The Arab Peace Initiative and Israeli-Palestinian Peace:

The Political Economy of a New Period

Aix Group

Arie Arnon & Saeb Bamya (eds.)

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Preface

The Aix Group is a unique working group of Palestinian, Israeli and international economists, policymakers, academics, and civil society members that produces position papers which seek to identify economic scenarios and suggest recommendations in order to promote win-win outcomes for Palestinians and Israelis. The Group is accompanied by official observers, who not only share their thoughts with the Group, but have regularly incorporated some the Group's ideas and recommendations into their national policies and approaches to the negotiation table, thus making it a typical Track II economic forum. Indeed, in light of the deteriorating political circumstances of the region, the Aix Group has maintained itself as one of the only cross-border working groups in which the two sides continue to meet and engage in rational discussions related to common concerns.

Formed in 2002 under the auspices of the Université Paul Cézanne-Aix-Marseille III in France, and in coordination with the Peres Center for Peace in Israel and DATA Center for Studies and Research in Palestine, the Aix Group is chaired by Professor Gilbert Benhayoun from Université Paul Cézanne. The Group is headed on the Israeli side by Professor Arie Arnon of Ben-Gurion University of the Negev, and on the Palestinian side by Mr. Saeb Bamya, former Deputy Minister of National Economy.

In 2004, the Aix Group embarked on its first joint Palestinian-Israeli position paper, entitled the "Economic Road Map." Rather than ending with Stage III (permanent status agreements) of the Quartet's Road Map for Peace, the Group instead used it as the conceptual starting point, and then proposed a series of models of Palestinian-Israeli economic relations which would accompany the political implementation of the proposed road map.

In 2005, the Aix Group published its second joint position paper, entitled "Israel and Palestine: Between Disengagement and the Economic Road Map." In this work, the Aix Group analyzed the risks, benefits, and potential outcomes of Israel's unilateral disengagement plan from the Gaza Strip and the northern West Bank from an economic perspective, and came to

the conclusion that it would be in Israel's best interest to coordinate the disengagement with the Palestinian Authority, rather than risk creating the eventual political vacuum filled by Hamas.

In 2007, the Aix Group published its third stage of research, entitled: "Economic Dimensions of a Two State Agreement between Israel and Palestine," which tackled four critical yet sensitive final status issues that have been neglected by researchers and policymakers the like: economic cooperation in Jerusalem; a just, economic solution to the Palestinian refugees; cross-border cooperation in infrastructure; and "fast track" issues such as Palestinian labor in Israel, transitional trade arrangements and the economic development of the Jordan Valley.

In 2010, the Aix Group published its fourth stage of research, which further examined the political and economic alternatives facing Israelis and Palestinians as part of a permanent agreement. The project included both more detailed elaboration on previously researched topics as well as important innovations on critical final status issues which have not yet been examined: an economic comparison of the "two-state" vs. "one-state" solutions; the feasibility of a Territorial Link between the West Bank and Gaza Strip; the economic development of the Palestinian Jordan Valley; reanalysis of the Euro-Mediterranean Partnership; and the practical implementation and international coordination of a solution to the Palestinian refugees.

Building upon the Aix Group's previous works, this fifth stage sets out to further examine the economic implications of the Arab-Israeli peace process, but from a regional perspective, specifically under the political guidelines of the Arab Peace Initiative (API). The volume includes 12 essays which seek to explicate the short- and long-term economic implications of the API, which hitherto has been discussed solely from a political perspective.

Over the course of more than two years, three international conferences, and dozens of working group meetings, the Aix Group exchanged ideas on various economic aspects of a possible permanent resolution within an overall two-state agreement, engaging local, regional, and international decision makers and opinion formers from a variety of nationalities and professional backgrounds. Four joint Israeli-Palestinian working groups tackled four topics

of economic significance relating to the promise of regional peace offered by the API: macroeconomic conditions, trade regimes, and cross-border cooperation in tourism; economic, developmental, and labor institutional arrangements; cooperation in transportation, energy, and environmental infrastructure; and regional elements of the Palestinian refugees. The volume also includes a commentary on the status of the API in the context of recent regional developments, particularly the Arab Spring, as well as a chapter written in light of the Palestinian application for membership in the United Nations in September 2011.

As in the past, we had to imagine a political solution which seemed to some observers, and sometimes even to members of the Group itself, as a very remote possibility. Still, we assumed throughout the work, with all the reservations we had, that an agreement acceptable to the two peoples will be reached. Only in that context do the Group's detailed discussions and findings make sense. Thus, we would like the reader to assess the arguments in the following pages with the expectation that a permanent political agreement on all dimensions is still very much attainable.

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From the Arab Peace Initiative to the Arab Spring and Back

A Historic Initiative - A Changing Region

Ron Pundak & Saeb Bamya

The March 2002 Arab League Initiative was intended, and could, potentially, have revolutionized the Middle East. The new regional agenda proposed by the 22 countries of the Arab League represented an historic paradigm shift in the relations between Israel and the Arab world. If we are to summarize the provisions laid out in the League's resolution in Beirut, the fundamental principles are quite simple: according to the plan, all Arab countries would normalize their relations with Israel in return for full Israeli withdrawal from the Arab territories occupied in 1967, i.e. the Golan Heights, the Gaza Strip, and the West Bank (including East Jerusalem). An independent Palestinian state would be established within the 1967 borders, and a just and agreed solution would be found for the Palestinian refugee problem, in accordance with Resolution 194 of the UN General Assembly. All Arab countries would consider the Arab-Israeli conflict as being over and done, enter into peace agreements with Israel, and provide security to all countries in the region.

All League members endorsed the proposal, thus turning it into a pan-Arab initiative. On March 28, 2007, the Arab League reaffirmed its support for the initiative. Moreover, the full support for the Arab Peace Initiative (API) by all 57 states of the Organization of Islamic Cooperation (all Muslim countries) at their meeting in Tehran could have extended the scope of the initiative even further.

The Israeli response to the initiative, however, has been to totally ignore it. Not only did the government not issue any formal response, the API received very little media coverage. In our opinion, Israel's lack of response resulted in the loss of an historic, monumental opportunity to change the face of the Middle East.

The Arab Peace Initiative emerged in a very difficult political context, in the midst of the 2nd Intifada. The Israeli position was that there was no partner for peace. This premise was originated by the then prime minister Ehud Barak following the failure of the Camp David negotiations and was further propagated by Ariel Sharon who served as prime minister at that time. The relevance of the initiative should be reevaluated in the current context.

The benefits – at the political, economic and security levels – promised by the realization of the Arab Peace Initiative, are beyond anyone's imagination. Some of these appear in the following chapters, but there are other macro-level points worth emphasizing. The most essential point is the paradigm shift in the peace process, a shift that might finally introduce an element of stability to what historically has been such a delicate and complex process. There are two important dimensions apparent in this change. The first and most obvious concerns the territorial framework: unlike in the past, the basic formula of Israeli withdrawal from all territories occupied in 1967, in return for a full peace and end of conflict, would be agreed in advance. (It should be emphasized that Israeli and Palestinian officials have agreed that a full withdrawal would include a land swap on a 1:1 scale.) The second change relates to the multilateral nature of the initiative. Until now, the three notable agreements that Israel signed with Egypt, the PLO, and Jordan, were based on bilateral negotiations, and thus were limited in scope. The result was exclusionary, "cloak-and-dagger" diplomacy, for both Israel and the countries that remained outside the immediate circle of negotiations. The Arab Peace Initiative offered to turn the pyramid upside down, moving the parties towards an egalitarian, transparent multilateralism.

The immediate effect of this change would be manifested not only in the political symmetries enjoyed by the parties themselves, but also on those specific issues which were defined as topics for multilateral negotiations already in 1991 as a result of the Madrid Conference: water, environment, regional economic cooperation, refugees, and regional arms control. These issues, which represent the essence of change in the Middle East, were hitherto hinged on the political progress – or, in reality, lack thereof – of bilateral negotiations between Israel and the Palestinians, and even then there were always those who sabotaged attempts at regional agreements, because they were not part of the underlying process. Moreover, in parallel with these multilateral working groups, and as a result of the positive post-Oslo-Agreement atmosphere, Europe initiated in 1994 – within the Barcelona Process - a transformation from its traditional Euro-Arab dialogue into a broad and heavily funded program of developing the entire Mediterranean basin, including Israel, through cooperation. This European initiative can be revitalized within a process of negotiating and implementing the API.

Universal congregation under the umbrella framework of the API will thus enable all parties to feel vested in the same final package from the outset, and enable agreement and implementation in those areas that require multilateral consent. Conscious of the historical character of the initiative, the international community endorsed it and included it in the terms of reference of the peace process in the Roadmap of 2002.

While some Israeli leaders have recently highlighted the importance of the initiative, the current government continues to reject it. Meanwhile, and in light of Israel's disregard, the Arab side is continually reassessing the initiative's validity vis-à-vis its policy towards Israel. And despite the numerous calls to abandon the initiative, the official Arab stance remains supportive. This stance is however increasingly tenuous.

The spring of 2011 has brought with it an earthquake of unprecedented magnitude to the Middle East, and its aftershocks may very well affect the Arab-Israeli front. The Arab spring that Israeli officialdom and its leading media commentators considered at the outset to be a threat, is both an opportunity and a reminder of the urgency of settling the Middle East conflict. The common denominator was clear: the public had enough with the suppression of its dignity, in every sense of the word. The targets were often the leaders and their families, but the public outrage was in fact directed at the system itself: its arbitrary nature, the lack of democratic institutions, the lack of transparency the lack of social justice, the excessive use of force by the police, security, and intelligence establishments; the huge gap between rich and poor, the rising unemployment, and all the other ills that have plagued Arab civil society for so many years.

What are the chances of the Arab Spring achieving real change? As it appears now, less than one year into the process, liberation, democracy and social and economic justice still seem a long way off. Furthermore, the possibility that Islamic forces will take over in country like Egypt, demands a closer look to assess their attitude towards maintaining the peace accords with Israel. Be it as it may, bringing about fundamental structural change in government will require tremendous efforts. But the resounding conclusion is that the

genie is out of the bottle, and the system that has ruled until now, almost unopposed and with no viable alternative, is in a process of transformation. The perception we were accustomed to, that the masses would continue to acquiesce to whatever their authoritarian governments dictated to them, is no more.

To summarize, the realization of change, which appeared so tantalizingly within reach in the early days, the euphoria, the impressive demonstrations we witnessed, will all require fundamental change and a lot of time, and will probably take different forms and different tempos in the various countries in the region. The most urgently needed reforms – a more equitable distribution of wealth, job creation, reduced prices for certain basic goods and commodities such as fuel, and salary increases – all have to be enacted within the context of a long-term vision and strategy to which the population can subscribe. Moreover, serious reforms will entail serious economic implications for the countries which already face very real and fundamental problems, such as an inability to maintain a reasonable and balanced budget. Who will pay for the reforms? Are there any financial reserves available? What will happen to their foreign currency reserves, or their ballooning national debts? Are the richer countries willing to help with substantial grants or soft loans to weaker states? Beyond that, nothing can move swiftly in the existing systems, which are bogged down in red tape, nepotism, and mismanagement. These are daunting challenges, and even under the best of governance, no country could deal with them with the speed demanded by the public.

The peoples of the region took to the streets to claim their legitimate rights to freedom, justice and dignity. They called for accountability, social justice and equitable development. This popular uprising was deeply-rooted in both a political and socio-economic injustice. The profound contradiction between the Arab street demanding instant change, and the trends and forecasts shown in the Arab Human Development Reports on Arab society, is enormous. According to the report, if in 1980 there were about 150 million people in the Arab countries, then in 2015 this figure will have increased to nearly 400 million inhabitants. About 60% of this population will be below age 25; and, in 2005, about 20% of the Arab population lived below the two-dollar-a-day international poverty line.

The wide range of challenges facing the Arab youth cannot be overstated. According to the UNDP's 2009 edition of the Arab Human Development Report (AHDR) - Challenges to Human Security in the Arab Countries – about 30% of this population is unemployed. Considering that more than 50% of the population in Arab countries is under the age of 24, 51 million new jobs will be needed by 2020 just to avoid an increase in the unemployment rate. The countries which have embarked on transitions will face several challenges: building a transparent, fair and democratic political system, while preserving or developing solid equitable economies so as to tackle the social needs of the population. The best way forward is to promote good governance and a solid economy in order to allow for political, economic, and social reforms, the growth of a strong and healthy civil society, a strong and innovative private sector, and a fair and transparent system of government. While there has been much focus and emphasis on the diversity of circumstances in each individual country, the regional dimension is of essence to create a suitable and sustainable environment for positive and fundamental change in the region. Peace in the Middle-East and its foreseen impact on regional relations and cooperation, including south-south integration, is of primary importance for fostering favorable dynamics throughout the region.

After some hesitation, the US and the EU gave their support to the popular calls for democratic change. President Obama in his speech on the region clearly stated his country's support for the right to self-determination and for the quest for freedom, justice and dignity. These words were used in the context of the Arab spring but were still noticeably absent from the second part of the speech on the Middle East Peace Process (MEPP). The support to the peoples' right to self-determination must entail support to the Palestinian people's inalienable rights including their right to statehood. The Palestinian people are also entitled to freedom, justice and dignity. They will not accept being excluded from this Spring. And events showed and will continue to show that the Arab people will not accept it either.

While it is clear that the primary objective of the revolutions was the people's aspirations for democratic change and social justice, the impact of the eruption of a free Arab public opinion on the conflict should not be understated. Resentment against Israel among ordinary Arabs is increasing. The attack

against the Israeli Embassy in Cairo in September 2011 is just a reminder of what might happen if things go wrong. Yet, despite vociferous opposition calls to cancel the agreements with Israel, or even to deny the legitimacy of Israel's right to exist, the majority appears to accept Israel as a fait accompli, and would like to see peace and an end to the Arab-Israeli conflict, but on one condition: end of occupation and upholding of the Palestinian people's right for the establishment of their own state side by side with Israel. This perception derives from the feeling that Israel has taken advantage of the peace with Egypt and Jordan, the Oslo Agreement, the cooperation with other Arab governments, and the American commitment to its security - all at the expense of the Palestinians. The Arab public is thus suspicious of Israel's intentions and has become skeptical of Israel's calls for peace. As a result, ending the occupation including in the Golan Heights, and ensuring peace between Israelis and Palestinians is still very much at the heart of the Arab Peace Initiative.

And yet, we have still to discuss the primary question which concerns us: whether the Arab Spring will affect the API? We will not attempt to forecast the future policy decisions of the Arab League, however we would like to establish an assumption, and a recommendation: keeping the initiative alive, both conceptually and operationally, is in the interests of all parties involved – the Arab League, Israel, the Middle East region, and the international community.

The average Israeli has also had enough of the occupation, opposes illegal settlement activities, approves of the Palestinian right to self-determination as part of an independent state in the West Bank, Arab Jerusalem and the Gaza Strip, and in spite of his skepticism, if opportunity will evolve, will vote for a peace settlement according to the parameters known to all.

The social protest that has swept through Israel beginning in July 2011, during which some half a million Israelis descended onto the streets of Tel Aviv and other cities represents an authentic, grassroots demonstration,

one that should not be discounted. The demonstrations are directed at the current Israeli political-economic system, and are led primarily by the mainstream, middle-class youth, which finds itself left with "no money at the end of the month" unable to own a home, facing soaring rent costs, and most importantly feels exploited by its own government.

Lurking in the shadows of this unrest is another unspoken agenda which the organizers of the Israeli demonstrations will not admit to openly, but is nevertheless clear: the settlers and the ultra-orthodox community, two segments of Israeli society that live off the state and are endangering its stability – the former from the commonly argued political/security perspective, and the latter in the fact that they represent an unproductive sector constituting a drain on the country's resources without any significant contribution to the economy, nor any commitment to its national interests or solidarity. Of course it should be emphasized that the current government coalition depends on both of these groups for its survival, and thus they hold a disproportionate amount of power. The paradox lies in the fact that the settlers were able to manipulate all governments for forty years; not only by encouraging and helping them to build their settlements in total illegality according to international law, but also by transforming the "Land of the Settlers" concept into a subverted Israeli welfare state, where subsidized housing and transportation, investment in infrastructure, public buildings, and a wide variety of support systems exist outside the pre-1967 borders.

Interestingly, the Israeli protest is taking place within the context of impressive national economic success. At the macroeconomics level, Israel has seen tremendous economic growth, a drastic decline in unemployment – among the lowest in the world – and is characterized by financial and economic stability, which is even more remarkable in the context of the recent global economic crisis. On the ground, however, the average middle class family with two providers struggles to pay its bills, faces constant rises in the prices of everyday goods, and watches from the sidelines as the gap widens between the rich and the rest of the country as their middle-class dream slips out of their reach. When we talk about the target of their demonstrations, the current Israeli economic system, we actually mean the Israeli version of neo-liberalism created by Prime Minister Benjamin Netanyahu. In Israel

today, the welfare of the society was put aside in favor of the welfare of the tycoons, the solidarity between the government and the individual has been compromised, and the result is 500,000 people in the street chanting: "The people demand social justice."

Ostensibly, there is no substantive connection between these protests and the Israeli-Palestinian political issue, and the demonstration leaders are doing everything they can to avoid any correlation between the two agendas. This time the discourse is focused within Israel's borders, rather than being turned outwards (whether Westward or towards the Arab World). The focus on the social agenda has allowed the public at large to identify with the struggle and mobilize across traditional cultural identities and political affiliations. In practice, however, a strong, enduring relationship does exist between the protest movement and the peace camp. Not only do the organizers belong mostly to the center-left slice of the political spectrum, but it is clear that the success of the struggle will strengthen the country's progressive and social-democratic forces, who at the end of the day identify with the principles for resolving the conflict, as proposed by the API.

Israel should consider engaging in political realism, and thereby perceive the new realities in the Arab world not as a threat but as a fact, and better yet as an opportunity. Having said this, the strengthening of the Islamic forces, whose position regarding the Peace Process is yet unknown, demands special attention. Processes such as transparency, democracy, and citizen empowerment in Arab countries are in fact in Israel's interests. Therefore, Israel should adopt a positive and open approach, which would in fact preempt the extremists who would expect, and count on, it to adopt an uncompromising stance.

The API is clearly not a direct answer to the demands of the demonstrators, but it can definitely become a significant vector for the structural changes required. This is also consistent with the Arab world's need to continue the integration of their local economies with the regional and global economy. After all, in order to be truly engaged within one's home, one should ensure that one's backyard is secure as well. Peace would stimulate investment,

increase cross-border cooperation, reinvigorate regional economic processes that broke down in the 1990's, allow Europeans to broaden the European Neighborhood Policy, and offer a true opportunity to renew the Barcelona process, realize the Union for the Mediterranean – and all of the associated financial benefits for Middle Eastern states and their societies. Progress in the form of a comprehensive peace agreement between the Arab world and Israel – an agreement that would transform the political order at the heart of the Middle East – would constitute a historic change for both sides of the Mediterranean and a substantial contribution to international peace, prosperity and security.

As a group of experts not bound by government policy or other influence, our strength lies in our ability to look ahead towards the future, to think outside of normal conventions, and to maintain our distance from the increasing gravitational forces of today's troubling burdens. Our conclusion is that, despite the dramatic changes sweeping across the region, it is still in the general interest of both the Arab world and Israel to preserve the Arab Peace Initiative and to continue to promote the only plan capable of achieving long-term stability and prosperity. In this context, the Israeli government should initiate a pro-active move declaring that from its standpoint the API is a fair basis for peace negotiations with the Palestinians and the Syrians. Such a declaration would help the Arab world to reaffirm its commitment to the initiative, and would send a message to the public returning to Tahrir Square that Israel continues to pursue regional peace. The current alternative chosen by the Israeli government is to manage the conflict rather than to resolve it. Hence, despite Prime Minister Netanyahu's June 2009 declaration in his speech at Bar-Ilan University, that he accepts the principle of two states for two peoples, the actual government policy prefers the status quo and is abandoning the paradigm of land for peace.

Regional peace will free existing resources and generate new ones for economic development, increased intraregional trade – which is sorely underdeveloped – and interconnection between the markets in the Middle East, Europe and beyond. The strength of the initiative – despite the fact that it emanated in the "old world" – lies in part in the fact that it produces a vision for the Middle East and gives the forces of peace in Israel, hope to continue their

struggle for change in the public and political agenda. It holds the promise that the people of our region will one day enjoy the prosperity that the Arab initiative – if realized – can bring to the area.

The fundamental changes underway in our region could jeopardize the Arab Peace Initiative or breathe new momentum into it. However, it is also dependent on the attitude of the international community, hence it should not content itself merely with the endorsement of the Initiative, and it should work on fostering its implementation. For example, the PLO's UN bid for statehood provides it with a unique opportunity to change the rules in a way that would be beneficial to all stakeholders. By supporting the establishment of a Palestinian state based on the 1967 borders, the international community would be moving forward on one of the key elements of the initiative while returning to the framework which provides the terms of reference of the MEPP. The Palestinian spring begins but does not end with recognition and UN membership: a state thus recognized must still assert its sovereignty over its territory, and final status issues will still have to be resolved, but this would send a clear signal to Israel that the current status quo is not an option and the international community is serious about moving forward. In this context, the Arab Peace Initiative should not be viewed as part of the past of this changing region, but the key to its future.

A Socioeconomic Profile of the MENA Region

Aamer S. Abu-Qarn

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Executive Summary

The strategic location of the Middle East and North Africa region, its large area, population and its massive oil and gas reserves have granted it a special position in world's economy and politics. Despite its many similar characteristics, the region boasts a great deal of diversity in its geographical, social, and economic dimensions. These similarities and diversity provide the region with many opportunities for cooperation and mutual policies to resolve some of the most pressing problems and obstacles that characterize the region.

The following are the major problems that the region suffers from:

- A high rate of population growth that puts strains on its development.
- An extremely low participation rate of women in the labor force constitutes a waste of valuable resources that if utilized it could stimulate economic growth.
- Dependence on natural resources and agriculture exposes the region to a high degree of volatility in economic activity. Shocks to world prices of natural resources and primary goods cause episodes of accelerated growth, in cases of positive shocks, and stagnations when the prices drop. The countries should diversify their economic base to reduce their vulnerability to external shocks.
- The state is the key player and the major employer in the economies; the role of the private sector is minor. Reforms and attempts at privatization are underway in many of the countries but have to accelerate.
- High unemployment rates especially among the young and the educated have been regarded by many analysts as the key factor behind the recent Arab Spring.
- Low intraregional trade volume that reflects the similar economic structures of the economies.

1. Introduction

The Middle East and North Africa region extends from the Arabian Gulf in the east to the Atlantic Ocean in the west and from Turkey in the north to the Indian Ocean in the south. Its strategic location between Asia, Europe and Africa coupled with its massive reserves of natural resources, have gained it a special position in economy and politics. Dominated by Arab countries (Iran, Israel, and Turkey being the exceptions) and by Muslims (Israel is the only non-Muslim country), the region shares a common heritage of history, traditions, culture, social structures and economic systems. Despite that, one can point at many differences among countries and their inhabitants. Our socio-economic profile of the region attempts to highlight the commonalities as well as the diverse characteristics, as they emerge from splitting the region into several interesting subgroups of countries. These subgroups include the core countries (Egypt, Israel, Jordan, Lebanon, Syria, and Palestine), the Mashreq (according to the definition of the World Bank; Iraq, Jordan, Lebanon, Syria, and Palestine), the Maghreb (Algeria, Libya, Morocco, and Tunisia), and the GCC countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates).

If we may generalize, the major socio-economic characteristics of the MENA economies can be summarized as follows:

- A huge strategic area at the center of the old world.
- Relatively large population with extremely high population growth that leads to high dependency rate and a sizable youth segment.
- The population is concentrated in cities.
- The region is very rich in oil and natural gas and it has a large share of the world's proven reserves.
- The region is home for very rich (Israel and the GCC members) and very poor countries.

- Dependence on natural resources and traditional sectors translates into a high degree of volatility of economic activity. Shocks to prices of natural resources and primary goods cause episodes of accelerated growth in cases of positive shocks and stagnations when the prices drop.
- The state is the key player and the major employer in the economies. Reforms and attempts at privatization are underway in many of the countries.
- Absolute poverty (based on the World Bank's definition) is not a serious problem but income inequality is relatively low.
- Most of the countries have made substantial progress in terms of human development; education and health have improved persistently.
- Agriculture and natural resources are the main sectors of the economies. Several countries have made some progress in diversifying their economies; however, they still have a long way to go.
- Low participation rates in the labor market, especially among females.
- Some countries, notably in the GCC, import workers from Asia whereas others such as Egypt, Syria, Lebanon, Morocco have a net outwards flow of labor.
- High unemployment rates especially among the young and the educated.
- High saving and investment rates dominated by the state.
- Low intraregional trade volume. The issue is discussed in a separate paper.

2. Geography and Demography

The region spans over more than 14.2 million km^2 and it is comparable to 1.5 times the area of the United States and more than three times the area of the European Union. The countries range in area from the very small

(Bahrain with only 700 km^2, the Palestinian Authority with about 6,000 km^2, and Lebanon with about 10,000 km^2) to vast countries even in world standards (Algeria and Sudan with over 2.3 million km^2, and Saudi Arabia with about 2 million km^2). The area of the core countries is more than 1.3 million km^2 and it constitutes about 9% of the region's area. With respect to sub-regional division, the Maghreb dominates with over 33% of the land area of the region (See Figure 1 and Table 1).

There are several large deserts within the region. Among these are the Sahara desert (of more than 9 million km^2) which includes areas of Algeria, Egypt, Libya, Morocco, Sudan and Tunisia; The Arabian desert (more than 2.3 million km^2) stretching over areas of Saudi Arabia, Jordan, Iraq, Kuwait, Qatar, United Arab Emirates, Oman and Yemen; and the Syrian desert (0.5 million km^2 of Syria, Jordan, and Iraq). The arid lands translate into a mostly (93.2% of the region's landmass) infertile expanse, not suitable for agriculture. Only 1.5% of the area of the oil-rich GCC countries is arable, whereas the core countries that lack significant natural resources and minerals, depend at least partially, on agriculture have a mere 6.5% arable land. Notable exceptions include Turkey and Syria with 28.5%, and 25.8%, respectively, of arable land.

With about 475 million inhabitants, the region is comparable to the European Union and 1.5 times of the USA's population. The largest countries in terms of population (Egypt, Turkey and Iran with 80.1, 73, and 71 million inhabitants, respectively) are ranked among the world's 20 most populous countries. In addition to these populous countries, the region is home to some of the least populated countries of the world (Bahrain and Qatar). A sub-regional division of population is illustrated in Figure 2. About one quarter of the region's population resides in the core countries with Egypt's population constituting about two thirds of that.

Diversity is also observed in terms of population density. While overall the region is comparable to the USA's population density (about 33 inhabitants per km^2), it is considered one of the least dense regions in the world. Despite this, both extremes exist in the region. On the one hand, some of the densest countries in the world - Bahrain, Palestine, and Lebanon and on the other

hand - some countries in the region are ranked very low in their population density (Libya, Oman and Saudi Arabia). Relatively speaking, the core countries boast high population density whereas the Maghreb and the GCC countries are among the least dense (92.7, 17.2, and 14.8 per km^2, respectively)

One of the most distinct characteristics of the region is its extraordinary rapid rates of population growth. At an average rate of 1.8% per annum compared with 1.2% for the entire world, rapid population growth poses serious challenges to the social and economic development of the region. Many countries are already dealing with the increasing need for basic infrastructure, public services, and job opportunities to avoid the severe social and political implications of the growing population and the rise of the dependency rates. Some analysts attribute the recent revolutions in Tunisia, Egypt, Libya, Yemen, and Syria to the frustration of the growing segment of educated young that was left with extremely poor standards of living and virtually no prospects for appropriate jobs matching their qualifications.

The experiences of the region's countries vary significantly; while Palestine, Jordan, and Yemen recorded growth of over 3% per annum, Tunisia, Lebanon, and Morocco's population grow at a rate slightly higher than 1% per year. Among the sub-groups of the region, the GCC members have the highest population growth rates at about 2.3%, whereas the Maghreb countries (with the exception of Libya) have modest growth rates.

Although there is a downward trend, the sharp decline in mortality rates coupled with the slow reduction of birth rates in the mostly traditional countries keeps the region atop the world's population growth regions. The United Nations projections point at the continuation of the trend of declining growth rates for all the countries. However, the decline is relatively slow. For example, the Palestinian population is expected to grow at 2.87%, 2.69%, and 2.42% over 2010-15, 2015-20, and 2020-25, respectively.[1] Thus, by 2025 the Palestinian population is projected to grow at about three times the world's average.

One can learn about the demographics of the region by looking at the fertility rates; the region boasts some of the highest fertility rates in the world. With

1 The United Nations (2007)

an average of 2.9 live births per woman in 2007, the region is second only to Sub-Saharan Africa which has an average of 5.2 births per woman, and it is about 80% higher than the average for the EU (1.6 births per woman). In a sub-regional division, the Mashreq countries have about a 50% higher birth rate than the Maghreb countries (3.7, and 2.4 births, respectively). Countries within the region differ substantially; Yemen, Palestine, and Sudan have extremely high fertility rates (5.3, 5.2, and 4.3, respectively) that are comparable to those of African countries, while the rates in Lebanon, Iran, Tunisia and Turkey stand at about 2 births per woman.

Another noteworthy demographic dimension is the high rates of urbanization in the region. At about 60% of the total population, the percentage of MENA's urban population is relatively higher than the world's average of about 50%. GCC countries have the highest proportions of urban population. Rapid urbanization puts a strain on the provision of services in the existing cities and leads to the creation of poor and deprived neighborhoods in the outskirts of the growing cities.

3. Economic Performance

Rich in oil and natural gas, the GDP of the MENA region reached a total of US$2.6 trillion in 2007, which is about 15% of the EU's GDP. The six oil-rich GCC economies constitute about 32% of the regional GDP whereas the relatively poor Mashreq countries contributed only 6% of the region's output (See Figure 3). The core countries contribute about 15% of the regions' total GDP. Within this group of countries, Israel dominates with the size of its economy being about 43% of the total GDP, and it is followed by Egypt whose share in 2007 was 34% (see Figure 4).

As with their land and population, there are great disparities in the economies and their income. The largest economies are Turkey, Saudi Arabia, and Iran with GDPs of 647, 384, and US$286 billion, respectively. On the other extreme, we find the Palestinian, Jordanian, and the Bahraini economies (See Table 2). When compared to the GNI, we find that the GDP is larger for most countries. This fact reflects the net flow of payments remitted to foreign production factors.

Turning to living standards represented by the GDP/GNI per capita, we observe huge disparities among the countries. The region is home to very rich countries as well as very poor ones. Figure 5 shows that on average, the region has a GDP per capita of US$5,470 which is about 16% of the European Union. The GCC members, together with Israel, are the economies with the highest GDP per capita. In fact, Qatar, UAE, and Kuwait are among the countries with the world's highest income per capita. According to the World Bank, Qatar is ranked 8th in the world in 2007. Alongside these rich countries one finds some of the poorest countries in the world. Yemen, Palestine, and Egypt are at the bottom ranking of income per capita with US$972, 1,303, and 1,630, respectively.

Sub-regional analysis of the income per capita shows that the Mashreq and Maghreb are extremely poor compared to the GCC countries (US$2,270, 3,895, 23,346, respectively). With the exception of Israel, the core countries have very low standards of living.

Using purchasing power parity figures slashes the gap between the rich and the poor; however, those remain relatively substantial. For example, the ratio of the UAE's GDP per capita to that of Yemen drops from 49 to 24.

The region's economies are characterized by high volatility in their economic activity and a high degree of vulnerability to external shocks (world commodity prices, political unrest). This volatility is reflected in the economic growth that on one hand can skyrocket when the conditions are favorable or, when a downturn occurs, they can reach record lows. Evidence of the close relationship between oil prices and the economic growth of the region is shown in Figure 6; one can notice that the region's economies experience spells of high growth when the oil prices are on the rise and the economies stagnate when the trend in oil prices is reversed.

As can be seen in Figure 7, the region's economies witnessed high growth rates in the 1960's and 1970's mainly due to a drastic rise in oil revenues, and especially in the GCC countries in the two latter decades. The rapid growth in the oil exporting countries spilled over to the other countries through the workers' remittances that were channeled back to the home countries in the form of investments, mostly in residential construction and through

direct foreign aid. The economic activity slowed down in the 80's and 90's. The Mashreq countries, dominated by the collapse of the Iraqi economy following the war against Iran in the 80's and the Gulf War in the early 90's, suffered record negative growth levels of about 4% annually in the 80's and 0.7% in the 90's. A modest recovery has been seen in the first decade of the 21st century. These developments illustrate, once again, the fragility of the economies and their vulnerability to external and political shocks.

Another characteristic of the region, evident in Figure 7, is the region's relative diversity in the course of economic performance over the last six decades; while the GCC and the Mashreq countries were the first to reap the benefits of rising oil revenues, the Maghreb countries experienced relatively slow expansion in their activity throughout.

Table 2 and Figure 8 display the average annual growth for the economies of the region the 2000-2008 period. As can be seen, the individual economies differ significantly in their performance. While some experienced a period of accelerated growth (Qatar, Kuwait, UAE, Sudan), others witnessed slow growth and even regression (Palestine, Israel, Yemen). It is worth noting that the figures greatly depend on the periods under investigation; looking at the growth rates for 2007 we see examples of extreme volatility. For instance Qatar's growth rate for 2007 (26.8%) was more than double that of the average rate for 2000-8 (12.8%) and that of Kuwait and Saudi Arabia (4.4% vs. 8.1%, and 2% vs. 4.1%, respectively) was about half of the rate. Keeping in mind the high population growth rate, for many countries the growth in the standards of living proxied by the GDP per capita was relatively small and even negative.

4. Poverty, Inequality and Human Development

When we attempt to analyze poverty trends in the region we face a serious lack of reliable data (see Table 3). Such information is available only for a few of the countries in the region and for a very limited time span. Overall, absolute poverty, as measured by the World Bank's $2 per day, is low compared to other developing countries. One can assume that such absolute poverty is nonexistent in the GCC countries, at least for the region's natives. Data on the

number of expatriates and poverty among them is unavailable. Examples from the available data on absolute poverty show that even in a poor country such as Jordan most of the population lives above the international poverty line. However, the situation in Yemen is extreme. According to the World Bank estimates, more than 46% of the population lived on less than $2 per day.

Comparing the relative poverty levels in the region is rather difficult. Countries differ substantially in their definition of the national poverty line and in the availability of such data. Thus, comparison is of no value. One can point out that in the poor countries Sudan, Yemen, and Palestine there is a very high poverty percentage measured at their respective national poverty lines. The headcount ratio for the other countries ranges between 7.6% for Tunisia and 28% for Lebanon.

To further assess poverty, the Gini Index of Inequality together with GDP per capita can provide a limited view of the standards of living of the median inhabitant. Low GDP per capita coupled with high Gini means that the income distribution is skewed to the left and the median income is lower than the already low GDP per capita. The good news is that income in the region is distributed relatively equally compared to other developing regions; The Gini Index ranges between 0.30 in Kuwait to 0.51 in Sudan and most of the countries have indices below 0.4.

Since income is only one aspect of development, the UNDP has constructed the Human Development Index (HDI) that captures the level of education and health in addition to income. The countries in the region fare reasonably well in HDI and there is a continuous rise in their relative ranking. The best performers are the GCC countries and Israel for which the HDI tops 0.80. However, countries such as Yemen, Sudan and Syria still have a long way to go to catch up with the rest.

Table 3 provides more evidence on the progress that has been made in the region in other development indices. Infant mortality has declined sharply in most countries. In the GCC countries and Israel the incidents of infant mortality have dropped to around 10 cases per 1000 inhabitants. The poor

countries of the region still have high mortality rates compared to the developed countries in which the rate is about 5 per 1000. A derivative of infant mortality is the life expectancy at birth. Figures of life expectancy again point at constant progress and fast convergence with the developed countries. Israel and the GCC countries are already very close to the 79 years mark of the population of the European Union.

Another significant aspect of human development is education. The countries in the region have made substantial headway in educational attainment as illustrated in Table 3. Averages of years of schooling have increased steadily in all countries; however, countries differ greatly in their level. The top performers in the region are Israel, the GCC members, and Jordan and they are closing the gaps with the developed countries (in the range of 10-12 schooling years). As in other development indicators, Sudan and Yemen are lagging behind with below 4 schooling years.

The countries of the region are doing poorly in the TIMSS exams, intended to measure quality of schooling in mathematics and science for the fourth and eighth grades. According to the 2007 score, virtually all the participating MENA countries scored below the TIMSS scale average. Jordan had the highest average of 482 in science for eighth grades whereas pupils in Singapore had the highest score of 567.[2] Similar trends are observed in math.

5. Economic Structure

One of the significant structural changes that economies experience in the process of development is the movement from agriculture to manufacturing and gradually to services. The MENA economies have been no exception to this trend. However, we still witness a dominant role for agriculture in many of the MENA countries. For countries like Sudan, Syria, Egypt, Morocco, Iran, and Tunisia agriculture constitutes more than 10% of their GDP in 2007. The exceptions are the GCC countries, that rely mainly on mining and

2 The International Association for the Evaluation of Educational Achievement, http://www.iea.nl/data.html.

Israel which experienced a drastic structural change in favor of high-tech industries and away from the traditional agricultural sector.

As Table 3 illustrates, there are some countries in the region for which manufacturing has become a major activity. In Turkey, Jordan, Tunisia, Israel, Egypt and Morocco manufacturing accounts for more than 15% of their income. One should emphasize that there is a lot of variation within this category of economic activity that can range from production of processed food and textile to machinery and high-tech. However, the available data does not allow us to go to a higher degree of disaggregation.

For most of the region's countries, notably the GCC countries, the relatively high percentage attributed to industry, indicates their reliance on natural resources. Although there is a continuous trend towards diversification of production, the region is still lagging behind the developed countries for which an increasing share of their income is originated from manufacturing and services. For example, about 72%, and 17% of the income in the EU countries is attributed to services and manufacturing, respectively, while agriculture contributes a mere 2%.

The state has a leading role in the economies of most of the MENA countries since it owns the abundant natural resources. Additionally, the state is the largest employer, responsible for providing adequate sustainable jobs to the growing segment of young educated graduates. This task proved to be a challenging one and many analysts believe that the failure to provide sustainable jobs was a key factor behind the latest upheavals in many of the Arab countries. Although the private sector plays a very limited role in the economies, attempts have been made in many of the countries to stimulate private sector activity by instituting reforms and privatizing state enterprises.

6. The Labor Market

The high rates of population growth lead to a growing percentage of dependent population that does not participate in the economic activity and is a heavy burden on the economy. Extreme are the cases of Palestine, Yemen, and Iraq for which the dependency rate exceeded 80% of the working age population compared with a world's average of about 55% and the EU's average of 49%.

Another dimension of the labor market that characterizes the region is a relatively low rate of participation in the labor force. For nine countries, this rate is below 50%, which indicates low utilization of resources compared with the rest of world for which this rate is above 64%. Some exceptions are also found. Qatar, UAE and Kuwait have exceptionally high rates of involvement in the labor market of 83.5, 77.4, and 68.8%, respectively.

A more striking characteristic is the remarkably low rate of female participation in the labor force. For most of this traditional region, the rate for female participation does not exceed 30% and can go as low as 13.4% in Iraq, 15.1% in the Palestinian Authority, and 19.2% in Yemen. The only two exceptions that come close to the international standards are Israel (52.1%) and Kuwait 44.9%. It is obvious that a lot of work is needed to integrate females into the labor market, however, many barriers, mostly social, may block progress towards achieving this goal.

Information on unemployment is unavailable for many of the MENA countries, and where data is available; we see high rates of unemployment for many of them. Notable examples include Palestine (21.6%), Iraq (17.5), Yemen (15.4%), and Tunisia (14.1%). The GCC countries usually have very low rates of unemployment.

High unemployment together with low labor force participation can be inferred from the low employment rates that range from 31.8% (Palestine) to 76.4% (Qatar) with many countries for which only 40% of their 15+ population is employed.

There are two other distinct characteristics of the labor markets in the region. First, the state and the public sector is the leading employer, which is expected to provide adequate jobs to the masses of young people graduating from the growing universities. Reliance on the public sector is an inherited problem that stems from the leading role the state has in the economic activity. Graduates prefer to wait for state jobs that offer them generous compensations and benefits and assure them lifetime employment. The underdeveloped private sector cannot compete with the state by offering comparable conditions. Second, there are massive flows of labor in the region. On the one hand some countries, especially the GCC countries, import many workers from

Asia and other Arab countries. On the other hand, there are major suppliers of labor such as Egypt, Morocco, Lebanon, and Syria that send workers to the GCC countries and Europe. For the latter countries, the ability to export labor eases the pressures on their labor markets and yields substantial worker remittances that serve to stimulate their economies.

7. Savings and Investments

Economists tend to attribute a vital role in economic activity to accumulation of physical capital through domestic saving and foreign direct investments. Table 5 provides evidence of exceptionally high savings for countries with natural resources. The GCC countries have savings rates in excess of 50%. However, as outlined earlier, these rates are very volatile and often reflect the external shocks to which these economies were subjected. The other countries exhibit low savings rates that turn, in the case of Jordan, into negative domestic savings of 11% of GDP. For almost all the countries the ratio of investments to GDP exceeds 20% and even 30% (Morocco and Qatar). These rates are higher than the world's and the OECD's average of 22%, and 21%, respectively and allow the economies to accumulate capital and accelerate growth. Although we do not have information on the decomposition of the investments, it is widely known that a very high share of the investments is public and the involvement of the private sector is much less dominant.

As for foreign investments, the region is mostly a net recipient of FDIs although the share of the world's total inflows (about 3%) is rather small. The small portion of FDIs that the region receives can be attributed to the political instability and to institutional restrictions imposed on foreign ownership of enterprises. Many countries have adopted reforms aimed at encouraging foreign investments. Table 6 shows that the largest recipients of FDI inflows are Saudi Arabia (US$24.3 Billion), Turkey (US$22 Billion), and Egypt (US$8.8 Billion). Many countries in the region have no FDI outflows. In relative terms, Jordan, Lebanon, and Bahrain receive 15.4%, 13.5%, and 9.5%, respectively, of their GDP. At the other extreme there are some countries that invest from their resources abroad; Bahrain, Kuwait, and Libya have invested 9%, 8.5%, 5.5%, respectively, of their GDP abroad. Countries like Saudi Arabia, Syria, Jordan, and Tunisia have virtually zero FDI outflows.

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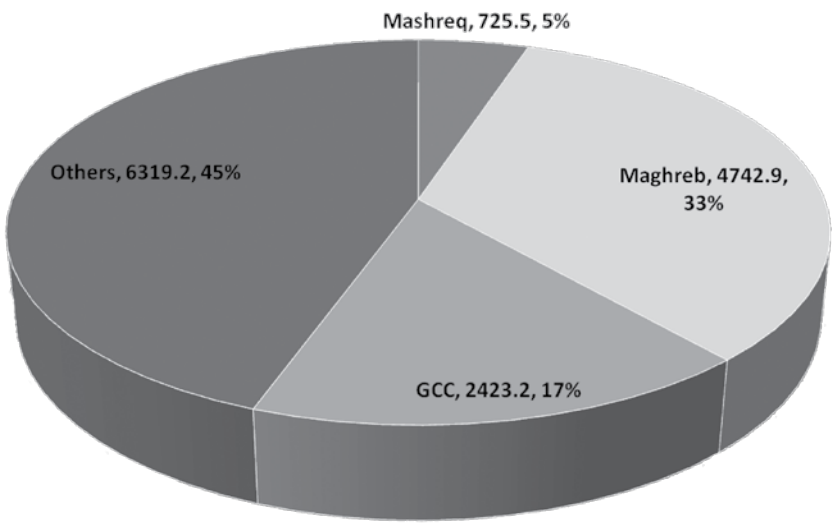
Appendix

Table 1 \\ Land and Population, 2007

Country Name	Land Area (000s km²)	Arable Land (%)	Population (millions)	Population growth (%)*	Fertility Rate	Density (per km²)	Urban (%)
Algeria	2381.7	3.1	33.9	1.5	2.4	14.2	64.6
Bahrain	0.7	2.8	0.8	1.8	2.3	1069.8	88.5
Egypt	995.5	3.0	80.1	1.8	2.9	80.4	42.7
Iran	1628.6	10.4	71.0	1.4	1.9	43.6	67.9
Iraq	437.4	11.9	29.9	1.8	4.1	68.5	66.7
Israel	21.6	14.2	7.2	1.7	2.9	331.8	91.6
Jordan	88.2	1.6	5.7	3.0	3.5	64.3	78.4
Kuwait	17.8	0.8	2.7	2.4	2.2	149.4	98.3
Lebanon	10.2	14.1	4.2	1.1	1.9	406.9	86.8
Libya	1759.5	1.0	6.2	2.0	2.8	3.5	77.4
Morocco	446.3	18.1	31.2	1.2	2.4	70.0	55.7
Oman	309.5	0.2	2.7	2.0	3.1	8.8	71.6
Qatar	11.6	1.6	1.1	2.1	2.5	98.1	95.6
Saudi Arabia	2000.0	1.7	24.2	2.2	3.2	12.1	82.6
Sudan	2376.0	8.1	40.4	2.2	4.3	17.0	42.6
Syria	183.6	25.8	20.1	2.5	3.3	109.4	53.9
Tunisia	155.4	17.7	10.2	1.1	2	65.8	66.1
Turkey	769.6	28.5	73.0	1.3	2.1	94.9	68.2
UAE	83.6	0.8	4.4	2.9	2	52.2	77.8
Palestine	6.0	18.1	3.8	3.2	5.2	636.6	71.8
Yemen	528.0	2.6	22.3	3.0	5.3	42.2	30.1
MENA	**14210.9**	**6.8**	**475.0**	**1.8**	**2.9**	**33.4**	**60.0**
Core Countries	**1305.2**	**6.5**	**121.0**	**2.0**	**3.0**	**92.7**	**51.6**
Mashreq	**725.5**	**14.2**	**63.7**	**2.2**	**3.7**	**87.8**	**65.3**
Maghreb	**4742.9**	**4.2**	**81.5**	**1.4**	**2.4**	**17.2**	**62.3**
GCC	**2423.2**	**1.5**	**35.9**	**2.3**	**2.9**	**14.8**	**82.9**

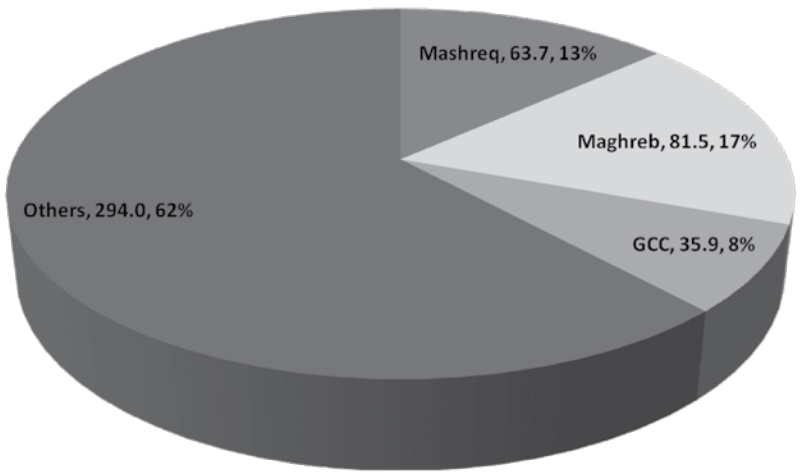
* For 2005-2010; Source: United Nations (2007). Otherwise: World Bank (2011)

Figure 1 \\ Land Area (Thousands km²)



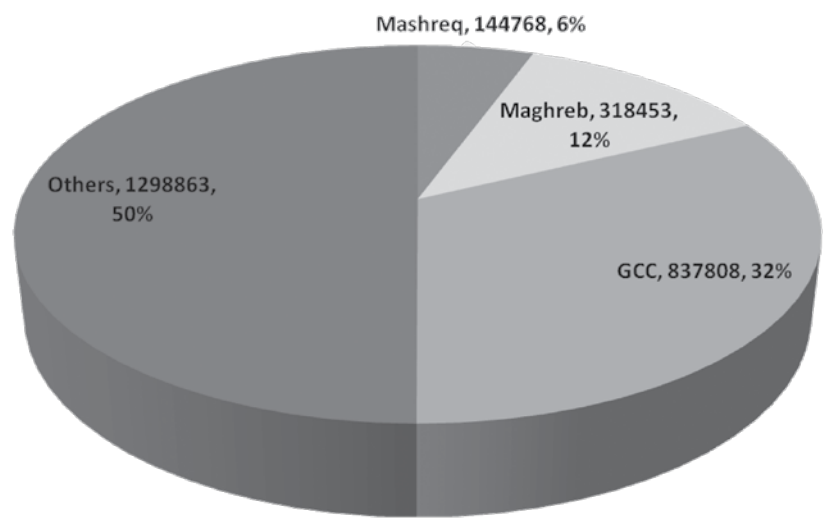
Source: Our calculations based on World Bank (2011)

Figure 2 \\ Population in 2007, Millions



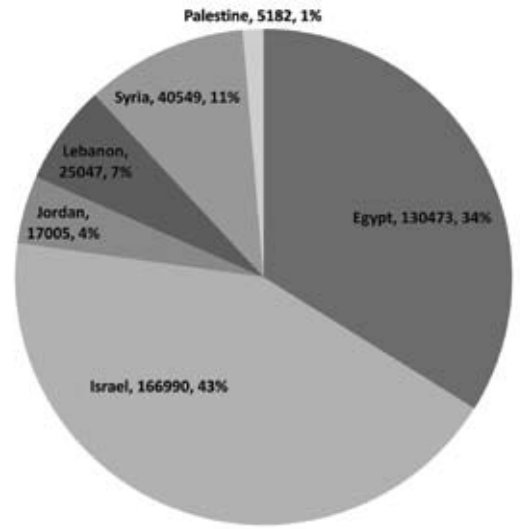
Source: Our calculations based on World Bank (2011)

Figure 3 \\ GDP (Millions of current US$)



Source: Our calculation based on World Bank (2011)

Figure 4 \\ Core Countries' GDP in 2007 (Millions of current US$)



Source: World Bank (2011)

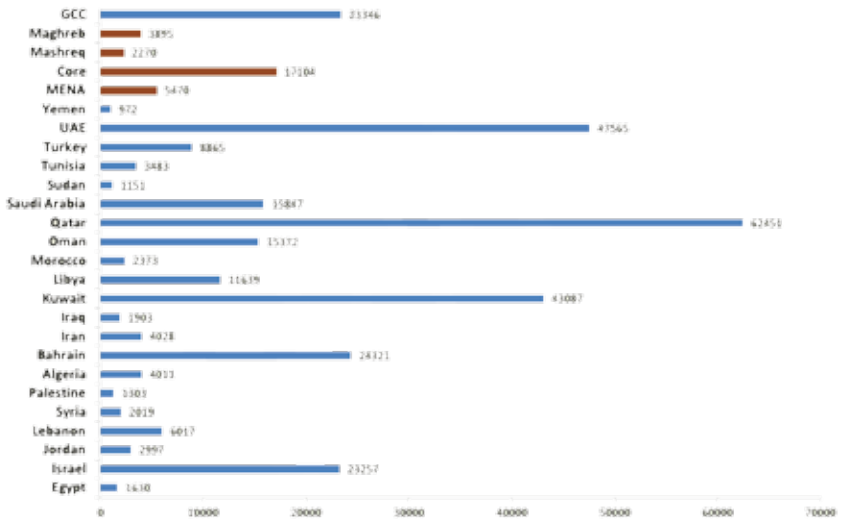
Table 2 \\ National Accounts, 2007

	GDP	GNI	GDP	GNI	PPP GDP		GNI/ GDP	GDP growth (%)	
	Millions of US$		per capita (US$)		Millions Int'l $	per capita Int'l $		2000-8	2007
Algeria	135804	122798	4011	3630	263056	7769	0.90	4.3	3.0
Bahrain	18473	17285	24321	22760	24976	32883	0.94	6.4	8.3
Egypt	130473	120051	1630	1500	404873	5057	0.92	4.7	7.1
Iran	286058	251491	4028	3540	780324	10987	0.88	6.0	7.8
Iraq	56984	42432	1903	1420	94446	3154	0.74		1.5
Israel	166990	160793	23257	22390	190478	26529	0.96	3.5	5.3
Jordan	17005	17277	2997	3040	29387	5178	1.02	6.7	8.5
Kuwait	114739	116984	43087	43930	128790	48363	1.02	8.1	4.4
Lebanon	25047	25795	6017	6200	44650	10727	1.03	4.0	7.6
Libya	71803	63057	11639	10220	96404	15627	0.88	4.1	6.0
Morocco	75226	70686	2373	2230	127156	4011	0.94	5.0	2.7
Oman	41909	38973	15372	14300	61189	22444	0.93	4.4	6.8
Qatar	71041		62451					12.8	26.8
Saudi Arabia	384076	377091	15847	15560	548300	22623	0.98	4.1	2.0
Sudan	46531	36717	1151	910	80668	1995	0.79	7.4	10.2
Syria	40549	35766	2019	1780	87939	4379	0.88	4.4	4.2
Tunisia	35620	32816	3483	3210	77123	7542	0.92	4.9	6.3
Turkey	647155	590693	8865	8090	960942	13163	0.91	5.9	4.7
UAE	207570		47565		245374	56228		7.7	6.1
Palestine	5182	5709	1303	1429			1.10	-0.9	
Yemen	21657	19026	972	850	52222	2345	0.88	3.9	3.3
MENA	2599893		5470						
Core Countries	385246		11387						
Mashreq	144768		2270						
Maghreb	318453		3895						
GCC	837808		23346						

%

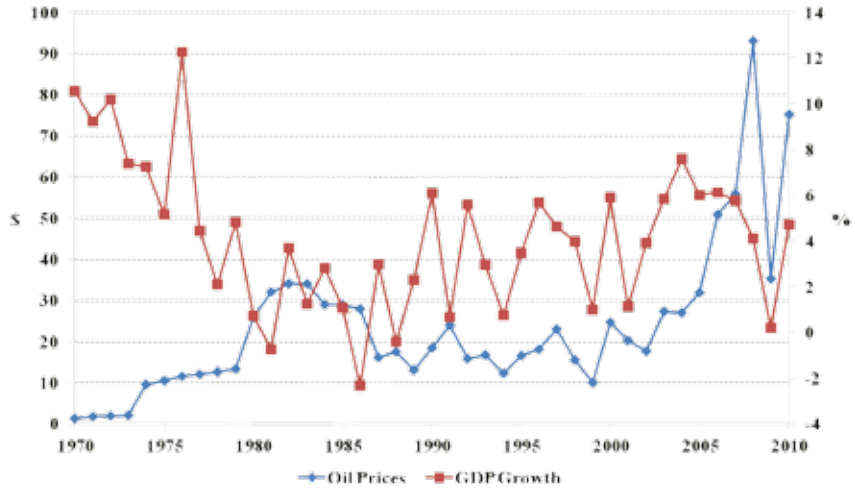
Source: World Bank (2011)

Figure 5 \\ GDP per capita (US$)



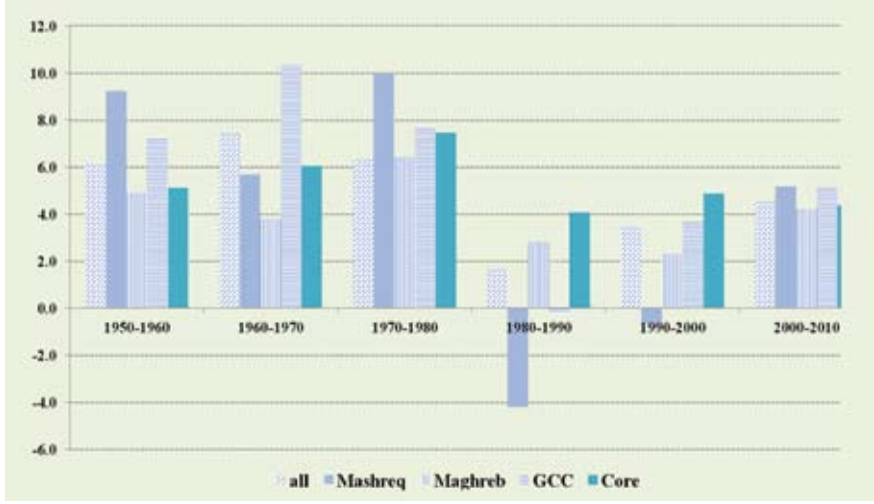
Source: World Bank (2011)

Figure 6 \\ Oil Prices (nominal US$) and MENA GDP Growth (%), 1970-2010



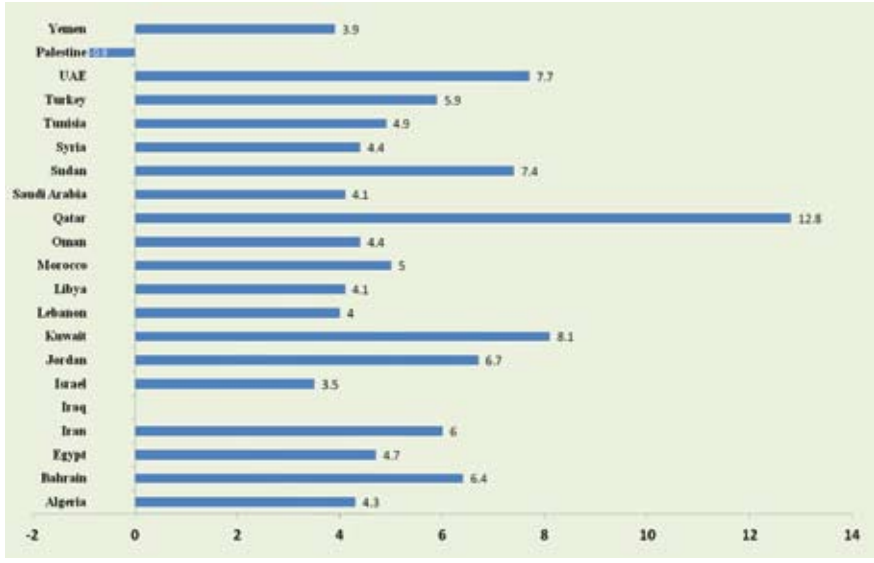
Sources: Oil prices - The U.S. Energy Information Administration (2011); GDP growth - The Conference Board (2011)

Figure 7 \\ GDP growth (%)



Source: The Conference Board (2011)
Note: Aggregates exclude Lebanon, Libya, and the Palestinian Authority for which no data is available.

Figure 8 \\ Average annual GDP growth 2000-8 (%)



Source: World Bank (2011)

Table 3 \\ Development, Poverty and Inequality

	Poverty Headcount Ratio		Gini Index	HDI	Schooling years	Infant Mortality	Life Expectancy
	International $2/Day	National Poverty Line				(Under 5 per 1000)	(years)
Algeria	23.6 (2006)	22.6 (2006)	0.35	0.71	8.3	35	72
Bahrain		11 (2000)	0.36	0.83	9.6	12	76
Egypt	18.4 (2006)	16.7 (2006)	0.32	0.66	7.1	25	70
Iran		18.0 (2007)	0.38	0.74	8.6	34	71
Iraq		25.0 (2008)	0.42		5.9	44	68
Israel		23.6 (2007)	0.39	0.88	11.3	5	81
Jordan	3.5 (2006)	14.2 (2006)	0.38	0.72	9.2	26	72
Kuwait			0.30	0.86	6.3	10	78
Lebanon		28.0 (1999)	0.45	0.77		14	72
Libya			0.36	0.81	7.9	20	74
Morocco	14 (2006)	14.0 (2007)	0.41	0.62	5.0	41	71
Oman			0.32	0.79		14	76
Qatar			0.39	0.84	7.5	12	76
Saudi Arabia			0.32	0.80	8.5	21	73
Sudan		40.0 (2004)	0.51	0.48	3.3	110	58
Syria	11.4 (2004)	11.4 (2004)	0.42	0.59	5.3	17	74
Tunisia	12.8 (2006)	7.6 (2006)	0.41	0.73	7.3	22	74
Turkey		20 (2007)	0.43	0.76	7.1	24	72
UAE		19.5 (2003)	0.31	0.84	9.1	8	78
Palestine		60 (2002)		0.74		30	73
Yemen	46.6 (2006)	41.8 (2006)	0.38	0.44	3.7	73	62

Sources:
Poverty data from UNDP-POGAR (2011), UNDP (2011), CIA (2011), and World Bank (2011). The figures in parentheses refer to the latest year for which data is available.
Gini Index refers to the latest available figure from the World Bank (2011).
HDI, infant mortality and life expectancy are obtained from UNDP (2011) and UNDP-POGAR (2011)

Table 4 \\ GDP by Sectors (%), 2007

	Agriculture	Industry	Manufacturing	Services
Algeria	8.0	61.3	5.3	30.7
Bahrain	0.3	46.6	14.10	53.1
Egypt	14.1	36.3	15.7	49.6
Iran	10.2	44.5	10.6	45.3
Iraq	5.0	60.0	1.7	34.9
Israel	1.8	22.7	15.8	75.6
Jordan	2.9	30.3	19.5	66.8
Kuwait	0.2	60.1	4.8	39.7
Lebanon	7.4	22.4	11.2	70.2
Libya	2.1	76.4	4.5	21.5
Morocco	13.7	27.3	15.0	59.0
Oman	1.2	60.9	10.3	37.9
Qatar	0.1	70.2	7.3	29.7
Saudi Arabia	2.8	65.5	9.3	31.7
Sudan	28.1	30.5	6.1	41.4
Syria	18.1	35.0	11.7	46.9
Tunisia	10.2	29.1	16.9	60.7
Turkey	8.7	28.3	19.1	63.1
UAE	1.8	60.6	12.4	37.6
Palestine	5.6	21.0	13.0	73.4
Yemen	8.9	42.5	9.3	48.6

Sources: World Bank (2011) and UNCTAD (2011)

Table 5 \\ Employment, 2007

	Dependency Rate (%) of working age population	Labor Force Participation (%)		Employment Ratio (%) of 15+ Population	Unemployment (%)
		Total	Female		
Algeria	49.0	58	36.1	49.1	13.8
Bahrain	41.7	64.1	32.3	61.1	
Egypt	59.2	47.8	22.8	42.8	9.0
Iran	42.7	52	31.1	47.8	10.5
Iraq	81.4	41.5	13.4	37.1	17.5
Israel	61.1	57.7	52.1	49.8	7.3
Jordan	65.0	49.4	22.8	37.3	13.1
Kuwait	34.1	68.8	44.9	65.6	1.3
Lebanon	50.6	45.4	22	45.9	9.0
Libya	52.0	52.3	24.1	48.3	
Morocco	52.8	52.4	26.5	46.0	9.5
Oman	54.9	55.9	24.8	51.6	
Qatar	21.4	83.5	48	76.4	
Saudi Arabia	56.8	54.8	20.5	51.0	5.6
Sudan	76.9	52.3	30.5	47.1	
Syria	63.8	50.3	20.7	44.6	8.4
Tunisia	44.9	48	25.3	40.7	14.1
Turkey	50.2	47.3	24.3	42.4	9.9
UAE	25.3	77.4	41	75.7	4.0
Palestine	93.7	42.5	15.1	31.8	21.6
Yemen	88.8	46.4	19.2	38.9	15.4

Source: World Bank (2011) and ILO (2011)

Table 6 \\ Savings and Investments, 2007

	Gross Domestic Savings		Gross Savings		Investment
	US$ Million	% of GDP	US$ Million	% of GDP	% of GDP
Algeria	78140	57.5			26.0
Bahrain	9675	52.4	7893	42.7	26.4
Egypt	21232	16.3	30732	23.6	20.9
Iran	125293	43.8			25.8
Iraq					
Israel	30440	18.2	37230	22.3	19.5
Jordan	-1875	-11.0	1795	10.6	27.3
Kuwait	64581	56.3	66529	58.0	20.9
Lebanon	650	2.6	4161	16.6	26.8
Libya	45673	63.6	47722	66.5	25.0
Morocco	17580	23.4	24303	32.3	31.2
Oman	24376	58.2	19858	47.4	
Qatar	41274	58.1			30.2
Saudi Arabia	185751	48.4	175104	45.6	20.3
Sudan	9455	20.3	5197	11.2	20.1
Syria	7812	19.3	7943	19.6	21.6
Tunisia	7845	22.0	7469	21.0	23.2
Turkey	102943	15.9	98078	15.2	21.4
UAE	90837	43.8			19.5
Palestine					
Yemen					

Source: World Bank (2011)

Table 7 \\ FDI and Investment, 2007

	FDI net	FDI Inflows	FDI Inflows	FDI Outflows	Investment
	US$ Million	% of GDP	US$ Million	% of GDP	% of GDP
Algeria		1.2	1662		26.0
Bahrain	87	9.5	1756	9.0	26.4
Egypt	10913	8.9	11578	0.5	20.9
Iran		0.6	1670		25.8
Iraq	964	1.7	972	0.0	
Israel	194.4	5.3	8798	5.2	19.5
Jordan	2574	15.4	2622	0.3	27.3
Kuwait	-9673	0.1	112	8.5	20.9
Lebanon	2528	13.5	3376	3.4	26.8
Libya	756	6.5	4689	5.5	25.0
Morocco	2194	3.7	2807	0.8	31.2
Oman	2881	8.0	3332	0.6	
Qatar					30.2
Saudi Arabia	24470	6.3	24335	0.0	20.3
Sudan	2426	5.2	2426	0.0	20.1
Syria	1242	3.1	1242	0.0	21.6
Tunisia	1515	4.3	1532	0.0	23.2
Turkey	19941	3.4	22047	0.3	21.4
UAE					19.5
Palestine	36		28		
Yemen	917	4.2	917	0	

Source: World Bank (2011)

Trading Peacefully:
How to Increase Trade in MENA after a Comprehensive Arab-Israeli Peace

Suleiman Abu Bader, Saad O. Khatib, Joseph Zeira

Contents

Executive Summary

This study reviews the current state of international trade in the Middle East and North Africa (MENA) region. It also makes some recommendations on how to increase international trade in our region after a comprehensive Arab-Israeli peace agreement.

We focus on four main ideas. One is to build special territorial corridors for trade between Arab countries, which are on the two sides of Israel. These corridors will pass through Israeli territory, but will not require any tariff or tax for passing through the country, but only some transportation fee. We estimate that such corridors can boost intra-Arab trade significantly. The second idea is to develop centers for undergraduate education within Palestine for students from other Arab countries. These centers will be based on the existing system of higher education in Palestine, after making the required changes and improvements, and will make use of the high quality of the human capital in the Palestinian society in general. The third idea is to develop centers of graduate education in Israel for students from the Arab countries. The fourth idea is to develop centers for high-tech R&D in Palestine in collaboration with Israeli firms and knowhow, which will supply high-tech services to the Arab countries.

Our analysis demonstrates that in order to reap the benefits of peace we need to prepare ahead of time. In our previous project we showed for example that one of the important elements of the Israeli-Palestinian peace agreement, the territorial link, should be planned and built already today, even before we reach a peace agreement. The same logic applies here. Building territorial passages is a long process, and so are improving the systems of higher education and the high-tech sectors. Hence, now is the time to start. All these are initiatives that governments should embark upon, as these are areas where the private sector plays a secondary role. We also believe that the private sector will play an important role in realizing the potential trade benefits from comprehensive peace, but such developments should be left to markets and we therefore do not discuss them as a policy issues.

1. Introduction

This study reviews the current state of international trade in the Middle East and North Africa (MENA) region. It also attempts to make some recommendations on how to increase international trade in our region after a comprehensive Arab-Israeli peace agreement. We assume that such a peace agreement will follow the basic outline of the Arab Peace Initiative (API). The Arab Peace Initiative was first proposed by the Arab League in 2002. It offers Israel a comprehensive peace with all Arab states, with full normalization of relations, once Israel reaches peace agreements with Palestine and Syria, where those peace agreements would be based on the pre-June 1967 borders. The current AIX project, which this study is part of, analyzes how the API can be utilized to increase economic development and economic coordination in MENA, and also what economic policies and measures can strengthen the comprehensive peace in the Middle East, making it more inclusive and more durable. Within this general project this study focuses on the issue of international trade within MENA.

It must be clear from the outset that we do not attempt to predict how trade will develop once Israel and its Arab neighbors embark on the new road of peace and end their long historical conflict. Such a change in relations in the region is so dramatic and so revolutionary, that it is very difficult to imagine what its total impact might be. It is especially difficult to predict developments in international trade, since this area is extremely dynamic, constantly and rapidly changing due to increased globalization and the rapid technological innovations of recent decades. We cannot try and guess ahead of time what types of innovations will be pursued by entrepreneurs in the area, and what type of trade initiatives will unfold once barriers are removed, once new relations are created, once armies shrink, once new industries emerge, and many other changes occur. Some might claim that trade and economic relations will not be affected significantly by a comprehensive peace. They might point at the poor state of trade between Israel, Egypt and Jordan, the two countries that have already signed peace agreements with Israel. But this argument is misleading. The peace agreements between Israel and these two countries have been quite limited in their effect, since they were not part of a comprehensive peace agreement. Hence, they were

not viewed as signaling a profound shift in the Arab-Israeli relations. As a result, these two agreements did not penetrate large social circles in these two countries and their economic effects have been fairly small.[1] We firmly believe that a comprehensive peace, which profoundly changes the mood in the Middle East, both in Israel and in the Arab countries, will have much deeper effects on the entire economic landscape in the region, including international trade.

Hence, if we do not want to indulge in attempts to foresee the future, we should instead outline a few possibilities for increasing and intensifying trade following a comprehensive peace agreement. We focus on proposals on infrastructure, education and R&D – areas that require strong involvement on the part of the public sectors. This study therefore outlines what governments can do to foster important areas of international trade once peace is achieved. We focus on four main ideas. One is to build special territorial corridors for trade between Arab countries, which are on the two sides of Israel. These corridors will pass through Israeli territory, but will not require any tariff or tax for passing through the country, but only some transportation fee. The second idea is to develop centers for undergraduate education within Palestine for students from other Arab countries. These centers will be based on the existing system of higher education in Palestine, after making the required changes and improvements, and will make use of the high quality of the human capital in the Palestinian society in general. The third idea is to develop centers of graduate education in Israel for students from the Arab countries. Again, the operation of such centers requires some serious changes in the system of Israeli higher education and the study outlines them in detail. The fourth idea is to develop centers for high-tech R&D in Palestine in collaboration with Israeli firms and knowhow, which will supply high-tech services to the Arab countries.

We firmly believe, and this study will demonstrate, that these initiatives have the potential to invigorate and increase trade in goods and services both between Palestine and the other MENA countries, between Israel and the MENA countries, and even among the MENA countries themselves. It is

1 This is discussed in more detail below in Section 3.

also clear that these initiatives, due to their strong public character, require some government involvement and investment, and that is why we focus on them. We assume that private sectors, once peace settles down, will find ample ways to exploit the new political situation and the opportunities within. We direct this study to governments, who can plan ahead and put in place the conditions for increased trade in some well specified areas. This also reminds us that governments are responsible not only for taking advantage of these possibilities, which will be opened by a comprehensive peace, they are also responsible for reaching peace in the first place. Let us hope they will rise to the challenge they are presented with.

2. Current Patterns of International Trade in MENA

As already mentioned in the introductory study of this project, the MENA region has some unifying characteristics, mostly religious, as it is almost entirely Muslim, and cultural, since most countries in the region, except for Israel, Turkey, and Iran, are Arab. Thus, for the most part they share a common language and a common culture. But despite these unifying similarities, we also observe great diversity and great disparities in the region. Some countries are densely populated, like Egypt, Turkey and Iran, while other countries are more sparsely populated. Some countries live in the temperate zone, while others (actually most countries in the region) are located in arid areas and even in deserts. There is also large economic diversity in the region.

GDP per capita differs significantly across countries in the region. The oil-rich Gulf countries have the highest GDP per capita. Israel trails somewhere behind, while the rest of the countries lag far behind, and some are even extremely poor. Thus for example, in 2007, GDP per capita (in PPP adjusted international dollars) was 56,228 in the UAE, 26,529 in Israel, 13,163 in Turkey, 10,987 in Iran, 5,057 in Egypt, 2345 in Yemen, 1,995 in Sudan, and 1,303 in the West Bank and Gaza. But the countries in MENA differ not only in their output per capita, but in the structure of their production as well. Interestingly the richest countries in the region are quite different in their structure from countries with similar levels of income. While the largest sector in most developed countries is services at around 60% of GDP, in the

Gulf countries it is industry that racks up more than 60% of GDP. This is of course due to the oil industries. The poorer countries in the region are characterized by the relative size of their agricultural sectors, especially in Sudan, 28% of GDP, Syria, 18% of GDP, and Egypt, 14% of GDP.

One might expect that such large economic diversities should stimulate international trade in the region, to take advantage of the differences between the countries. Apparently, however, this is not the case at all. In general, the MENA countries engage in international trade quite significantly. In 2009 their share of global merchandise exports was 5.7%, while the share of these countries in global GDP was less than 2%. But the MENA countries do not trade much with one another; their trade is directed much more toward countries outside the region, mainly Europe. Tables 1 and 2 describe trade in merchandise (not including services) between MENA and the various regions of the world.[2] Table 1 focuses on exports from MENA to these various regions as shares of total exports from MENA.

Table 1 \\ Exports of Merchandise from the MENA to Global Regions in 2009 (%)

MENA	11.2
EU	17.6
NAFTA (North America)	8.3
Rest of Western Hemisphere	0.9
Sub-Saharan Africa	2.2
APEC – Asia Pacific Economic Cooperation	47.7
(of which) China	8.5
World	100

From Table 1 we learn that Asia is the main export destination for the MENA countries. This of course reflects the large share of oil in the region's exports.

2 For more data on trade between regions of the world see the Appendix, Tables A.1-A.5.

Note that China is the recipient of 8.5% of MENA exports, which is quite significant for a single country. The exports to China have grown very rapidly in the last two decades. In 1990 China was the destination for only 0.3% of exports from the MENA. Since then these exports have grown by more than 5,000% in real terms. Note that 90% of these exports to China are oil. Interestingly the main relative reduction in exports during these 20 years was to Europe. In 1990 34% of the MENA exports went to the EU. This number has diminished to a mere 17% of the MENA exports. The relative share of exports to the EU has thus declined to half. Another interesting observation derived from Table 1 is that exports to America (the continent) are relatively quite small, less than 10% of MENA exports, of which 85% are oil. This could be an effect of distance, since Asia and Europe are much closer to MENA than America.[3] Table 1 also implies that the share of exports within MENA countries is small. This result is discussed below.

Table 2 \\ Imports of Merchandise to MENA from Global Regions in 2009 (%)

MENA	13.5
EU	32.1
NAFTA (North America)	8.5
Rest of Western Hemisphere	2.7
Sub-Saharan Africa	0.9
APEC – Asia Pacific Economic Cooperation	36.1
(of which) China	10.8
World	100

Table 2 describes merchandise imports to MENA from the various regions as shares of total merchandise imports to MENA, in percentages. From Table 2 we learn that MENA imports goods mainly from Europe and Asia, which

3 Gravity studies, used below in this study, indeed show that distance has a significant effect on trade.

together account for 68% of the goods imported. These trade patterns have seen significant changes over the last twenty years. In 1990 Europe was the source of almost half of the imports to MENA - 45.8% - and that share has declined to less than one third. The share of APEC has increased, from 28% in 1990 to 36% in 2009. But most dramatic of all is the increase of imports from China. From a share in imports of 1.6% in 1990, it now supplies more than 10 percent of the imports to the region. The share of America in imports to MENA is a bit more than one tenth, but is fairly low. Again, distance might explain this.

Before we discuss trade within MENA, we look at the balance of payments in the region. In 2009, export of merchandise to the world was 704 billion dollars, and import of merchandise was 633 billion dollars. There is clearly a surplus of merchandise exports over imports, driven mainly by oil exports. Interestingly, MENA has a current account deficit of 11 billion dollars. This means that that MENA has a very large deficit of services, which turns the surplus in merchandise to an overall deficit.

We next turn to trade between the MENA countries. Tables 1 and 2 show that this trade is relatively small and amounts to only 10% of the trade of the MENA countries. This is rather surprising as distance is so important for trade, and we would expect trade within MENA to be larger due to the proximity of these countries one to the other. It is even more surprising as we know that the MENA countries are quite diverse and thus have a lot of comparative advantages to exploit through international trade. Clearly, it is far beyond the scope of this document to find a full explanation to this surprising fact, but we do three things. First, we briefly survey the literature for the main explanations for the low levels of intra-MENA trade. Second, we check some of these explanations by using statistical tests. Third, we focus on issues related to the Arab-Israeli conflict. This might be conducive to finding ways of promoting trade once a settlement for the conflict is reached.

3. Possible Explanations for Low Trade within MENA

Economists have considered many variables that affect the amount of trade between countries. Some of these explanations focus on policy, and especially on policy towards trade, namely on trade agreements. Other explanations focus on geography and mainly on physical obstacles to trade. Other explanations stress issues of income, or development. In this section we try to apply these general explanations to the trade between MENA countries. Some of the following analysis is a summary of existing research, but some of it is based on our own estimation of a gravity regression. A gravity regression is a statistical test that examines how the volume of trade between each pair of countries depends on a number of explanatory variables. The main explanatory variables are the GDP of the respective trading countries and the physical distance between them.[4] The distance is used as a measure for transportation costs between the two countries. To these variables we add more variables, like whether the two countries have a trade agreement between them. The results of the gravity regression are presented in the Appendix in Table A.6 and they reflect a test of 173 countries and data on trade over more than fifty years (see footnote 5 below).

Regional trade agreements: Tariffs and non-tariffs are considered to be major factors that explain the low intra-Arab trade. Numerous bilateral and multilateral trade agreements were signed among Arab countries since the 1940s. However, these agreements were not successful in reducing tariffs and non-tariff trade barriers, which allow greater regional trade. As was outlined earlier, the Great Arab Free Trade Area (GAFTA) was signed in 1997 and was expected to be fully operative by 2005. It is considered successful in reducing some of the trade barriers, especially, tariffs. It would be difficult to assess the effectiveness of GAFTA on trade among Arab countries based on comparing the Arab share in Arab worldwide trade before and after signing the agreement as other factors were also changing at the same time. To test for the net impact of GAFTA we added a dummy variable that takes the value 1 if the pair of countries are GAFTA members and 0 otherwise, in our gravity

4 The resemblance to gravity, which depends positively on the masses of two bodies and inversely on the distance between them, is obvious.

model. In addition to this variable, the model adds six more dummy variables to control for the effects of other trading blocs, among them the Association of Southeast Asian Nations (ASEAN), the Caribbean Community (CAR), the European community (ECD), and the South Pacific Regional Trade and Economic Co-operation Agreement (SPR). This enables us to compare the impact of GAFTA on bilateral trade relative to that of other agreements for countries with similar characteristics. As the results in Table A.6 show, GAFTA has a highly significant impact on trade compared to countries that are not part of any of the other trade blocks in the regression. Hence, GAFTA clearly improved trade in MENA since its inception. However, its impact is far below that of other regional agreements. The reason for that could be that GAFTA is a continuation of numerous bilateral and multilateral trade agreements among Arab countries since the mid-1940s. Thus, the limited impact of GAFTA could be a manifestation of the very modest effectiveness of those agreements rather than of GAFTA itself.[5] Therefore, this result proves that trade agreements within the MENA region were less successful in enhancing intra-regional trade than other regional agreements worldwide. For example, the Association of Southeast Asian Nations (ASEAN) was formed in 1967 with five nations and it includes ten members today. The objectives of the association are to accelerate regional economic, social and cultural development and to establish peace and stability amongst its member states. ASEAN has made significant progress in developing intra-regional economic relationships. The Preferential Trading Arrangement (PTA), the Enhanced PTA Program and the ASEAN Free Trade Area (AFTA) are examples of such economic cooperation. AFTA was introduced in 1992 with the objective of developing a regional competitive advantage, in order to utilize the economic efficiency and productivity of its member countries. AFTA removed tariff and non-tariff barriers within the region. As a result, exports among ASEAN countries increased from 43.26 billion USD in 1993 to almost 80 billion USD in 1996, with an annual average growth rate of 28.3%.

5 In our gravity analysis we utilized the dataset of Rose (2004) data which covers 173 countries over the period 1948-1999. As such, the data covers only the first two years of GAFTA, therefore, our results regarding the effectiveness of GAFTA on enhancing the bilateral Arab trade should be taken cautiously. One advantage of our analysis relative to other gravity studies that analyzed the determinants of bilateral trade in MENA, is the extensive data base used here.

Researchers have learned that to a large extent GAFTA has been successful in removing many trade barriers, as shown by Hoekman & Sekkat (2010), Romagnoli & Mengoni (2009), and Hertog (2007). It is considered to be the most central and comprehensive trade agreement signed so far between Arab countries. According to Abedini & Péridy (2008), its importance is manifested in several aspects. First, all countries in the Arab region have joined the agreement. Second, it is supported by central intra-regional political institutions (Arab League, GCC), and third, its content is relatively comprehensive. It contains tariff removal on intra-GAFTA manufactures trade (which was officially completed by the beginning of 2005), a removal of several non-tariff barriers to manufactures trade (monetary, administrative and quota barriers) and a partial liberalization of intra-Arab agricultural trade.

Abedini & Péridy (2008) analyze the impact of GAFTA implementation during the 1997-2005 period, during which 15 Arab countries implemented the agreement, while six other countries have not yet signed or implemented it.[6] They find the effect of the agreement to be significant. Using a gravity model, they examined the determinants of trade performance during the 1988-2005 period within all GAFTA countries (both those who have implemented it and those who haven't yet), as well as within 35 other reference countries. They concluded that the GAFTA agreement has increased intra-regional Arab trade by about 16-24% during the period 1997-2005, depending on the econometric method used. However, their results should be regarded with caution, as the fact that GAFTA has been implemented only gradually during this period may create an identification problem (Hoekman & Sekkat, 2010).

A survey conducted in 2008 by Hoekman & Zarrouk (2009) among 300 exporting and importing firms (across nine GAFTA members) revealed that the GAFTA agreement has had a positive impact on more than 90 percent of responding firms. According to them, this is mainly due to the fact that, by and large, tariffs on intra-regional trade have indeed been removed, eliminating almost completely a very central barrier to intra-regional trade in the past (in a similar survey conducted in 2001, tariffs were ranked first in a list of the most important barriers to intra-Arab trade).

6 The non-implementing countries were Algeria, Sudan, Somalia, Mauritania, Comoros and Djibouti. These countries contribute only 11 percent of Arab intra-regional trade.

In contrast, other trade barriers tackled by the GAFTA agreement continue to limit intra-Arab trade, reflecting inappropriate address and/or implementation. Although the GAFTA agreement officially contains a precise set of rules of origin (ROOs), coordination among Arab countries continues to be partial, as ROOs are still considered to have a statistically significant impact in restricting trade, having the effect of a 3-4% tariff (Hoekman & Sekkat, 2010; Hertog, 2007). Lack of coordination in product standards' policies, another trade barrier tackled by the GAFTA agreement, still restricts intra-Arab trade (Hoekman & Sekkat, 2010). As for custom procedures' barriers, Hoekman & Zarrouk (2009) find some improvements, but Hertog (2007) and Dennis (2006) note that, by and large, these barriers are still heavy and sometimes unpredictable. A recent study by PALTRADE has found that these barriers are more due to implementation than to policy.

Moreover, several major impediments to intra-Arab trade have not been addressed concretely by the GAFTA agreement. Hoekman & Sekkat (2010) find that the agreement has not been harnessed to pursue service sector reforms, although the bottlenecks in the service sectors (transportation, communication, etc.) are considered today to be a main barrier to intra-Arab trade. Lack of coordination between Arab countries in trade, labor and investment policies and regulations is also assumed to be a substantial impediment to intra-Arab trade, which the GAFTA consolidation process has not yet dealt with.

Lastly, GAFTA process characteristics also reflect substantial political barriers which are limiting greater intra-Arab trade. These reflect the reluctance of Arab regimes to transfer sovereignty to supranational bodies for managing and enforcing the Arab intra-trade policies. Indeed, GAFTA is an intergovernmental body launched under Arab League auspices. As such, it explicitly assures the precedence of member states, concerning sovereign autonomy. Moreover, it does not contain a binding dispute settlement mechanism, which is a very substantial element in any regional trade agreement. Hence, the system lacks the necessary credibility, which can ensure effective implementation of GAFTA (Hoekman & Sekkat, 2010).

Geography: Shared borders, distance between countries and land area are considered to be major factors explaining bilateral trade between countries.

Common borders, short distance and smaller land areas reduce shipping costs of merchandise goods and therefore are expected to increase the bilateral trade between countries. This is especially significant when the other transport facilities such as maritime and air transport services are lacking or inadequate. In the MENA, physical barriers to transport are perceived in recent years to be one of the major obstacles to Arab intra-regional trade (Romagnoli & Mengoni, 2009; Dennis, 2006; and Hoekman & Sekkat, 2010). Transport sector bottlenecks are explained partly by the dominance of public monopolies in the sector. Air transport is concentrated in a few key airports and suffers in most cases from restrictive regimes. Only Jordan, Morocco and Lebanon have gradually moved towards more open regimes. Maritime transport suffers from weak competitiveness of the mainly state-owned port systems and from poor infrastructure for loading and storing goods. The same concerns can be applied to land transport services, namely the road and rail networks. The inadequate maritime and air transport infrastructures can explain why 80%-100% of the intra-Arab trade uses land transportation compared with less than 10% of world trade (Abdel-Kader Lasheen, 2000). These obstacles dramatically increase the shipping costs of merchandise goods between Arab countries. This can also explain the relatively high trade within sub-regions, between countries sharing common borders such as Syria, Jordan and Lebanon in the Mashreq sub-region, and among the GCC countries.

The results of the gravity model show clearly, as can been seen from Table A.6, how these geographical factors are important determinants of bilateral trade among MENA countries. The coefficients of these variables are highly significant. Moreover, the impact of a common border and the land areas of a pair of MENA countries have larger impacts on their bilateral trade when compared to pairs of countries in other regions in the world with common characteristics. For example, the expected bilateral trade between two neighboring MENA countries is higher by 38%-57%, depending on model specification, which is a higher increment than between pairs of non-MENA countries sharing the same characteristics.

The finding that geographical factors are more critical for intra-MENA trade than for countries with common characteristics can be explained, at

least in part, by the low performing transport infrastructure and services in many MENA countries, relative to non-MENA countries. A recent report by the World Bank names the inadequate transport infrastructure as one of the major reasons for the recent decline in the regional and international trade flows, together with higher costs, delays, and uncertainty. To address this situation, the report stresses the need for transport infrastructure with broader geographic coverage, better inter-modal connectivity, higher quality, and sufficient capacity to accommodate traffic flows, as well as more efficient logistical services.

The Arab-Israeli Conflict: The conflict also contributes to the reduction of intra Arab trade, through its interaction with the geography. The reason is that as long as the conflict continues, Israel operates as a territorial barrier between the two parts of MENA, namely the Middle East and North Africa. Arab Countries, who happen to be on opposite sides of Israel, cannot transport goods over land and thus suffer from increased trading costs. This leads to reduction of trade between them. To see this we look at data on trade between pairs of Arab countries from the opposite sides of Israel. The data for 2009 are in percentages of GDP and are presented in Table 3. The data include countries that are rather close to one another, so that overland transportation is a preferred option for them. Morocco and Turkey, for example, would prefer to trade by sea than by land and thus will not be significantly affected by the inability to pass through Israel.

Table 3 \\ Shares of Trade in GDP for Pairs of Countries, 2009 (%)

	EGYPT	TUNISIA	LYBIA	SYRIA	LEBANON
EGYPT					
TUNISIA	0.28				
LYBIA	0.98	3.60			
SYRIA	1.04	0.09	1.09		
LEBANON	0.49	0.06	0.12	6.95	
JORDAN	0.94	0.19	0.11	1.90	1.13

Table 3 shows that countries on the same side of Israel trade with one another much more than countries on opposite sides of Israel, who do not have a territorial link for overland transportation of trade. If we calculate the averages we find that the average trade share in GDP for pairs of countries on one side of Israel is 2.47%, while the average trade share in GDP for pairs of countries that are located on opposite sides of Israel is 0.45%. This is a significant difference. This negative effect of Israel as a territorial barrier is not new and has been there even when trade was less prominent. In 1995 the average trade share in GDP for pairs of countries on one side of Israel was 1.08%, while the average trade share for pairs of countries that are located on opposite sides of Israel was 0.20%.[7] Hence, in both periods trade between countries on the same side of Israel was higher by a factor of 5 than trade between countries separated by Israel. Of course, one can question it by saying that countries which are on opposite sides of Israel are usually more distant from one another than pairs of countries that are on the same side of Israel. In Section 5 we deal with this argument in more detail and control for distance. We find that the fact that Israel is located between two Arab countries has a strong negative effect on trade between these two countries, in addition to pure distance. Section 5 also discusses the possibility of reducing this effect, once the conflict is over.

7 See Table A.7 in the Appendix.

Levels of Development: This variable has also been cited as an explanation for low intra-Arab trade. Fischer (1993) argues that richer countries prefer to import higher quality goods which are more likely to be produced by industrialized countries. The related low diversity of production and of the export base can also explain the lower intra-Arab trade. In our gravity model, the estimate of the coefficient of the interaction between the GDP per capita and the dummy variable for MENA countries is significantly negative. The absolute value of this coefficient is smaller than the coefficient of the GDP per capita, which indicates that the impact of per capita income in MENA is still positive but is less than half of its impact for non-Arab countries.

Insufficient Human Capital: Related to the low level of development is the shortage of human capital, namely of skilled workers, in the Arab countries. Bhattacharya & Wolde (2010) consider the lack of skilled workers in Arab countries to be an important factor impeding Arab manufacturing competitiveness. They claim that it particularly limits export diversification into more sophisticated industries, as recent technologies require more skills and education, thus limiting intra-regional trade.

As Nabli (2004) and Yousef (2004) indicate, access to education has improved considerably among Arab countries through the years, for men and also for women, so that the level of education of the Arab labor force has improved substantially. Nevertheless, it is still low by comparison to international levels. The MENA region has an average of 5.3 years of schooling per adult, while most developed countries have close to 10 years of schooling.

Moreover, the poor quality of the education and training systems in the Arab world is perceived (Nabli, 2004, Bhattacharya & Wolde, 2010 and Yousef, 2004) to be a major impediment to improved competitiveness, as well as to higher economic returns to education. The education systems in many Arab states are too narrowly geared toward employment in the public sectors, and have not sufficiently developed other professional skills, which are more applicable to the manufacturing sectors. One example for this is the weakness of vocational education. Another example for this is lack of sufficient coordination between academic institutions and the manufacturing sectors. Such shortcomings create a mismatch between the skills they provide and those required by a competitive market economy.

Nabli (2004) and Yousef (2004) perceive the poor quality of the Arab education systems as a symptom of a wider lacuna: the limited progress Arab states have achieved in shifting away from their old economic model of closed and centralized, public sector-led and oil-dominated economies to open and liberalized private sector-driven economies. Indeed, education systems in Arab states are characterized by poor governance, which is manifested by high rigidity and centralization, isolation from the main current economic environments and lack of quality and performance measurements. Nabli (2004) attributes this poor quality also to an inadequate economic openness, which could have encouraged firms to adopt more modern technologies and increase demand for skilled workers.

The lack of sufficient human capital, both in quantity and in quality, can also be significantly improved following a comprehensive peace agreement. We discuss these issues in Sections 6, 7 and 8 in this study. The reason is that both Israel and Palestine have relatively good systems of education, but they are currently disconnected to a large extent from the Arab world. There is significant chance that once the overall political situation will be changed, the two countries will be able to develop a significant system of exporting human capital to nearby Arab countries.

4. The Trade Fruits of Current Peace Agreements: Egypt and Jordan

When we want to study potential effects of comprehensive peace in the Middle East on international trade in the region, we should naturally look at trade between Israel and the two Arab countries that already signed peace agreements with Israel, namely Egypt and Jordan. Egypt signed its peace agreement with Israel in 1979 and its implementation ended for the most part in 1982, with the withdrawal from Sinai, and finally in 1985, with the final withdrawal from Taba. Hence the two countries have been at peace for 30 years, which is as long as the period the two countries had been at war (1948-1978). Jordan signed its peace agreement with Israel in 1994. Israel has strong political ties with the two countries, but these are mainly with the

ruling political and military elites.[8] The following data, in Table 4, show that the economic ties between Israel and these two countries have been much weaker than the political and military ties. Namely, there has been trade between Israel and the two countries, but the volume of trade has been quite low and it has been quite variable over time, which indicates vulnerability to various shocks. Table 4 describes the trade between Israel and the two countries during the ten years 2000-2009.

Table 4 \\ Trade between Israel and Egypt and Jordan in 2000-2009

Year	Egypt's Imports from Israel	Egypt's Exports to Israel	Jordan's Imports from Israel	Jordan's Exports to Israel
2000	41.4	103.3	52.8	64.5
2001	32.1	140.0	79.7	74.9
2002	17.1	101.0	93.3	88.3
2003	15.5	31.0	103.2	71.4
2004	18.2	16.0	135.6	76.3
2005	82.8	43.3	120.2	79.0
2006	107.9	65.9	117.9	72.9
2007	127.6	78.4	165.7	86.6
2008	81.1	37.8	197.6	108.9
2009	108.0	217.4	145.3	175.1

(US$M, 2000 prices)

We can learn a number of lessons from Table 4. First, trade with Egypt and Jordan is fairly limited, despite the many years of peace with the two countries. With a GDP of more than 150 billion dollars in Israel, these amounts of trade are marginal. But we should be careful in drawing economic conclusions from these low figures of trade. The main reason is that despite the peace between these two countries the lack of comprehensive peace is key in

8 The ties between Israel and Egypt have suffered a severe blow by the revolution that ousted Mubarak from power.

limiting trade between Israel and these two countries. As long as the conflict with the Palestinians continues, it is very hard to convince people on both sides to buy and sell one to another. A clear indication of this are the years 2001-2004 of the Intifada. The amount of Israeli exports to Egypt declined precipitously and began to increase again only after it. A similar and even a longer decline was observed for Egypt's exports to Israel. The effect of the Intifada on Jordan is not so manifest in the data, but it could be that it has delayed the increase in trade, which came later.

The effect of the Israeli-Palestinian conflict on trade between Israel and these two Arab countries can also be deduced from another fact, that most of this trade is in intermediate goods and not in final goods. The value of trade in final goods between Israel and Egypt is less than 10 million dollars and the value of trade in final goods between Israel and Jordan is less than 40 million dollars in both directions. It is important to note that countries of origin of intermediate goods are usually not identified as they do not reach stores and the general public. This shows that the level of hostility due to the continuing conflict is still high and creates a significant barrier to trade.[9]

Our conclusion is therefore that we should be careful in drawing too many conclusions from the experience of international trade between Israel and these two countries. A comprehensive peace will present a real change in all MENA countries, including Egypt and Jordan. Once the conflict is over, it will open many new opportunities to trade and to exploit the vast differences between Israel and its neighbors and even among the Arab countries. We shall next describe some of these opportunities and confine ourselves to areas that are within the control of governments, leaving private sectors to form their own initiatives and innovations. We first discuss the ways in which the API can increase trade in merchandise among Arab countries.

9 For more detailed data on the composition of trade between Israel and Egypt and Jordan, see Tables A.8-A.10 in the Appendix.

5. Territorial Corridors between Arab Countries through Israel

Section 2 shows that trade between pairs of Arab countries, which are on opposite sides of Israel, is much lower, by a factor of 5, than trade between Arab countries that are on the same side of Israel. This finding led us to deduce that currently Israel constitutes a territorial barrier to trade between such Arab countries. In this section we examine this issue more thoroughly and we also offer an idea on how to overcome this barrier once comprehensive peace is achieved.

The main claim against this hypothesis can be that this finding reflects greater distance between countries on opposite sides of Israel than between countries on one side of Israel. To examine the issue more thoroughly we conducted a gravity test to trade among all pairs of Arab countries. Such a gravity test is a regression analysis which examines how the volume of trade between each pair of countries depends on the distance between this pair of countries and other regional and economic variables. We expect the coefficient of distance in the regression to be negative, namely greater distance should lead to less trade. Indeed this has been the result of many empirical tests and this is the case with respect to MENA as well. But at this point we add another explanatory variable to distance. This is a dummy variable that gets the value 0 if the pair of countries is on one side of Israel and the value 1 if Israel is in between the two countries in the pair. The full results of the regression tests are presented in Table A.11 in the Appendix. We shall only highlight the main results here.

The regression results are indeed impressive and fully corroborate our hypothesis. The variable 'in between' has a significant negative effect on trade, even when the distance between the two countries in the pair is controlled for. Quantitatively, putting Israel between two Arab countries reduces trade between these two countries by 20%. Furthermore, a regression that also tests the interaction between the two variables, distance and 'in between' shows that the effect of 'in between' increases the closer the two countries of the pair are. Namely if the two countries are closer, the decline in trade due to the territorial barrier that Israel poses for these countries is larger.

Table 5 presents our estimates following the gravity regression analysis of how much removing this territorial barrier will increase trade for all relevant pairs of Arab countries.

Table 5 \\ Increase in Trade as a Result of Removing the In-Between Variable

for Pairs of Countries

Country	Syria	Lebanon	Jordan
Egypt	77%	103%	136%
Libya	12%	13%	24%
Tunisia	1%	6%	3%

The results of this analysis, which are described in Table 5, are dramatic. They show that removing the barrier to transportation created by the conflict with Israel can more than double the trade between Egypt and Arab countries on the other side of Israel. This is a huge increase. These results lead to our first proposal, which deals with merchandise trade in MENA.

Proposal

Once the Arab-Israeli conflict will be over, Israel and Palestine will be able to open special territorial passages through Israeli territory, which will significantly reduce the costs of trade between Arab countries, which lie on opposite sides of Israel. These territorial passages will enable transport of goods across Israel and Palestine, and thus will promote trade between the two parts of the Arab world. In the first stage these territorial passages are planned as highways, for trucks, buses and similar freight vehicles, but trains can be considered as well at later stages. Following are brief explanations of this initiative, which can significantly benefit both the Arab countries and Israel and Palestine.

5.1 Location of Highways

In principle we suggest three main routes, two go through Israel and one goes through Palestine. The first route will connect Egypt and Jordan through a passage north of Eilat, close to Yotvata. Such a passage makes it possible to connect the road that crosses the Sinai Peninsula through E' Tamad, with the Jordanian road that goes along the valley north of Aqaba. This connection will enable traffic from Egypt to move overland to South Jordan, and through it to Saudi Arabia and the Gulf countries. It may serve even land traffic from North Africa to Iraq. The second passage through Israel can be arranged by use of the Israeli Route 6. It will connect Egypt from Ketziot to the Israel's Northern border with Lebanon. An extension of this highway to Syria can be considered as well. In this case the passing freight can use Route 6, and only short connecting segments to the borders need to be constructed, as Route 6 goes from the South of Israel, close to Egypt, to the North, close to Lebanon. Thus both highways do not require sizable initial investment, as one will be quite short, and the other will use an existing highway for almost its entire length. The third route will go through Palestine. The road will go from Egypt to Gaza and then using the "territorial link" from Gaza to the West Bank and from there on to Jordan. These three roads will be able to connect Egypt, or North Africa, to three different points in the Arab countries that are to the east of Israel and Palestine.

5.2 Operation of Highways

The Southern highway will be isolated from Israel and be dedicated exclusively to merchandise passing through Israel. Thus, it will be open to passing vehicles from the Arab countries only and will be closed to Israeli vehicles. The second and third highways will be used both by Israeli and Palestinian vehicles and by Arab thru freight, but the foreign vehicles will be monitored closely. One way to do it is to attach to each entering vehicle an electronic device which will continuously identify its location. The foreign merchandise which passes along the two highways will be tariff free, but will incur a certain user fee payable to the Israeli or Palestinian check points at the entrance to a highway or at the exit from it. An interesting question is whether payment

should be per vehicle or per merchandise. Vehicles will not be allowed to stop along the highway except for service and will not be allowed to unload merchandise, unless in case of emergency. All this can be done according to standards of "Trade in Transit." Clearly such passages within Israel and Palestine will significantly benefit both their users, as they will enable a territorial connection between the two parts of the Arab world, and also Israel and Palestine, which will benefit from the user fees paid on these roads.

5.3 Financial Implications

Roughly calculated, the territorial passages have a potential to increase international trade between Arab countries by at least 2.5 billion dollars, according to table 5. This is a huge increase. As international trade in the region is growing rapidly, it is anticipated that these figures will grow over time. This improvement in trade will of course benefit not only the trading Arab countries, but Israel and Palestine as well, which will be collecting passage fees. Although the exact sum of these fees is still hard to estimate, it could be more than 25 million dollars annually (1% of the value of merchandise). It seems that such levels of income can quite quickly cover the required investment in infrastructure. Note that Israel's benefits will be not only financial, but also political. One important benefit should be increased national security, since such passages become important to the countries that use them, who will have a vested interest in keeping the passage operating smoothly and continuously.

6. A Proposal for Exporting Higher Education from Palestine

Palestine is a rather small country and its population is small relative to the Arab world. But Palestinians are rich with Human Capital and they have a relatively high number of institutions of higher education. There are at least 10 universities and colleges in Palestine and the main ones are (the numbers of students are from 2009-2010):

- Al-Quds University in Jerusalem: 11,424 students. [10]
- Al-Najah National University in Nablus: 19,761 students.
- Arab-American University in Jenin: 4,382 students.
- Bir-Zeit University: 8,599 students.
- Bethlehem University: 2,966 students.
- Hebron University: 6,804 students.
- Islamic University of Gaza: 20,300 students.
- Al-Aqsa University of Gaza: 15,900 students.
- Al-Azhar University of Gaza: 13,357 students.
- Palestine Polytechnic University: 3,079 students.
- Palestine Technical University in Tulkarm: 2,171 students.
- University of Palestine (an open university): 107,925 students.
- Various Colleges (5): 1,500 students.

The geographical dispersion of universities over Palestine and the wide variety of disciplines, which these universities offer to students, imply that Palestine can position itself as one of the centers of higher education in the Arab world and attract students from all Arab countries. In other words, we suggest that Palestine make an effort in developing higher education as a significant export industry. This of course requires a significant investment. The universities need to increase their student capacities, to develop academic personnel that will be able to attract students from other countries, and to invest in the infrastructure required for incoming students in large numbers. That includes dormitories, communications and similar investments.

In the beginning these universities can specialize in undergraduate studies, as the research abilities of the Palestinian universities are still in need of improvement. In later stages the Palestinian universities can increase their supply and offer graduate studies as well. A more careful analysis of the potential of Palestinian universities can be done in order to focus on specific

10 This university teaches the largest variety of disciplines in Palestine.

areas of higher education, like medicine, communication and media studies, computer science, education, economics, business administration, or public policy. These areas do not require large investments for laboratories, or similar expensive infrastructure, and can thus develop well within the limited territory of Palestine and within a short period of time. Hosting a large number of students during their college studies will have additional economic effects, as it will increase the demand for housing and for other services around the colleges and universities.

7. A Proposal for Exporting Higher Education from Israel

Israel has an extensive system of higher education, which consists of seven research universities and of many colleges. While the colleges offer mostly undergraduate education, the research universities provide graduate education as well, which is divided into a second degree and to a Ph.D. In 2008 the number of Ph.D. students in Israel was around 10,000. If the average time to a Ph.D. is 5 years, this number implies that around 2,000 Ph.D.'s graduate every year. Since this number seems to be larger than the steady state demand in Israel for Ph.D.'s, it seems that Israel can export higher education at the graduate level in significant numbers.

The ability of Israeli research universities is not only quantitative but also qualitative, since the research universities in Israel are quite famous for their research achievements. One of the most prestigious rankings of universities is the Shanghai ranking (http://www.arwu.org/). This ranking puts the seven Israeli research universities in 2009 in the following places:

- The Hebrew University – 72 (5th in Asia/Pacific).
- Tel-Aviv University – 101-150.
- Technion (Israel Institute of Technology) – 101-150.
- Weizmann Institute of Science – 101-150.
- Ben-Gurion University – 301-400.
- Bar-Ilan University – 301-400.

- Haifa University – 401-500.

Hence, the four top research universities are ranked among the top 150 universities in the world. This is of course a general ranking, while in specific areas some of these universities rank much higher. Thus, Mathematics in Tel-Aviv University is ranked 26, Economics in the Hebrew University is ranked 44, and Social Sciences in the Hebrew University is ranked 46 globally.

These findings indicate that Israeli universities have the capacity to provide a high quality, close to home and relatively inexpensive graduate education to students from all over MENA. But the system of graduate studies in the Israeli universities is not yet ready for the challenge and needs to be significantly reformed before it can provide graduate studies to students from the region. Such a reform is required also for internal reasons and should therefore begin as soon as possible. Reform is required in three main areas: organization of graduate studies, language of instruction (English instead of Hebrew) and financial support for graduate students.

The system of graduate studies in Israeli universities is not unified but rather, it is divided to Master studies and a following Ph.D. instruction. Such a system is very different from the American system of a unified graduate program, where students begin with two years of research courses, and then continue to do research. The American system of graduate programs has proven to be very successful and is now followed in all leading European universities. The split in Israeli universities between the courses, which constitute the Master studies, and the research stage, which constitutes the Ph.D. instruction, is due to historical reasons, but mainly due to the fact that there is vast demand to Master studies without continuing to Ph.D., since a Master degree entitles to a higher wage in the Israeli labor market. As a result most of the Master students in the universities are not research oriented and thus the quality of Master programs has declined significantly and they are not sufficient for supplying a good base for a research career. Hence, Israeli universities need to specialize more in research studies and follow the American example of graduate schools. Such a change requires significant reorganization, but more than that, it requires a change in finance by the government, since the universities might lose a significant source of income.

Once the leading research universities will develop graduate schools, they will have to change the language of instruction to English, in order to attract students from abroad. Right now the language of instruction in all Israeli universities is Hebrew. This is due to ideological reasons, but also due to opposition by the student unions to changing to English. The change is required not only in order to accommodate for foreign students, but also because the scientific language today is English, and it is quite useless to develop scientific terms in Hebrew in many research areas, where the community of researchers that might use them is extremely small, due to growing specialization in the sciences. Of course, some of the graduate programs will remain in Hebrew, mostly those programs that focus on areas like the Bible and Jewish studies, which are an obvious specialty of some Israeli universities.

The third issue that needs to be dealt with is the financing of graduate students. Study in a graduate program is highly intensive and time consuming. A student cannot take a graduate program and work at the same time, as is today the case for many Ph.D. students in Israel. In order to enable students to complete such intense studies they need to be financed, even moderately. The Israeli universities have a financing system of sorts for research students, but it is partial, it is not uniform, it is not well organized, and it does not cover the initial stage of the graduate studies, which consists mostly of courses. This requires not only reorganization by the universities, but also some budgeting from the government. There is a need to understand that the top research universities should specialize in graduate education, and that this specialization should be financially supported. Not only will it benefit research students within Israel, but it will also enable Israel to export graduate studies to people from other countries. Naturally the first candidates should be students from the neighborhood, namely MENA.

8. A Proposal for Development of a High-Tech Sector in Palestine

Israel has achieved significant capabilities in high-tech and in information technology over the last 25 years. It has high levels of human capital in these areas and large supporting institutions, like university programs in engineering and computer sciences, large financial intermediaries which supply venture capital and also government agencies that subsidize high-tech enterprises. Furthermore, since high-tech and innovation industries have significant returns to scale, the existence of a large high-tech industry itself increases the productivity of this industry and its ability to further develop and expand its activity.

In view of the high quality of the human capital in Palestine, we can assume that a high-tech sector can develop there rather quickly. Such a sector can combine the demand for information technology services in the Arabic language from the Arabic countries and the accumulated know-how from the Israeli high-tech sector. What is needed is initial public support for this sector, which is justified by the returns to scale in high-tech, with the involvement of high-tech companies and individuals from the Israeli high-tech sector, to start an industry with very promising growth potential in Palestine. It is hard to estimate the possibilities that such an initiative may open before it has got off the ground, since much of the demand is triggered by the supply and by previous demand for alternative services, but the potential seems to be significant. A few such cooperative initiatives are already under way, initiated by high-tech firms, to open businesses within the Israeli Arab community, such as TSOFEN for example. International software and hardware companies such as Oracle, Microsoft and others have also embarked on their own initiatives to integrate their work into Palestinian universities and to work with IT companies in Palestine to tap into this market. Similar initiatives could become much more successful and much more profitable when conducted within the larger society in Palestine, and directed toward a much larger market in the Arab MENA.

9. Summary

This document outlines a number of proposals that can boost international trade in the region following a comprehensive peace agreement. These proposals relate both to trade in merchandise and in services, which have both increased vastly in recent decades. The proposal for territorial passages through Israel and Palestine is intended to increase trade in merchandise among Arab countries, which are quite close to one another, but are physically separated by Israel. As long as the Arab-Israeli conflict persists this separation creates a formidable barrier to trade. Comprehensive peace can remove this barrier and stimulate trade in the region. Israel and Palestine will also benefit from it due to income generated by these territorial passages. The other proposals outlined in the study are to increase trade in services, mostly in education and in high-tech. Such services can be provided by Palestine, by Israel, or even by some form of partnership between the two countries and these services can be exported to the broader MENA region.

We would like to clarify here that we are painfully aware that such initiatives involving territorial passages through Israel and Palestine, of Arab students coming to study in Palestine or in Israel, and of cooperation between Israelis and Palestinians in providing high-tech to the region, seem highly unrealistic in these times of hardship and suspicion. However, we wish to make a few points with respect to such criticism. First and foremost, such an analysis as we conduct in this study is intended to shine a light on the vast potential that peace has to improve our lives and to increase prosperity. We want to examine ways in which peace can change life in the Middle East in general and in Israel and Palestine specifically, since we are a group of Israelis and Palestinians. What we find is that there is broad scope for potential projects that can be developed, which are not possible today because of the conflict, but will be possible once comprehensive peace is achieved. We strongly believe that such an analysis is important for challenging the status-quo. But we also believe firmly that things can change very rapidly, sometimes even from today to tomorrow. Recently we have all witnessed the huge changes in Tunisia and Egypt. Similar changes can occur in other Arab countries. We have seen a summer of mass social protests in Israel. Such changes might have a dramatic effect on the Arab-Israeli conflict.

Here is where our work and research can be very helpful. We show in our analysis that in order to promote peace and to reap its benefits we need to prepare ahead of time. In our previous project we showed for example that one of the important elements of the Israeli-Palestinian peace agreement, the territorial link, should be built already today, even before we reach a peace agreement.[11] The reason is that it takes a long time to build and also that there is a clear understanding how to build it, if we want to achieve peace and not continue the occupation. Similarly, the projects proposed in this study should be started already today. Building territorial passages is a long process, so planning and preparations should begin today. Improving the systems of higher education in order to be able to export higher education to students from the region is a difficult, time-consuming and costly task. Now is the time to start. Building bridges between the Israeli high-tech sector and the Palestinian human capital is also a lengthy process. It should be initiated as soon as possible. All these are of course initiatives that governments should embark upon, as these are areas where the private sector plays a secondary role. We believe that the private sector will play an important role in realizing the potential benefits from comprehensive peace, but we do not have much to say about that. The private sectors in the region will respond to the challenges in ways that are hard to anticipate today, but we believe that private enterprise will seize the opportunities they will be presented with as a result of the dramatic change. But governments can also make a significant contribution to trade, by investing in infrastructure and by supporting the upgrading of human capital. But before all that, governments must make the first step in this long road to prosperity, namely a peace agreement. Right now, with the Arab Peace Initiative on the table, coupled with the Palestinian peace proposals, most of the burden of response lies on the government of Israel. We hope that it will respond positively soon, since too much is at stake - not only economic benefits, but human life on both sides as well.

11 See the fourth stage of the Aix Group, "Economic Dimensions of a Two State Agreement (vol. II)," Ch. 2 "The Territorial Link."

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Appendix

Table A.1

Intra and Inter-Regional Global Merchandise Trade, 2009 (Million $)[12]

			Destination					
Origin	**SSA**	**EU**	**MENA**	**WEST-H**	**D-ASIA**	**APEC**	**NAFTA**	**World**
SSA	28656	56030	4419	8687	429749	91376	45940	213551
EU	71163	3055000	192877	94564	207570	781650	340280	4596370
MENA	15393	124175	78604	6423	162136	335649	58617	703608
WEST-H	7952	91654	15936	135268	67966	3719930	301264	692710
D-ASIA	51679	354096	124626	70590	312011	1213670	351800	1962370
APEC	82911	927839	212232	421126	1225220	3719930	1356114	5613790
NAFTA	16238	185429	49684	260933	141729	1071586	751370	1580984
WORLD	221878	4600120	588302	660065	1762110	8638170	1982011	12335400b

Table A.2

Share of Regional Trade in each Region's Total Merchandise Exports (%)

			Destination					
Origin	**SSA**	**EU**	**MENA**	**WEST-H**	**D-ASIA**	**APEC**	**NAFTA**	**World**
SSA	13.4	26.2	2.1	4.1	20.1	42.8	21.5	100
EU	1.5	66.5	4.2	2.1	4.5	17.0	7.4	100
MENA	2.2	17.6	11.2	0.9	23.0	47.7	8.3	100
WEST-H	1.1	13.2	2.3	19.5	9.8	537.0	43.5	100
D-ASIA	2.6	18.0	6.4	3.6	15.9	61.8	17.9	100
APEC	1.5	16.5	3.8	7.5	21.8	66.3	24.2	100
NAFTA	1.0	11.7	3.1	16.5	9.0	67.8	47.5	100
WORLD	1.8	37.3	4.8	5.4	14.3	70.0	16.1	100

12 Key: SSA= Sub-Saharan Africa; WEST-H = Western Hemisphere; D-Asia = Developing Asia; APEC = Asia-Pacific Economic Cooperation

Table A.3

Share of Regional Trade In World Merchandise Exports (%)

	SSA	EU	MENA	WEST-H	D-ASIA	APEC	NAFTA	World
SSA	0.23	0.45	0.04	0.07	3.45	0.74	0.37	1.73
EU		24.77	1.56	0.77	1.68	6.34	2.76	37.26
MENA		1.00	0.64	0.05	1.31	2.72	0.48	5.70
WEST-H	0.06	0.74	0.13	1.10	0.55		2.44	5.62
D-ASIA	0.42	2.87	1.01	0.57	2.53	9.84	2.85	15.91
APEC	0.67	7.52	1.72	3.41	9.93	30.16	11.00	45.51
NAFTA	0.13	1.50	0.40	2.16	1.15	8.69	6.09	12.82
WORLD	1.8	37.3	4.8	5.4	14.3	70.0	16.1	100

Table A.4

MENA Regional Merchandise Exports, Change Over Time

Destination

	SSA	EU	MENA	WEST-H	China	APEC	NAFTA	World
1990	1333	54345	15356	4403	420	61276	19227	160162
1995	2303	44893	15783	2046	2026	65076	13327	161166
2000	6354	72466	19352	3814	9778	139658	31063	273776
2005	8902	130136	53848	6224	32007	281629	62776	554734
2009	15393	124175	78604	6423	59617	335649	58617	703608
90-09 change	1155%	128%	412%	46%	8180%	448%	205%	339%

Figures are in current US$M

Partner's Share in MENA's Total Merchandise Exports (%), Change Over Time

	SSA	EU	MENA	WEST-H	China	APEC	NAFTA	World
1990	0.8	33.9	9.6	2.7	0.3	38.3	12.0	100
1995	1.4	27.9	9.8	1.3	1.3	40.4	8.3	100
2000	2.3	26.5	7.1	1.4	3.6	51.0	11.3	100
2005	1.6	23.5	9.7	1.1	5.8	50.8	11.3	100
2009	2.2	17.6	11.2	0.9	8.5	47.7	8.3	100
90-09 change	175%	-49%	17%	-67%	2733%	24.5%	-31%	0

Table A.5

MENA Regional Merchandise Imports, Change over Time

Origin

	SSA	EU	MENA	WEST-H	China	APEC	NAFTA	World
1990	1009	56714	11793	2428	1927	35089	12872.5	123897
1995	1467	61686	14261	3665	4347	46982	18477.7	143673
2000	1644	69114	19140	5136	7302	58714	19389.7	169890
2005	3559	137295	59083	10607	26957	126823	33006.6	384775
2009	5625	203113	85278	17385	68152	228697	53944.8	632917
90-09 change	457%	258%	623%	616%	3436%	552%	319%	411%

Partner's Share in MENA's Total Merchandise Imports (%), Change over Time

Origin	SSA	EU	MENA	WEST-H	China	APEC	NAFTA	World
1990	0.8	45.8	9.5	2.0	1.6	28.3	10.4	100
1995	1.0	42.9	9.9	2.6	3.0	32.7	12.9	100
2000	1.0	40.7	11.3	3.0	4.3	34.6	11.4	100
2005	0.9	35.7	15.4	2.8	7.0	33.0	8.6	100
2009	0.9	32.1	13.5	2.7	10.8	36.1	8.5	100
	9%	-30%	42%	40%	592%	28%	-18%	0%

Table A.6

Dependent Variable: lnTrade

	All Countries				MENA Countries	
	Eq1	**Eq2**	**Eq3**	**Eq4**	**Eq5**	**Eq6**
LDIST	-1.137***	-1.118***	-1.163***	-1.132***	-1.603***	-1.554***
LRGDP	0.882***	0.923***	0.880***	0.921***	0.635***	0.699***
LRGDPPC	0.317***	0.326***	0.332***	0.335***	-0.104***	-0.027
CUnion	1.40***	1.147***	1.346***	1.120***		
Border	0.473***	0.544***	0.483***	0.557***	0.355***	0.3423***
LArea	-0.049***	-0.100***	-0.045***	-0. 100***	-0.088***	-0.118***
LRGDP*MENA			0.173***	0.190***		
LRGDPPC*MENA			-0.352***	-0.293***		
BORDER*MENA			0.453***	0.321***		
LAREA*MENA			-0.159***	-0.204***		
CAC	1.333***	1.1664***	1.153***	1.558***		
CAR	1.233***	1.676***	1.149***	1.632***		
ECD	-0.010	0.125**	-0.09**	0.081		
SPR	2.129***	2.771***	2.11***	2.757***		
ASE	1.27***	1.691***	1.233***	1.668***		
MER	0.952***	1.563***	0.867***	1.504***		
GAFTA	0.389***	0.619***	1.016***	0.804***	0.773***	0.615***
Time FE	NO	YES	NO	YES	NO	YES
R2	0.5912	0.6486	0.5932	0.6494	0.3856	0.4016
N	234597	234597	234597	234597	2707	2707

All regressions include constants and the following variables: ONEIN a dummy variable that takes the value 1 if one of the two countries is a member of GATT/WTO and 0 otherwise, BOTHIN, a dummy variable that takes the value 1 if both countries are members of GATT/WTO in the specific year and 0 otherwise; GSP, a dummy variable that takes the value 1 if country i was a GSP beneficiary of country j or vice versa in the specific year and 0 otherwise ; COMLANG, a dummy variable if the two countries have a common language; COLONY, a dummy variable that takes the value 1 if country i ever colonized country j or vice versa and 0 otherwise ;. The estimated coefficients of these variables were not reported to save space.

Table A.7

Trade Share in GDP of Pair Countries (1995)

	EGYPT	**TUNISIA**	**LYBIA**	**SYRIA**	**LEBANON**
EGYPT					
TUNISIA	0.12				
LYBIA	0.33	2.01			
SYRIA	0.20	0.33	0.42		
LEBANON	0.17	0.09	0.15	1.76	
JORDAN	0.14	0.07	0.21	1.46	0.83

Average Trade Share for pair of countries on one side of Israel is 1.08%
Average Trade Share for pair of countries on opposite sides of Israel is 0.20%

Table A.8

Jordan's Trade with Israel by Category

Exports (US$M, 2000 prices)			**Imports (US$M, 2000 prices)**			
Consumption	**Intermediate**	**Total**	**Consumption**	**Intermediate**	**Total**	**Year**
5.5	18.5	26.6	4.8	17.4	25.1	1998
28.5	30.9	64.0	10.0	19.2	32.9	1999
19.6	35.2	64.5	6.8	40.5	52.8	2000
17.6	47.0	74.9	9.8	64.9	79.7	2001
14.4	64.0	88.3	15.8	73.2	93.3	2002
11.7	50.5	71.4	14.7	81.5	103.2	2003
11.3	52.0	76.3	22.1	98.5	135.6	2004
15.8	50.2	79.0	33.2	70.4	120.2	2005
16.9	52.6	72.9	29.0	64.6	117.9	2006
20.3	55.3	86.6	37.6	87.8	165.7	2007

Table A.9

Egypt's Trade with Israel by Category

Exports (US$M, 2000 prices)			Imports (US$M, 2000 prices)			
Consumption	Intermediate	Total	Consumption	Intermediate	Total	Year
			0.9	28.6	38.5	1998
6.3	74.5	81.8	5.8	31.1	39.7	1999
5.8	96.9	103.6	5.6	32.0	41.4	2000
5.4	134.0	140.0	1.1	27.6	32.1	2001
4.7	95.8	101.0	1.2	12.9	17.1	2002
5.3	25.3	31.0	1.0	12.6	15.5	2003
4.2	11.3	16.0	1.0	13.8	18.2	2004
7.9	35.3	43.3	7.2	53.4	82.8	2005
9.6	56.0	65.9	8.5	68.2	107.9	2006
12.7	65.5	78.4	5.3	68.9	127.6	2007

Table A.10

Israel's Share in Egypt's and Jordan's Total Trade (%)

Year	In Egypt's Imports	In Egypt's Exports	In Jordan's Imports	In Jordan's Exports
1997	0.3	4.2	0.3	1.9
1998	0.1	5.3	0.6	2.8
1999	0.1	0.3	0.8	4.3
2000	0.3	4.6	1.5	6.1
2001	0.1	1.0	2.3	4.9
2002	0.1	0.2	2.5	4.9
2003	0.1	0.1	2.3	3.5
2004	0.1	0.2	2.0	3.1
2005	0.1	0.1	1.5	2.8
2006	0.0	0.1	1.2	2.5
2007	0.0	0.2	1.1	2.9
2008	0.1	0.3	1.2	2.2
2009	0.1	4.2	0.9	2.0

Table A.11

Gravity Model Results

Dependent Variable= lnTrade

Independent Variables	Pannel-Time-FE (without ILbetween)	Pannel-Time- FE (with ILbetween and Linear Interaction)	Pannel-Time- FE (with ILbetween and Quadratic Interaction)
C	-25.238***	-23.313***	-23.293
LDIST	-1.411***	-1.603***	-1.609
ILBETWEEN		-4.743***	-2.694
LDIST*ILBETWEEN		0.645***	
LDIST^2*ILBETWEEN			0.049
LAREA	0.001	0.011	0.012
LRGDP	0.788***	0.763***	0.763
LRGDPPC	-0.019	0.005	0.005
COMLANG	0.461***	0.403***	0.410
BORDER	0.117**	0.114**	0.105
D_MASH	0.463***		
D_MAGH	0.381***		
D_GCC	0.477***		
D_GAFTA	-0.175		

Variables Keys:
lnTradeij= ln(X(country i to country j)+M(country i from country j)/2)
ILBETWEEN: a dummy variable that takes the value 1 if both countries are in two sides of (but close to) Israel and 0 otherwise.
LDIST: ln of the distance between the two countries (adopted from Rose 2004).
LRGDP: ln of the multiplication of the real GDPs of the two countries)
LAREA: ln of the multiplication of areas of the two countries)
LRGDPPC: ln of the multiplication of the real GDPpc of the two countries,
BORDER= a dummy variable that takes the value 1 if both countries share a border.
COMLANG=a dummy variable that takes the values 1 if both countries share the same language and 0 otherwise.
D_GAFTA: a dummy variable that takes the value 1 if both countries are GAFTA members and 0 otherwise.
D_MASH: a dummy variable that takes the value 1 if both countries are Mashriq members and 0 otherwise.

D_MAGH: a dummy variable that takes the value 1 if both countries are Maghrib members and 0 otherwise.
D_GCC: a dummy variable that takes the value 1 if both countries are GCC members and 0 otherwise.
*,**,*** denote significance at the 10%, 5%, and 1% level, respectively.

Tourism Development and Integration in the Middle East

Contents

Executive Summary

Building on the strong evidence for the growing importance of tourism in the economy, as well as the development of countries around the world with a more promising contribution of the Travel & Tourism industry to the Middle East economies, this paper discusses and explores the untapped potential of cooperation in the tourism sector for the core countries (Egypt, Jordan, Israel, and Palestine) specifically and for the Middle East in general, assuming that the Arab Peace Initiative (API) is accepted and implemented.

The potential for Travel & Tourism in the region should not be underestimated. The Middle East has already made significant headway in its journey to become one of the world's premier travel hubs. If the region capitalizes on its strengths and makes use of the potential offered by the API, the Middle East should be able to steer a successful course towards reaching this target by 2025.

On the regional level in general, and in the core countries specifically, the potential for tourism may increase tremendously, given the high regional and global competition that the API could provide through the strengthening of the competitiveness of the region via different win-win cooperative strategies in the Travel & Tourism industry.

Tourism plays a key role in the economy of most of the core countries. Recently, these countries have witnessed an increased focus on tourism as a driving force for economic development. There is great potential for the tourism sector to become one of the main contributors to the economies and social welfare systems of the core countries.

Shifting tourism trends provide huge opportunities for the region. The future of tourism is not a single destination. The core countries could provide fascinating competitive packages to tourists from all over the world. The Holy Land is surrounded by many wonders of the world, including the Pyramids, Petra, the Nile, the Jordan River, and the Dead Sea.

Building on these strengths, cooperation in this sector among the region's countries could provide the necessary means not only to strengthen the

competitiveness of the tourism sector in the region, but also to provide the region with a leading edge over its competitors.

Along with this huge potential are substantial challenges, which could hinder further growth and development and should be taken into consideration when attempting to convert this vision into reality. These challenges include the significant impact of the global financial crisis on industry; the lack of management, awareness, and the capacity to receive visitors at some sites; and regional conflict and security concerns – this is a significant factor, although the Travel & Tourism sector in the region has proven resilient to this potential challenge.

Although the region in general, and the Israeli-Palestinian conflict specifically, has never reached full stability, except for periods of intensified violence, figures for the region show a rise in the number of tourists arrivals, as relative stability nevertheless has provided a platform for growth.

The basic principle to achieve the desired returns is to get the region's players beyond the level of competition to achieve win-win collaboration and create a seamless experience for the multi-centered visitor to the region. Destinations and attractions will need to consider collaboration in order to raise the average length of stay. The key to success will be to ensure a seamless experience for the traveler, and minimize the time spent in airports and customs clearance – possibly making road and rail options more attractive. Clear differentiations between one destination and the next will also be required of the attractions on offer.

It is of utmost importance to consider the establishment of a central regional agency which defines standards, collects data, and generates forecasts on a consistent basis so the outputs can then be used by everyone involved. This body would ensure continuous policy formulation and monitoring to develop cooperation in this sector between the core countries, and attract other countries to be part of the integration process. In addition, this body should lead the development of a comprehensive strategic plan for the region, and launch and implement a marketing strategy that integrates potential, development requirements, tourist satisfaction, and competition from other destinations in a complementary manner.

1. Objective

The objective of this paper is to discuss and explore the untapped potential of cooperation in the tourism sector for the core countries (Egypt, Jordan, Israel, and Palestine) specifically and for the Middle East in general, assuming that the Arab Peace Initiative (API) is accepted and implemented. We will be addressing the main challenges and constraints that such cooperation faces in the tourism industry, as well as whether political instability actually causes some of these challenges. We will investigate the various requirements of potential collaboration, integration, and multilateral investment opportunities for tourism development in creating a source of wealth and prosperity in the region and providing a win-win situation for all partners. We believe that political stability is a key prerequisite for achieving the unfulfilled development potential of this important economic sector, and that the API could provide the right platform to achieve concrete steps in this regard.

2. The Economic Importance of Tourism[1]

Various indicators and changes provide strong evidence for the growing importance of tourism in the economy and the development of countries around the world. Indeed, Travel & Tourism represents one of the world's largest industries, accounting for 9% of the global GDP. This figure is higher than that of the automotive industry (8.5 %), and only slightly less than the banking sector (11%).

According to the World Tourism Organization (UNWTO), international arrivals worldwide have more than doubled since 1990, rising from 435 million to 675 million in 2000, and to 940 million in 2010. Moreover, these

1 Figures and statistics are based on WTTC data, 2011.

figures do not take account domestic tourism, which generates up to ten times more arrivals than international tourism.

Figure 1 \\ International Tourist Arrival (Million), 2000-2010

Source: World Travel and Tourism Council, Travel & Tourism 2011

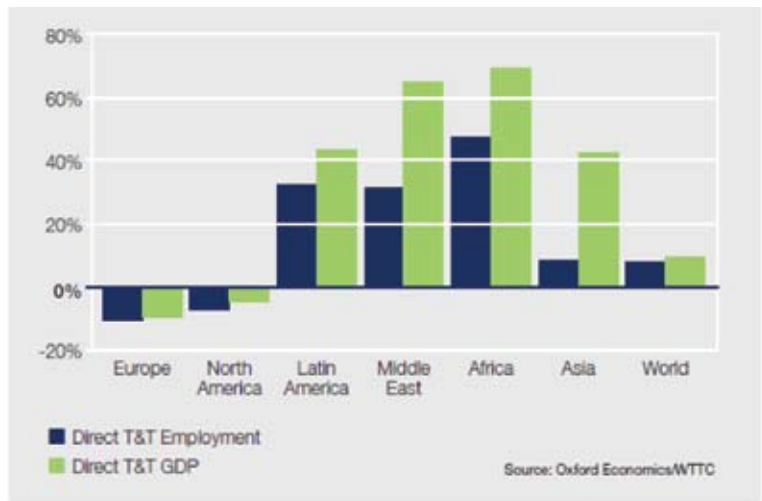
Travel & Tourism has clearly demonstrated its resilience over the past decade. This is highlighted by the growth in international arrivals worldwide from 2000 to 2010, as recorded by the World Tourism Organization (UNWTO). Over the ten-year period, average annual growth was 3.4%. During the last decade, the total arrivals volume declined only in 2001, following the 9/11 attacks; in 2003, due to the combined effect of the Iraq crisis, the SARS outbreak, and a persistently weak global economy; and in 2009, due to the global economic recession that began in the second half of 2008 and resulted in a 3.8% decline in arrivals worldwide the following year.

Travel & Tourism achieved healthy growth levels by most macro-economic measures between 2000 and 2010. The decade recorded a growth of 9.7%

overall, with the sector's direct contribution to GDP ending the period at US$1,770 billion (based on 2011 prices). Regionally, the balance of growth was uneven. Africa and the Middle East saw Travel & Tourism's direct contribution to GDP rise by 69.6% and 64.7% respectively, while Asia Pacific and Latin America enjoyed increases of approximately 43%. Europe, meanwhile, suffered a decline of 9.9% over the same period, and the US, the world's largest market in monetary terms, was down 5.3%.

In terms of global employment, direct employment in Travel & Tourism rose 8.3% from 2000 to 2010, equivalent to the creation of an additional seven million jobs. Nevertheless, annual growth rates fluctuated sharply. The impact of 9/11, in particular, contributed to a decline of 3.1% in 2001, while 2004 saw the fastest growth of the decade (4.5%.) An employment peak of 98.6 million was reached in 2006, a figure not exceeded until 2011. The global distribution of growth in direct Travel & Tourism employment was also very uneven. The fastest growth in percentage terms was in the Middle East, North Africa, and Latin America, The United Arab Emirates (UAE), for example, saw a remarkable growth of 167.9% in direct Travel & Tourism employment over the decade as Dubai and, more recently, Abu Dhabi, became premier international business and leisure tourism hubs.

Figure 2 \\ Growth in the Direct Contribution of Travel & Tourism to Employment and GDP (%), 2000-2010



Source: World Travel and Tourism Council, Travel & Tourism 2011

In 2011, visitor exports are expected to exceed US$1.2 trillion around the world, while the number of estimated people worldwide whose jobs are supported by Travel & Tourism is almost 260 million (with 100 million working directly in the industry).

Estimates for the next decade shows that the growth of Travel & Tourism is expected to outpace that of the global economy over the next decade. The direct contribution of Travel & Tourism to the global GDP is expected to rise by 54% in the next decade to over US$2,860 billion by 2021, accounting for nearly 3% of the global GDP. On the other hand, the Travel & Tourism industry is expected to create an additional 21 million (net) direct jobs over the coming decade, taking total direct employment to over 120 million (more than 3.5% of total employment).

3. Middle East[2] and North Africa[3]

According to reports of the World Travel and Tourism Council, economic activities are indicating a more promising contribution of the Travel & Tourism industry to the Middle East economies. The direct contribution of Travel & Tourism to GDP is expected to be US$66.8 billion (3.4% of total GDP) in 2011, rising by 4.6% per year to US$105.9 billion (3.4%) in 2021 (in constant 2011 prices). The total contribution of Travel & Tourism to GDP, including its wider economic impacts, is forecast to rise by 4.6% per year from US$159.5 billion (8.1% of GDP) in 2011 to US$251.2 billion (8.1%) by 2021.

Travel & Tourism is expected directly to support 1,831,000 jobs (3.2% of total employment) in 2011, rising by 2.4% per year to 2,330,000 jobs (3.2%) by 2021. The total contribution of Travel & Tourism to employment, including

2 The Middle East Region includes Bahrain, Iran, Israel, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, United Arab Emirates, Yemen. (However, statistics here don't include Palestine. Detailed statistics on Palestine will be provided later on)

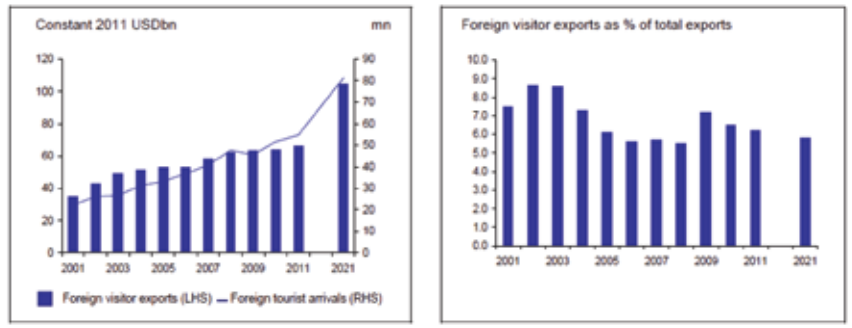
3 The North African Region includes Algeria, Egypt, Libya, Morocco, Tunisia

jobs indirectly supported by the industry, is forecast to rise by 2.5% per year from 4,631,000 jobs (8% of total employment) in 2011 to 5,922,000 jobs (8.1%) by 2021.

The Middle East is expected to attract 54,766,000 international tourist (overnight visitor) arrivals in 2011, generating US$65.9 billion in visitor exports (foreign visitor spending, including spending on transportation).

By 2021, international tourist arrivals are forecast to total 81,277,000, an increase of 4.0% per year, generating expenditure of US$104.7 billion.

Figure 3 \\ Middle East - Visitor Exports and International Tourism Arrivl



Source: World Travel and Tourism Council, Travel and Tourism Economic Impact 2011, Middle East.

In terms of world ranking (out of 12 regions), the relative importance of the total contribution of Travel & Tourism to the Middle East GDP is 8th in terms of absolute size; 7th in terms of relative contribution to national economy; and 6th in terms of forecasted growth.

In North Africa, the direct contribution of Travel & Tourism to the GDP is expected to be US$36.8 billion (5.8% of total GDP) in 2011, rising by 5.4% per year to US$62.3 billion (6.0%) in 2021 (in constant 2011 prices). The total contribution of Travel & Tourism to the GDP, including its wider economic impacts, is forecast to rise by 5.4% per year from US$77.8 billion (12.3%

of GDP) in 2011 to US$132.5 billion (12.8%) by 2021. On the other hand, Travel & Tourism is expected directly to support 3,043,000 jobs (6.0% of total employment) in 2011, rising by 2.9% per year to 4,068,000 jobs (6.4%) by 2021. The total contribution of Travel & Tourism to employment, including jobs indirectly supported by the industry, is forecast to rise by 2.9% per year from 6,593,000 jobs (12.9% of total employment) in 2011 to 8,762,000 jobs (13.7%) by 2021 (WTTC 2011).

Tourism is playing important role even for Gulf States: in Bahrain, 17-18% of jobs are in tourism, either directly or indirectly; in Oman, hotels are required by law to employ 50% of its employees from local populations. Tourism also helps in reducing dependence on other sources of economy (Gulf States, e.g. Dubai in UAE, Oman, Qatar, and Bahrain, are very good examples here, as these countries have begun to recognize the importance of tourism in decreasing their reliance on oil revenues in the long term). However, some other countries with large oil reserves have been slower in their tourism development, due to the lack of need to diversify their economies (e.g., Abu Dhabi in UAE, Kuwait, and Saudi Arabia) (WTO 2003)[4].

4. The Untapped Potential of the Middle East

The potential for Travel & Tourism in the region should not be underestimated. Many factors and trends suggest that the prize of this position is there to be taken. The Middle East has already made significant headway in its journey to become one of the world's premier travel hubs. If the region can capitalize on its strengths and make use of the potential offered by the API, it will succeed in its bid to become one the world's dominant travel hubs – provided that the region's hydrocarbon exports continue to supply, for the medium term at least, sufficient funds to finance whatever investments are needed to make the development of the global hub a reality.

4 Dr. Mairna Hussein Mustafa, *Tourism and Globalization in the Arab World*

If the API is fully implemented and travel demand to the region is expanded through international tourism, the Middle East should be able to steer a course successfully to reach its target to become a dominant travel hub by 2025. The main strengths that support this target include:

- Comparatively strong GDP growth, especially when compared with the G7 countries (Canada, France, Germany, Italy, Japan, the UK, and the US). Despite the global economic downturn, growth is expected to continue in the long term.
- Huge investments in the GCC countries, especially in the oil and gas sector, which have historically resulted in an increased demand for business travel, and in turn fuelled the aviation and construction industries.
- The aviation sector and tourism have been massively promoted in recent years.
- Government social and political goals and policies focused on job creation can help create the pool of skilled labor needed to support the region's international hub ambitions.
- The region's strategic location as a hub for passenger transit between Europe and the major developing markets of Asia Pacific.
- Major investment in the air travel industry (airlines, airports, and air traffic control), including US$86 billion earmarked for Middle East airports in the coming years and predicted passenger and cargo traffic growth of 8% annually until 2015.
- Growing international, intra-Middle East and domestic tourism. Advanced use of Information Technology (IT), due to rapid establishment and development of new carriers over the past decade, who invest in new IT rather than possessing legacy systems. IT is deployed for the efficient distribution of travel products and services, with airline tickets, hotel bookings, and many other components of the travel and transport supply chain distributed via electronic channels such as global distribution systems and the Internet.

- Increasing intra-Middle East traffic as a result of low-cost carriers entering the market. In addition to tourism and business travel, travel in order to visit friends and relatives as well as religious travel have gained significance and are expected to grow rapidly[5].

Building on these strengths, cooperation in this sector among the region's countries could provide the necessary means not only to strengthen competitiveness of the tourism sector in the region, but also to provide the region with a leading edge over its competitors.

Cooperation between the core countries provides a concrete model to illustrate the unexploited potential in the tourism sector. This model could be a first step towards further integration and cooperation in the region.

5. The Unexploited Potential of Core Countries in the Tourism Sector: A Model of Success

On the regional level in general, and in the core countries specifically, the potential for tourism may increase tremendously, given the high regional and global competition that the API could provide through the strengthening of the competitiveness of the region via different win-win cooperative strategies in the Travel & Tourism industry.

Tourism plays a key role in the economy of most of the core countries. Recently, these countries have witnessed an increased focus on tourism as a driving force for economic development.

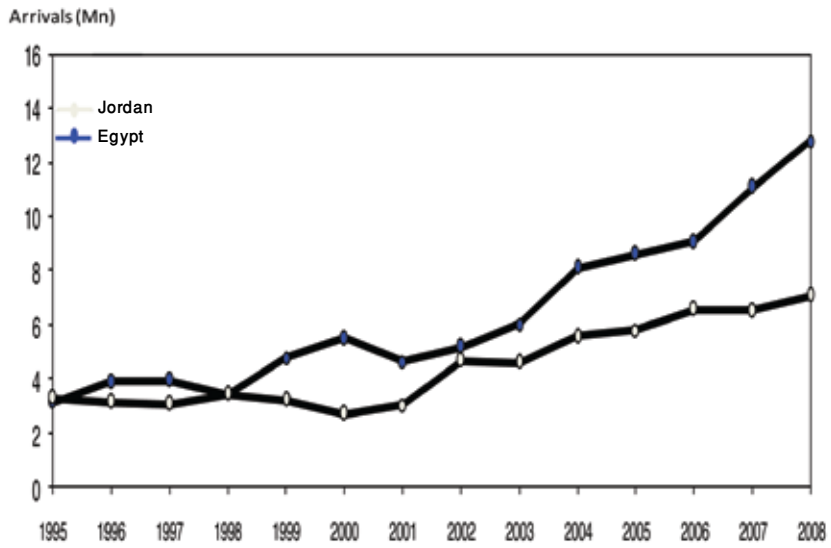
In Jordan, tourism is considered the main source of foreign exchange earnings after the remittances from overseas Jordanian workers. Jordan's national tourism strategy was designed to increase tourism receipts from JD570 million in 2003 to JD1.3 billion (US$1.84 billion) by 2010, creating over 51,000 new

5 Securing the prize for the Middle East

jobs. The government focuses on several niche markets including cultural tourism, Meetings, Incentives, Conferences, and Exhibitions (MICE), and adventure and religious travel.

As shown in the figure below, the number of tourist arrivals in Jordan more than tripled between 2000 and 2008 (from 2.7 to 7.1 million).

Figure 4 \\ Tourists Arrivals in Jordan & Egypt, 2000-2008



Source: Holy land Tourism: Vision, Office Of the Quartet Representative, June, 2010.

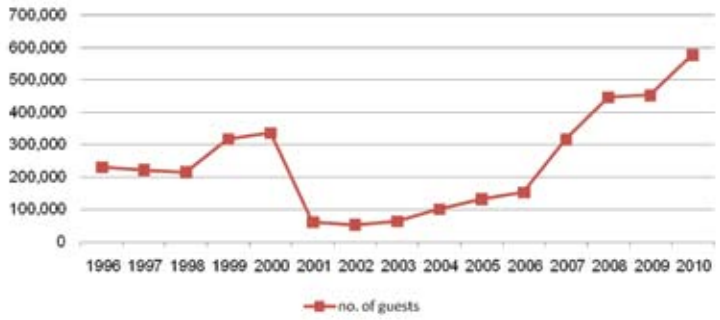
In Egypt, tourism also is a crucial generator of employment. According to the Egyptian Tourism Authority, 10% of the Egyptian population depends on tourism to earn a living, of which a significant proportion is semi-skilled and unskilled employees.

Egypt attracted 9.1 million visitors in 2006, and is targeting 16 million visitors by 2014. As shown in the figure above, the number of tourist arrivals tripled between the year 2001 and 2008 (4.6 in 2001 to 12.8 million in 2008). US$60 million has been allocated to promote Egypt in other countries, with US$40 million of these funds directed for advertising. Moreover, Egypt has developed a joint project with Turkey to host tourists from various countries.

In Palestine, the tourism sector accounted for 15% of GDP[6] in 2010, increasing from 9% in 2009[7], proving that the untapped potential of this sector has not yet been exploited. This sector is estimated to play a key role in sustainable Palestinian economic development.

In 2010, the number of inbound and domestic visitors to Palestine rose to 4.9 million, an 88.5% increase since 2009. There were 2.2 million tourists to the West Bank.

Figure 5 \\ Hotel Activities in the Palestinian Territory - No. of Guests 1996-2010



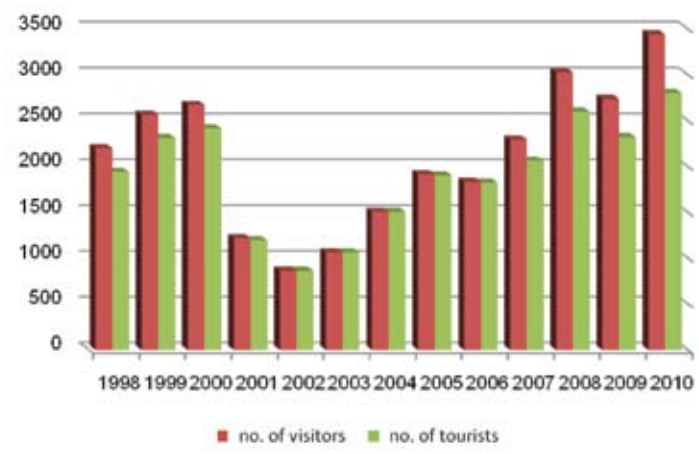
In Israel, although tourism contributes less than 3% to the country's GNP, it has a foreign currency added value of 85% (making it the added-value leader among the country's export industries) and employs some 80,000 persons. This industry's large potential is yet to be exploited, and is a major factor in Israel's economic growth plan.[8]

6 Total revenues from tourism reached US$885 million in 2010.

7 2010 statistics, Palestinian Ministry of Tourism and Antiquities website

8 "Sectors of the Israeli Economy," Israel Ministry of Foreign Affairs website

Figure 6 \\ Number of Arrivals - Israel 1998-2010



The past decade was characterized by fluctuations in the scope of incoming tourism, due to changes in the security and economic situation in Israel and throughout the world. At the beginning of the decade, there was hope for a surge in tourism following a period of economic prosperity and the peace agreements that had been signed several years earlier, as well as in anticipation of the visit of Pope John Paul II to Israel and Palestine in March 2000. Although there was a substantial rise in tourism during the first nine months of 2000 compared with 1999, the trend was suddenly reversed at the end of September 2000 with the outbreak of the Second Intifada. There followed a three-year period of deterioration, which reached its lowest point in 2002. Rates of incoming tourism began to improve in 2003 – a trend that continued until the outbreak of the Second Lebanon War in 2006. In 2007 and 2008, there was a further recovery in tourism, and in 2008 peak levels were recorded in most of the parameters of tourism. The world economic crisis, which began during the last quarter of 2008 and continued into 2009, as well as Operation Cast Lead which took place in January 2009, had an adverse impact on the recovery in incoming tourism in Israel in 2009. In 2009, there were 2.3 million tourist arrivals (a decline of 10% compared with 2008), and some 400,000 entries of day visitors (a decline of 9% compared

with 2008). Most of the day visitors arrived from the FSU. In 2010, another recovery and peak was recorded.

6. The Untapped Potential of Cooperation: Strengthening Competitiveness of the Region

There is great potential for the tourism sector to become one of the main contributors to the economies and social welfare systems of the core countries.

The driving forces for competitive cooperation in the tourism sector include the following factors:

1. The future of tourism is not a single destination. The core countries could provide a fascinating competitive package to tourists from all over the world. The Holy Land is surrounded by many wonders of the world: the pyramids, Petra, the Nile, the Jordan River, and the Dead Sea.

Figure 7 \\ Proposed Tourism Package in the Middle East

The wealth of historical and religious sites, as well as additional natural and recreational attractions, would enable tour organizers to offer attractive packages to all kinds of visitors to the area: those who are seeking a religious experience, those who prefer historical and natural site-seeing, those who are looking for relaxation and entertainment, as well as various special-interest tourists. These packages also offer great potential for internal and regional tourism.

The Israeli domestic tourism market is very large. The number of Israeli Arabs who travel to Amman for vacations is numbered at hundreds of thousands per year. The untapped potential of the domestic Palestinian market is quite significant too (in certain days of the Ramadan period, for example, Jerusalem hosts hundreds of thousands of Muslim visitors).

Regional tourism (mainly from the GCC and Jordan) presents an equally large potential area of expansion. Jerusalem is only one hour away by car from Amman. Once it repositions itself as a welcoming site for tourism and recreation, the Jerusalem area could attract many of the millions of Arab and Muslim tourists who come to Amman and Egypt for vacations or business trips. Cairo, too, is one hour from Amman and a half-hour flight from Jerusalem.

With the use of appropriate multimodal transport systems, the Jordan Valley and the Dead Sea between Jordan, Palestine and Israel on the one hand, and, nearby, the triangle of Al Aqaba (Jordan), Eilat (Israel) and Sharm El Sheikh (Egypt) comprise potentially great destinations for domestic and foreign tourism. Such a competitive package could make a considerable difference in terms of the number of tourist arrivals to the region.

2. Shifting tourism trends provide huge opportunities for the region to use efficiently. These trends include:

   a. The increase of intraregional tourism in the Arab World

   b. Innovative types of tourism: medical and spa tourism, MICE, ecological tourism, and sport tourism. Spa centers by the Dead Sea and first-class infrastructure for international conferences

and meetings established in Sharm el-Sheikh make Cairo and the Dead Sea competitive sites for international meetings. The Jordan Valley also provides a potential meeting place for tourists with different interests.

c. The new interpretation of pilgrimage and other religious locations in the context of tourism. Saudi Arabia is promoting the so-called "Summer Umrah"; Jordan and Egypt are advertising "Islamic Tourism" worldwide to attract more Arab and Muslim tourists (Jordan is promoting, among other sites, the shrines of Mu'tah); and Palestine and Israel are promoting the Holy Land for Christian and Muslim pilgrims.

d. Newly emerging tourist markets. The Arab tourism industries are strongly penetrating the central and eastern European markets, as well as the markets of neighboring countries that were practically ignored in the past – Poland, Hungry, Russia, the Czech Republic, Turkey, Spain, Iran and even China and Korea have been addressed by many Arab marketing strategies and promotion campaigns. More and more Arab countries are taking part in tourist fairs and exhibitions in the newly emerging markets, and vice versa. In addition, the spatial organization of new tourist destinations and hotel capacities are changing. The trend is moving towards construction of fully-integrated tourist complexes and gated communities.

e. The enlargement and the enrichment of the support infrastructure for tourism: entertainment parks, shopping malls, cultural events and festivals, new flight destinations, apartment hotels, etc.

f. An expanding interest of international and local hotel management companies in the region, such as the Mövenpick Hotel in Ramallah.

g. More intensive intra-Arab cooperation in the tourism sector on various public and private levels over recent years, including joint tourist programs, workshops and meetings on Arab tourism issues, and cooperation and coordination efforts between Arab

governmental bodies and organizations. The Arab World Travel and Tourism Exchange (AWTTE), which has been taking place in Beirut yearly since 2002, and the Islamic Tourism magazine are examples of these kinds of initiatives in the Arab private sector.

Some of the above-mentioned trends could have a long-term effect on the form, structure, and organization of Arab tourism markets in general, and the core countries specifically. Like any other industry, tourism is subject to continuing changes and adjustments. The main attribute that differentiates tourism from other industries, is that tourism presents the only possibility for mass face-to-face inter-cultural and inter-ethnical dialogue, which makes it a sector that raises its importance significantly when we talk of a permanent peace in the region.

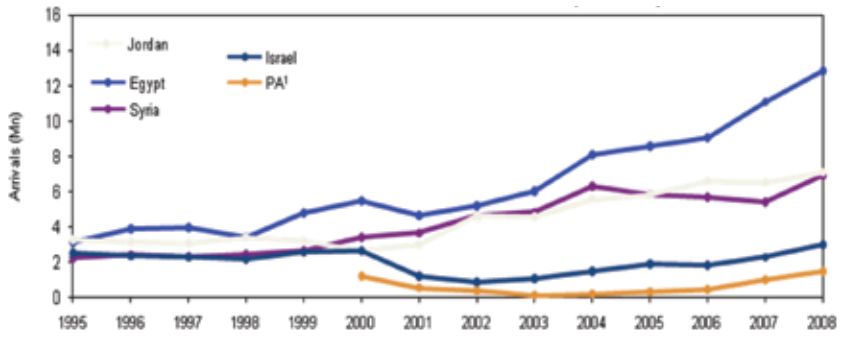
7. Challenges

Along with this huge potential are substantial challenges, which could hinder further growth and development and should be taken into consideration in order to convert this vision into reality. These challenges are:

1. The significant impact of the global financial crisis on industry. Spending on tourism and hotels is closely related to the economic cycle. Certainly, leisure activities such as holidays tend to be one of the first things consumers cut back on in times of economic hardship. The travel and hotel industry is further affected by reduced demand from the business sector, as travel is also one of the first areas that the corporate sector axes when the economy slows. Consequently, the real challenge lies in developing the best strategies to provide attractive but economically feasible packages for tourists from all over the world.

2. A lack of management and capacity to receive visitors at some sites, as well as a lack of awareness in some segments of Arab societies about the importance of tourism and its benefits, causing a negative perception and reaction toward tourism (particularly from a socio-cultural point of view).
3. Regional conflict and security concerns – this is a significant factor, although the Travel & Tourism sector in the region has proven resilient to this potential challenge. Most recently, the Israel-Lebanon conflict of 2006 saw the tourism industry rebound rapidly after a short-lived decline. Similarly, although the United States experienced a significant decline in tourism following 9/11, this was not the case in the Arab world. Tourism remained strong due in large part to an increase in intraregional tourism[9].

Figure 8 \\ Tourist Arrival in Select Middle East Markets (1995-2008)



Source: Holy Land Tourism: Vision, Office of the Quartet Representative, June, 2010

Although the region in general, and the Israeli-Palestinian conflict specifically, has never reached full stability, as shown in the figure above, except for periods of intensified violence, figures for the region show a rise in the number of tourists arrivals, as relative stability nevertheless provided a platform for growth.

9 *Assessing Travel & Tourism Competitiveness in the Arab World*

Other important challenges include:

- Decline in growth in the global airline industry
- Failure to improve the regulatory framework, covering issues such as cross-border coordination of large projects, harmonized visa regulations, measures to ease airspace congestion, and lack of transparency in the financial sector
- Poor integration of Middle East carriers with global air alliances such as Star Alliance and Oneworld
- The low quality of service staff required to meet the future staffing needs of the region's travel and tourism sector

8. Looking Forward: Basic Development Requirements

1. Competition and cooperation is a basic requirement for the tourism industry, while understanding the global drivers of change is necessary for its future development. To achieve the desired returns, destinations and attractions will need to raise the average length of stay, and thus consider collaboration. The key to success will be to ensure a seamless experience for the traveler, and minimize the time spent in airports and customs clearance – possibly making road and rail options more attractive. Clear differentiations between one destination and the next will also be required of the attractions on offer. Simply swapping from one luxury five-star hotel for another may not be enough. The basic principle in this regard is to get the region's players beyond the level of competition to achieve win-win collaboration and create a seamless experience for the multi-centered visitor to the region.

2. The starting point in moving forward is to understand the power of reliable information in order to achieve effective policy formulation and planning. In our research, we found a measurable variation between the visitor forecasts coming from different sources, such as the national tourist agencies, the WTTC, and independent research and national statistical bodies. Investors, developers, facility operators, governments, and infrastructure planners need reliable and up-to-date forecast data on which to base their assumptions and plans. More importantly, those developing tourist and leisure facilities need to see that infrastructure planners are working to the same set of growth assumptions to ensure adequate provision of water, sanitation, power, transportation, and telecommunications. Consequently, it is of utmost importance to consider the establishment of a central regional agency which defines standards, collects data, and generates forecasts on a consistent basis so the outputs can then be used by everyone involved. Moreover, this body would ensure continuous policy formulation and monitoring to develop cooperation in this sector between the core countries, and attract other countries to be part of this integration process.

3. A comprehensive strategic plan should be formulated for the region. This plan should take the following key issues into consideration, and provide the best available solutions in this regard:

    a. Define the necessary mechanisms to:

        - Locate future customers in order to sustain visitors' targets interests and preferences
        - Maintain the price premium required to deliver the desired rate of return
        - Ensure that the cost to update facilities, services, and infrastructure stays competitive in line with other planned and future developments, both in the region and further afield

    b. Define scenarios to respond to possible shortfalls in visitor numbers

    c. Clarify how the region can position itself to maximize visitor flows from the rapidly growing economies

    d. Create a "unity in diversity" principle, where each partner defines particular aspects of culture, heritage, or tradition that it wishes to emphasize in future tourist development and promotion

    e. Emphasize an appropriate mix of activities the region, such as sport, cultural, or health tourism

    f. The lack of water in the region could become a major constraint on its ability to attract and sustain the desired levels of tourists. Given the growing concern over the region's supply of fresh water and the demands placed on infrastructure, the strategy should explore whether this inevitably force players to move "up-market" and focus on attracting smaller numbers of longer-staying, higher-spending visitors

    g. Define the optimum service ratio for the desired market positioning, in comparison to other destinations and attractions

4. Launch and implement a marketing strategy that integrates potential, development requirements, tourist satisfaction, and competition from other destinations in a complementary manner. In addition, these marketing strategies should also target increasing internal tourism within the Middle East.

5. The region should begin investing in tertiary, secondary, primary, and even nursery education facilities to instruct the next generations of service staff required to meet the future needs of the region's travel and tourism sector.

6. Regular health-related trips could increase the duration and frequency of visits if the quality and cost compare favorably with other heath tourism destinations. The region is able to offer more high-quality hotel facilities and better infrastructure than many other destinations.

Given the cost of equipping and maintaining health facilities, and the competition from other forms of tourism, the region's players will need to decide where to focus their development efforts to maximize the returns.

7. The attention being paid to climate change and sustainability issues is rising fast. A tipping point could soon be hit, wherein carbon allowances and reduction targets are imposed on both firms and individuals. Consequently, future visitor forecasts and development plans may need to be scaled back, and greater focus placed on the environmental footprint of existing and new developments. The region should respond by establishing global best-practice standards on emissions, energy efficiency, and waste.

8. In order to ensure continued growth, the aviation and tourism industries must work hard to attract new business and leisure travelers to the region, as well as to capitalize on transit passengers. In general, there are significant opportunities for airlines (and travel agents), which could arise from the weak points in the current value chain, such as the disconnect between ground transportation and the flight. Passenger willingness to pay for a smooth travel experience seems to be a significant opportunity, with a variety of sources, but one which has so far gone largely unexploited. New technologies offer the potential to access these sources by allowing airlines and agents to tailor their products more closely to match traveler preferences.

9. Increasing intra-Middle East traffic using low-cost carriers and transportation systems. The territorial link between the East and the West proposed by our paper on "Trading Peacefully: How to Increase Trade in MENA after a Comprehensive Arab-Israeli Peace"10. The proposal includes building special territorial corridors for trade between Arab countries on the two sides of Israel. These corridors will pass through Israeli territory, but will not require any tariff or tax for passing through the country, only a transportation fee. Considering a multimodal transport system, such initiatives could make a significant difference in lowering the cost and time of travelling within the region.

10 For more information, please see the "Trading Peacefully: How to Increase Trade in MENA After a Comprehensive Arab-Israeli Peace" paper.

9. Concluding remarks

We believe that cooperation and integration in the tourism sector is the correct start in terms of making use of the potential provided by the API, in addition to being a good example for clearly foreseen success. It could promote further integration with other players in the region, and expand integration and cooperation to other economic sectors. At this point, we cannot speculate what types of innovation will be pursued by entrepreneurs in the area, and what types of trade initiatives will unfold once barriers are removed. Some might claim that trade and economic relations will not be affected significantly by a comprehensive peace. They might point at the poor state of trade between Israel and Egypt and Israel and Jordan, which have already signed peace agreements. But this argument is misleading. These peace agreements ave been quite limited in their effect, since they were not part of a comprehensive peace agreement. Hence, they were not viewed as signaling a profound shift in Arab-Israeli relations. As a result, these two agreements did not penetrate large social circles in these two countries, and their economic effects have been fairly small. We firmly believe that a comprehensive peace, which will profoundly change the mood in the Middle East, both in Israel and in the Arab countries, will have a much deeper effect on the entire economic landscape in the region, including international trade.

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The Role of Institutions in Developing Economic Integration

Introduction & Key Issues

Shawqi Makhtoob

Contents

Executive Summary

While institutions matter, there is no common set of institutions that all partner countries should aspire to possess. The best we can do is to learn from the successes and avoid the mistakes of other integration initiatives.

This paper explores the institutional model that can best address our vision for the region to accomplish the goals of economic integration, and how those institutions can provide the required interlocking structure. We analyze three institutional models – the EU, the Arab League, and the Organization of the Islamic Conference. The comparison will include background information, the structure of these models, their strategic approach, implementation and achievements, as well as the key support institutions needed to support integration from inception.

A fundamental issue that should be highlighted is that all the models were politically motivated, and they all sought to use economic cooperation as a mechanism for integration. In addition, the three models have almost the same institutional structure; however, in terms of overall achievements, the European model remains the most sophisticated case of regional integration. The European Union succeeded in achieving its vision of a common market on the way towards accomplishing political unity. The other two models are still struggling to achieve concrete steps in this direction.

The large gap in achievement between the different models raises many areas of comparison between them: the clear vision, the process, the political will, and the transfer of authority to a single executive supranational institution that can lead the process of integration.

A major difference between the EU model and the other two models is the clear vision of integration, which provides the basis for the process followed to achieve this vision. The European experience shows that integration should be thought of as a whole as well as a process, rather than as a series of separate steps to be undertaken and analyzed in isolation.

There was strong political backing for integration in the EU model, which is not seen in the other two models. The political will to shift the sovereignty from national governments toward EU institutions was a major basis for the dramatic success in the EU model. Political backing in the Arab League and OIC cases is still missing real will.

One lesson that may be drawn from trade policymaking in the EU is that responsibility for trade policy and all its outcomes should be clearly lodged in a single entity, ideally an executive that is subject to broad periodic guidance and review by elected legislatures. To the maximum extent possible, committees of national bureaucrats, whose horizons are necessarily limited, should be avoided. The use of a central executive body like the EC to manage the process, act as its guardian, eliminate barriers, and provide regional integration as well as the necessary arrangements to attain and maintain a positive overall cost-benefit balance and push it forward has been vital in preserving and advancing integration.

Towards this end, there are many sub-institutions that facilitate and support the central executive body in the implementation of any gradual or comprehensive economic integration. There are key institutions in the implementation process that are needed to support effective implementation, the most important of which are the statistical institution of the specific region, joint research institutions (institutions that provide knowledge and information), and financial support institutions. These institutions constitute the heart of any systematic approach to achieve the vision of regional integration. The first two are the basis for policy formulation and evaluation, and the third is the tool to finance the implementation of these policies.

Moreover, there are fundamental key issues that should be taken into consideration for any institutional setup that will support economic integration and cooperation in the region:

1. Institutions are important to regional integration—with the caveat that it is important to adopt a strategic approach to regional integration by prioritizing areas of action.
2. For a gradual approach strategy and the need for more focus, specialized institutions may be formed in the short run; however, initial planning of these institutions should take into consideration their future amalgamation at a specific point in the integration process.
3. Any form or design of institutions should take into consideration and expect a large degree of institutional diversity. Neither the EU institutional design nor any other design can be followed to the letter.
4. It is very important that institutions show the benefits of integration clearly in the short- and long-run, and generate direct relations with the citizens in the region.
5. Supranational institutions are vital in leading economic integration and achieving its objectives. A central executive body to achieve integration is the only way towards achieving success. This central executive body should have strong political backing and work towards a clear vision.
6. The history of European integration shows that more free trade encouraged EU members to deepen regional integration. Consequently, any central executive body should have specific and specialized directorates to promote and develop trade, as well as to eliminate all barriers that prevent its realization. Good examples are the EC trade, economic and financial directorates.
7. Such an example may serve our purpose of establishing the core institution of any future body that will handle economic integration in the region as a whole. This institution will work on formulating and implementing policies to expand the gradual integration of specific sectors towards full economic integration in the region.
8. This core institution must be supported by specialized institutions in each economic sector that will formulate and implement specific

policies to promote and sustain integration within each sector, e.g., a specialized institution to promote integration in the tourism sector.

9. A cornerstone of the degree of efficiency of such institutions is the commitment of the member countries to their share in the necessary budget for these institutions.

1. Introduction

Institutions play a key role in achieving economic integration; it is the institutional framework that ultimately drives or stalls integration. The fundamental role of institutions in providing the right framework for regional integration in general, and for economic integration in particular, has also been widely acknowledged.

This paper explores the institutional model that can best address our vision for the region to accomplish the goals of economic integration, and how those institutions can provide the required interlocking structure. We will examine the current established institutions in the Middle East region, mainly the bodies under the umbrella of the Arab League, and their anticipated roles in economic integration, and then suggest necessary modifications, and in some cases recommend creating new institutions. We will also study the existing models of institutions in other regions, with a focus on the European Union model. It is argued that while institutions matter, there is no common set of institutions that all partner countries should aspire to possess. The best we can do is learn from the successes and avoid the mistakes of other integration initiatives. While institutional diversity is accepted and supported internationally, in practice the forms that institutions are allowed to take are very limited, mostly because of the prevailing sociopolitical and economic environments. This is particularly relevant to the institutions driving or implementing regional integration.

We believe that the best institutional model should take the following main issues into consideration:

1. A clear and well-defined vision to achieve regional integration, as well as specific roles and responsibilities of institutions to create, develop, and sustain economic integration.

2. A plan to implement this vision, in order to enable institutions to achieve the desired objectives for this integration. In addition, institutions are

highly important in guaranteeing that agreements and legal frameworks for integration are clear and precise.

3. Regional integration blueprints should match the reality on the ground, through continuous surveillance by a professional institution that is mandated to manage, develop, and monitor the integration process.
4. Institutions should be enabled to play a key role in minimizing the ability of regional economic communities to independently pursue their integration agendas bilaterally, enhancing instead the required multilateral blueprints.
5. National institutional powers and capabilities should support the institutions of integration.
6. The flexibility factor within institutions must be considered in order to create the potential to develop growth-oriented strategies.
7. Institutional agendas should avoid being excessive, and instead should focus on only one or two areas, such as in the successful European Union model.
8. Institutions should be created in a collaborative manner between all the involved parties.
9. Even if institutions matter, as seems to be the case, there is too much potential for two-way causality between institutions and policies, and too much evidence that the impact on economic performance depends on interactions between policies and institutions, to rule out a key role of policies as well.
10. Adequate controls must be created to achieve the right balance between regulating and adequately supporting the private sector.
11. Adequate funding must be ensured in order for the institutions to be able to play their roles effectively.

2. Alternative Institutional Models

Countries seeking regional integration in general and economic integration in particular have created several institutions to carry out this integration process. The organizations may vary, and the objectives too, but the basic idea is the same: regional integration with economic integration as a driving force to achieve its objectives. This is the idea behind the organization of institutions that we seek in our model for the region.

The following highlights the institutions created for different regional integration models – the EU, the Arab League, and the Organization of the Islamic Conference.

2.1 Institutions of the European Union

The European Union model provides an excellent example of a success story that needs to be carefully regarded, especially since their are several parallels between the motivations behind the European experience and our own aspirations in the region:

- The use of economic factors as a driving force for unity and peace. The European Union was created to achieve the political goal of peace, but its dynamism and success spring from its involvement in economics.
- The historical background of conflict pre-union
- The aim to prevent future conflict and economic integration as the first step towards achieving a comprehensive peace.

The history of the European experience of institutional reform and regional integration went through serious divergences at many stages in the integration process. Despite difficulties with institutional development, the European Union achieved tangible achievements of regional development that we are aiming to accomplish. And the European Union is still probably the

best example of an agreement that has achieved the same ideals to which integration models aspire.[1]

The institutions created by the European Union model are considered among the most developed institutions in the history of regional integration. The European model is led by four supranational institutions which hold the legislative power of the European Union: the European Parliament, the European Council (Summit), the Council of the European Union, and the European Commission.

The European Parliament is elected by the people of Europe to represent their interests. Its main job is to pass European laws on the basis of proposals presented by the European Commission, a responsibility it shares with the Council of the European Union. The Parliament also has the power to dismiss the European Commission. Additionally, the Parliament elects the European Ombudsman, who investigates citizens' complaints concerning maladministration by the EU institutions.

The European Council (Summit) consists of the heads of state or government of the member states, together with its president and the president of the Commission. The High Representative of the Union for Foreign Affairs and Security Policy participates in its work. The European Council's function is to provide the momentum and general political guidelines for the Union's development. It is the body which fixed goals for the Union, and sets the course for achieving them, in all fields of EU activity.

The Council of the European Union — formerly known as the Council of Ministers — is the EU's principal decision-making body. It shares with Parliament the responsibility for passing EU laws. It is also in charge of

1 "It may seem strange that the European Union is still held up as an example of successful regional integration - especially given that there is no a priori evidence of an accelerated growth rate. Moreover, some European observers talk of "Euro sclerosis" [a term coined in the 1970s and early 1980s to describe a European economic pattern of high unemployment and slow job creation in spite of overall economic growth] – reflected in the secular decline in the share of world income of EU members." **African Union, Economic Commission for Africa,** *Assessing Regional integration in Africa II, Rationalizing Regional Economic Community. The recent EU crises is another example in this regard.*

the EU's foreign, security, and defense policies, and is responsible for key decisions on issues of justice and freedom.

The European Commission is the EU's executive organ. It represents and advocates the interests of Europe as a whole. It manages the day-to-day business of implementing EU policies and spending EU funds. The Commission consists of 27 men and women — one from each member state. They do not represent the governments of their home countries. Instead, each has responsibility for a particular EU policy area.

Other non-political institutions exist that facilitate and support EU objectives and strategies. These include financial institutions, judicial and monitoring institutions, and advisory and consultative bodies.

Financial institutions include: the European Central Bank, which is responsible for managing the Euro, principally by setting interest rates; and the European Investment Bank, which lends money for projects of European interest.

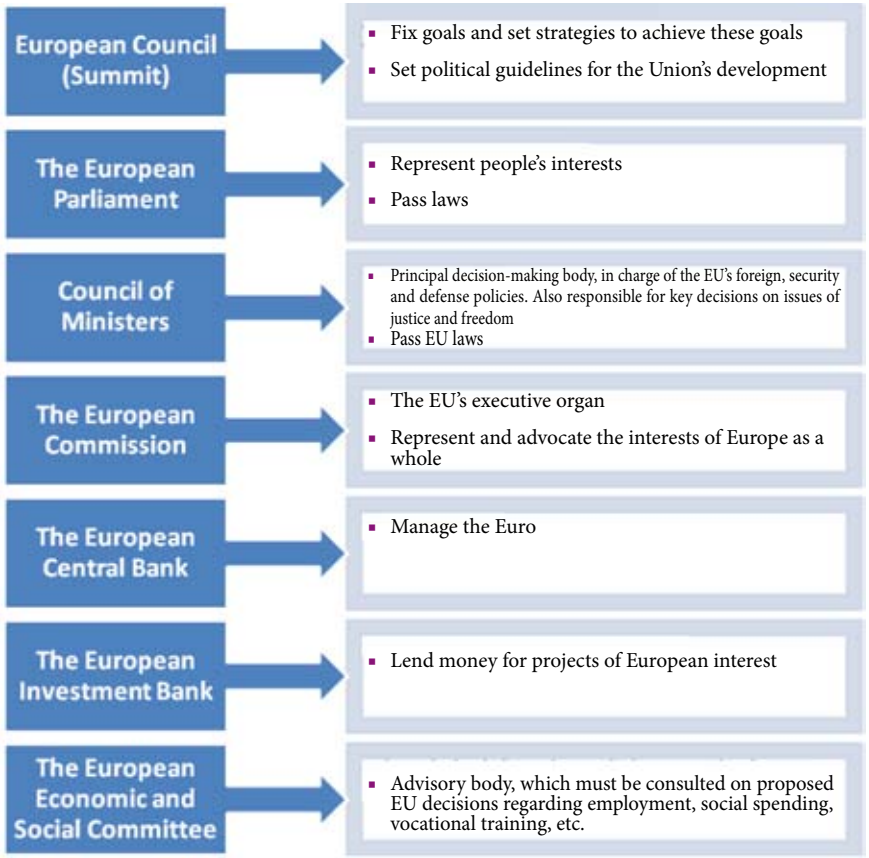
Judicial and monitoring institutions include: the Court of Justice, which ensures that EU law is interpreted and applied in the same way across all member states; and the Court of Auditors, which checks that the EU's funds, which come from the taxpayers, are spent legally, economically, and for the intended purpose.

Advisory bodies include: the European Economic and Social Committee, which must be consulted on proposed EU decisions about employment, social spending, vocational training, etc; and the Committee of the Regions, which is consulted on upcoming EU decisions with a direct impact at the local or regional level in fields such as transport, health, employment, or education. Its 344 members are often leaders of regional governments or mayors of cities.

A number of specialized and decentralized agencies are operated by the Commission, or sometimes the Council, to deal with specific problems or areas. These include the European Environment Agency and Europol. In addition, there are also three inter-institutional bodies. The Publications Office, the oldest such body, publishes and distributes official publications from EU organizations. Two relatively new bodies are: the European Personnel Selection Office (EPSO), a recruitment body which organizes competitions for posts

within Union institutions; and the European Administrative School, which provides specific training for the staff of Union institutions. Another body is the anti-fraud office OLAF, whose mission is to protect the financial interests of the European Union. Two further posts are: the European Ombudsman, who deals with citizens grievances against the Union's institutions; and the European Data Protection Supervisor, who ensures that institutions respect citizens' privacy rights in relation to data processing.

The following diagram shows the main EU institutions responsible for achieving economic integration:



2.2 The League of Arab States

Nearly 65 years have passed since the inception of the League of Arab States. Composed of 22 Arab States[2] and four observers[3], the Arab League is an international governmental organization established to promote Arab interests in general, and economic and security interests in particular. Another main reason that led to its creation was the development of Arab nationalism. The League also works to resolve disputes among members, as well as between member and nonmember states. Its image is one of unity in the protection of Arab independence and sovereignty.

The general structure of the League has remained intact since its formation, but the scope of its activities has expanded significantly, especially in nonpolitical fields. The organization consists of three major components: the Council, special committees, and a Secretariat-General. In addition, the League has become an umbrella organization responsible for the numerous specialized agencies, unions, and other institutions created to promote Arab economic and social interests.

The Council is the League's principal organ and its highest authority. It implements League policies, and follows up on League goals. It handles dispute settlement between members, and assigns the secretary general of the League.

Permanent committees have been established to promote mutual cooperation between members in various areas of interest, and to support the Council in the implementation of policies. The League's committees include: the Political Committee, the Culture Committee, the Communications Committee, the Social Committee, the Legal Committee, the Arab Oil Experts Committee, the Information Committee, the Health Committee, the Human Rights Committee, the Permanent Committee for Administration and Financial Affairs, the Permanent Committee for Meteorology, the Committee of Arab

2 Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine (The Palestine Liberation Organization), Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen.

3 Eritrea, Brazil ,Venezuela, and India—observers can express their opinion and give advice, but do not have voting rights.

Experts on Cooperation, the Arab Women's Committee, the Organization of Youth Welfare, and the Conference of Liaison Officers.

The Secretariat-General consists of the secretary-general and nine assistant secretaries-general responsible for different areas – Arab national security, political, social, and economic issues, Palestine and occupied Arab territories, the League's council, information and communication, financial control, and human resources, financial and public services issues – alongside other principal officials. The Secretariat-General is responsible for administrative and financial activities, and to monitor the implementation of the decisions and policies of the Council and the permanent committees.

The Arab Fund for Economic and Social Development is an Arab regional financial institution. The Fund was established in 1972 following the League's approval of the Fund four years earlier. It focuses on funding economic and social development by financing public and private investment projects and providing grants and expertise.

The main objective of the Fund is achieving Arab integration and consolidating cooperation among the member countries. Priority is therefore given to financing joint Arab projects of particular importance, specifically to those projects that increase the interdependence of Arab countries.

2.2.1 The Arab Monetary Fund

The Arab Monetary Fund is a regional Arab organization. Founded in 1976, it began operations in 1977. Its 22 member countries are: Jordan, the United Arab Emirates, Bahrain, Tunisia, Algeria, Djibouti, Saudi Arabia, Sudan, Syria, Somalia, Iraq, Oman, Palestine, Qatar, Kuwait, Lebanon, Libya, Egypt, Morocco, Mauritania, Yemen, and the Comoros.

The AMF aims at contributing to the achievement of the following objectives:

- Correcting disequilibria in the balance of payments of member states
- Removing restrictions on current payments between member states
- Establishing policies and modes of Arab monetary cooperation

- Rendering advice, whenever called upon to do so, with regard to policies related to the investment of the financial resources of member states in foreign markets
- Promoting the development of Arab financial markets
- Paving the way towards the creation of a unified Arab currency
- Promoting trade among member states

2.2.2 The Arab Labor Organization

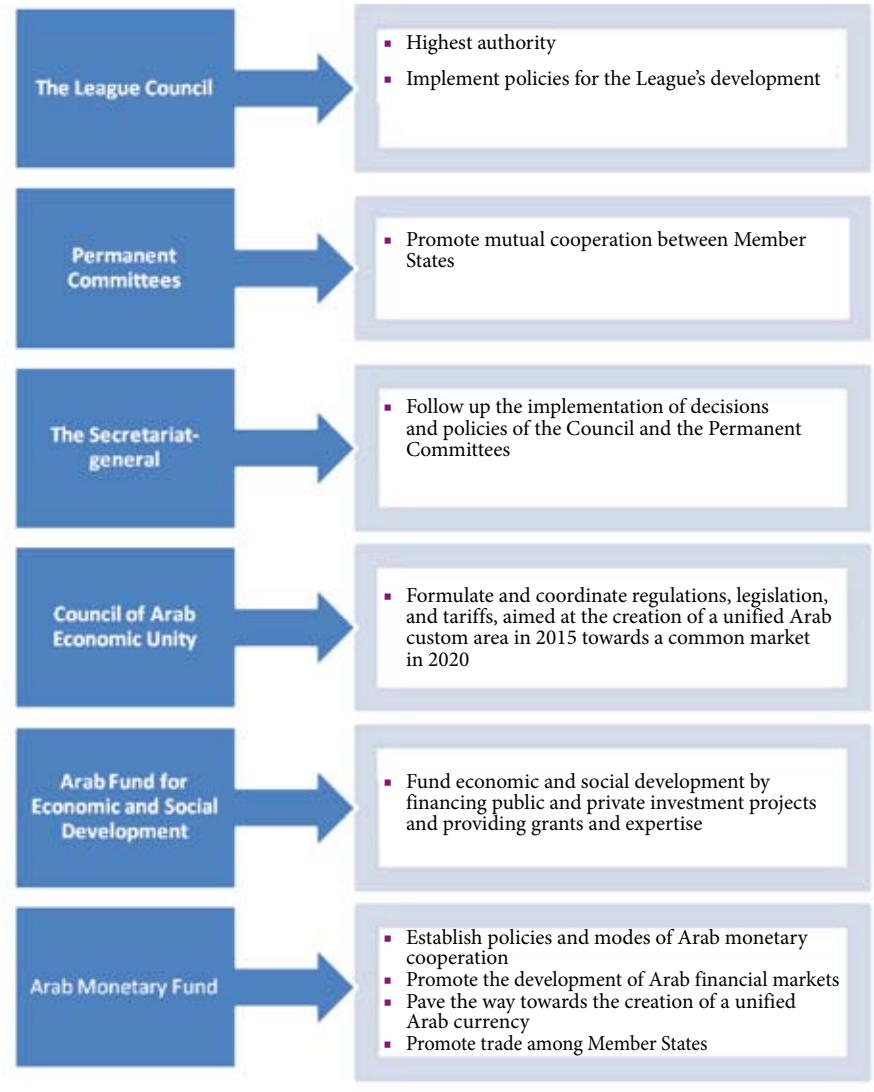
The Arab Labor Organization helps all the member states, based on national conditions, to promote the work and living conditions of the Arab labor force, as well as its development, rehabilitation, training, protection, and care. The ALO organized a series of activities in order to achieve the following:

- Coordination of efforts in the field of employment at Arab and international conferences
- Development and maintenance of the rights and freedoms of association
- Unification of labor legislation and working conditions in Arab countries as far as possible, including the preparation of a manual of professional classifications
- Undertaking of studies and research in the area of manpower planning and employment of women and juveniles; problems related to industry, trade, services, agriculture, industrial, and security industries, as well as micro-culture; and the classification of labor, cooperatives, and professional productivity
- Provision of technical assistance in the field of employment, as well as a plan for the social security system, and vocational training.
- Development of Arab human resources through manpower planning programs and activities and the fight against unemployment, as well as the creation of employment opportunities for women, the facilitation

of the movement of Arab labor, and attention to the situation of Arab workers and migrants.

In addition, numerous specialized organizations and other institutions that promote Arab cooperation and protect Arab interests in a wide array of fields fall under the League umbrella.

The following diagram shows the main Arab League institutions responsible for achieving economic integration:



2.3 The Organization of the Islamic Conference

The Organization of the Islamic Conference (OIC) is an international organization grouping 57 States (in addition to five observers)[4] which pool their resources, combine their efforts, and speak with one voice to safeguard the interests and secure the progress and well-being of their peoples and of all Muslims in the world.

The OIC was established in 1969 when the first meeting of the leaders of the Islamic world was held after the attempt to burn down the Al-Aqsa Mosque on 21 August 1969.

The Organization aims to:

1. Strengthen Islamic solidarity among member states, including: cooperation in the political, economic, social, cultural, and scientific fields; and supporting the struggle of all Muslim people to safeguard their dignity, independence, and national rights
2. Coordinate action to safeguard the Holy Places; support the struggle of the Palestinian people and assist them in recovering their rights and liberating their occupied territories

4 The Islamic Republic of Afghanistan, The Republic of Albania, The Azerbaijan Republic, The Kingdom of Bahrain, The People's Republic of Bangladesh, The People's Republic of Benin, The United Arab Emirates, The Government of Brunei Darussalam, Burkina Faso, The People's Democratic Republic of Algeria, The Republic of Djibouti, The Republic of Chad, The Republic of Indonesia, The Kingdom of Morocco, The Republic of Ivory Coast, the Palestinian Government, The Republic of Gabon, The Republic of Gambia, The Republic of Guinea, The Republic of Guinea-Bissau, The Republic of Guyana, The Republic of Iraq, The Islamic Republic of Iran, The Republic of Cameroon, the Qatar Government, The Republic of Kazakhstan, The Republic of Kyrgyzstan, The Federal Islamic Republic of the Comoros, The Government of Kuwait, The Great Socialist People's Libyan Arab Jamahiriya, The Lebanese Republic, The Republic of Maldives, Malaysia, The Republic of Mali, The Arab Republic of Egypt, The Islamic Republic of Mauritania, The Republic of Mozambique, The Republic of Niger, The Federal Republic of Nigeria, The Kingdom of Oman, The Republic of Uzbekistan, The Islamic Republic of Pakistan, The Republic of Senegal, The Republic of Sierra Leone, The Democratic Republic of Somalia, The Republic of Sudan, The Republic of Suriname, The Syrian Arab Republic, The Kingdom of Saudi Arabia, The Republic of Tajikistan, The Togolese Republic, The Tunisian Republic, The Republic of Turkey, Turkmenistan, The Republic of Uganda, The Hashemite Kingdom of Jordan, and The Republic of Yemen.

OIC Observer Members : The Turkish Republic of Northern Cyprus, Bosnia and Herzegovina, The Kingdom of Thailand, The Central African Republic, The Russian Federation

3. Work towards: Eliminating racial discrimination and all forms of colonialism; creating a favorable atmosphere for the promotion of cooperation and understanding between member states and other countries.

2.3.1 OIC Institutions

The OIC has created a number of institutions with different levels in order to achieve concrete results in the fields of political, economic, cultural, social, spiritual, and scientific cooperation among member states.

The OIC consists of:

- Principal bodies
- Subsidiary organs
- Specialized institutions
- Affiliated institutions

The OIC principal bodies consist of: **the Islamic Summit Conference**, the supreme body of the OIC entrusted with defining strategies for OIC policies and actions; **the Islamic Conference of Foreign Ministers (ICFM),** which considers the means of implementing the general policy of the organization and adopts resolutions accordingly; **the Secretariat-General, which** carries out duties entrusted to it by the above conferences as the Organization's executive organ; and **the International Islamic Court of Justice.**

In addition, the OIC Summit and Ministerial have created different committees including; the Al-Quds Committee, the Standing Committee for Information and Cultural Affairs (COMIAC), the Standing Committee for Economic and Commercial Cooperation (COMCEC), the Standing Committee for Scientific and Technical Cooperation (COMSTECH), and the Islamic Commission on Economic, Cultural, and Social Affairs.

The Standing Committee for Economic and Commercial Cooperation (COMCEC)

COMCEC is one of the three standing committees established in 1981. However, COMCEC only began operations in 1984, when a president was finally chosen. The duties of COMCEC include: monitoring the decisions on economic and commercial cooperation; strengthening economic and commercial cooperation between the members; and formulating plans to increase the economic and commercial capacity of the members.

Organization of the Islamic Conference's Subsidiary Organs, Specialized and Affiliated Institutions

The secondary organs and institutions working toward the achievement of the OIC objectives cover cultural, scientific, economic, legal, financial, sports, technological, educational, media, vocational, social, and humanitarian areas. Depending on their degree of autonomy vis-à-vis the parent organization, they are classified as subsidiary organs, specialized institutions, or affiliated institutions.

Subsidiary Organs

The Statistical, Economic, and Social Research and Training Centre for Islamic Countries, which aims to: collate, process, and disseminate socio-economic statistics and information on and for the utilization of the member countries; study and evaluate the economic and social developments in the member countries to help generate proposals that will initiate and enhance co-operation among them; and organize training programs in selected fields geared to the needs of the member countries, as well as to the general objectives of the Organization of the Islamic Conference.

The Islamic Center for Development of Trade, the subsidiary organ entrusted with trade promotion among the OIC member states. Its main objectives are:

- To encourage regular trade exchanges among member states
- To promote investments likely to develop trade flows

- To contribute to the promotion of member states' products, and encourage access to foreign markets
- To promote trade information
- To assist member states in the fields of trade promotion and international negotiations
- To extend assistance to enterprises and economic operators
- To participate in the trade fairs organized by the ICDT

The Islamic University of Technology (IUT) is an internationally recognized educational and research institution in Bangladesh. The main objective of the IUT is to contribute towards the development of the human resources of the OIC member states, particularly in different fields of engineering, technology, and technical education. The IUT receives direct endowment from OIC member countries, and offers scholarships to its students in the form of free tuition, boarding, lodging, and medicare.

The university has advanced much in a short time, and infrastructure development continues, financed by loans from the Islamic Development Bank (IDB) with a guarantee provided by the Government of Bangladesh.

Other Subsidiary Organs

- The Research Centre for Islamic History, Art, and Culture (IRCICA), Istanbul, Turkey
- The Islamic Fiqh Academy, Jeddah, Saudi Arabia
- The International Commission for the Preservation of the Islamic Heritage, Istanbul, Turkey
- The Islamic University of Niger
- The Islamic University of Uganda

Specialized Institutions

The Islamic Development Bank is an international financial institution established to foster the economic development and social progress of member countries and Muslim communities individually as well as jointly in accordance with the principles of Shari'ah i.e., Islamic Law. The functions

of the IDB are to participate in equity capital and grant loans for productive projects5 and enterprises, in addition to providing financial assistance to member countries in other forms for economic and social development.

Other Specialized Institutions

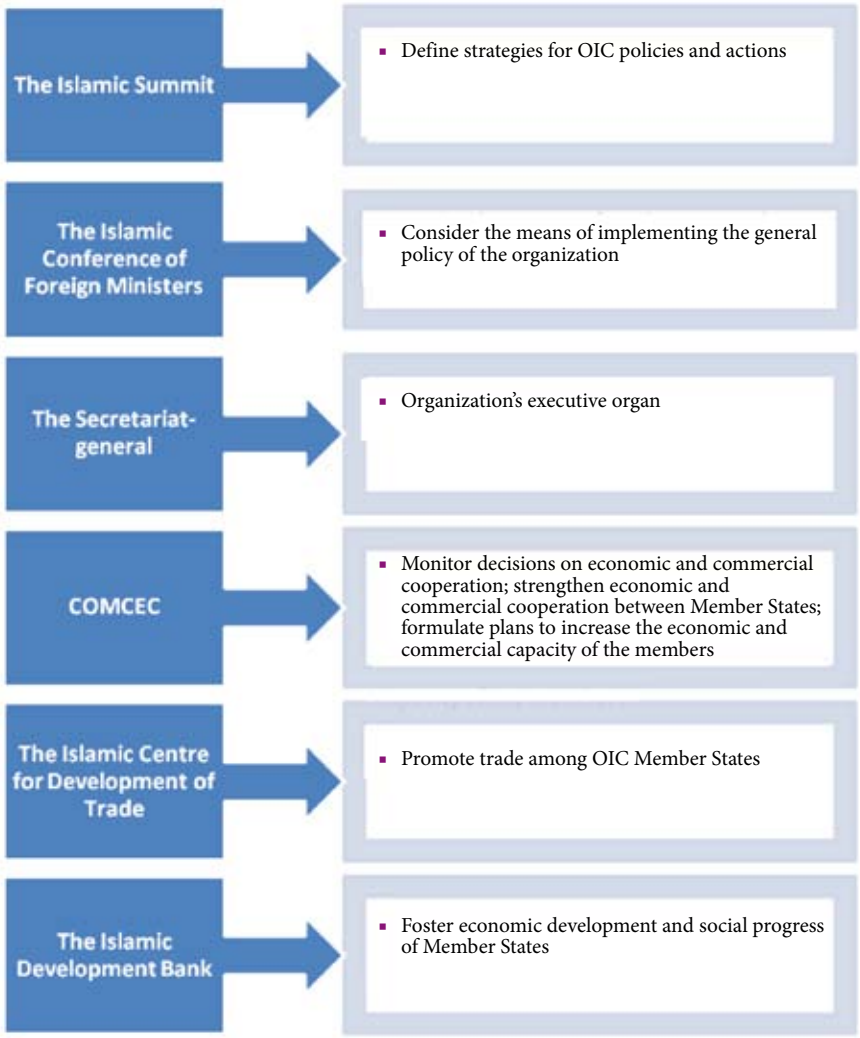
- The Islamic Educational, Scientific and Cultural Organization
- The International Islamic News Agency
- The Islamic States Broadcasting Organization

Affiliated Institutions

- The Islamic Chamber of Commerce and Industry (ICCI), Karachi, Pakistan
- The Islamic Committee of the International Crescent (ICIC), Benghazi, Libya
- The Organization of the Islamic Shipowners Association (OISA), Jeddah, Saudi Arabia
- The International Association of Islamic Banks, Cairo, Egypt
- The Organization of Islamic Capitals and Cities (OICC), Makkah Al-Mukarramah, Saudi Arabia
- The Sports Federation of Islamic Solidarity Games, Riyadh, Saudi Arabia
- The World Federation of International Arabo-Islamic Schools

The following diagram shows the main OIC institutions responsible for achieving economic integration:

5 The Bank extends loans to its member countries for the financing of infrastructure and agricultural projects such as roads, canals, dams, schools, hospitals, housing, rural development, etc. in the public and private sectors, which have an impact on the economic and social development of the member countries concerned and are accorded priority by the governments concerned. Such loans, in conformity with Shariah, are interest-free. The Bank recovers its administrative expenses by levying a service fee.



3. Comparisons and Lessons Learned

In this section, we will conduct a comparison analysis of the three institutional models mentioned above. The comparison will include the background and structure of these models, their strategic approach, their implementation and achievements, and the key support institutions needed to support integration from inception.

3.1 Comparison

3.1.1 The Background

A fundamental key issue that should be highlighted is that all the models were politically motivated, and they all sought to use economic cooperation as a mechanism for integration.

The European model used the economic factor as a driving force for unity and peace. The European Union was created to achieve the political goal of peace, but its dynamism and success spring from its involvement in economics.

The Arab League was established in 1945, providing a potential institutional means of promoting Arab interests in general, and economic and security interests in particular. It also aimed at reinforcing the bargaining power of the Arab world, and offering its people a better standard of living, including social welfare. The common market was established in 1965, open to all Arab League members. The common market agreement provides for the eventual abolition of customs duties on natural resources and agricultural products, free movement of capital and labor among member countries, and coordination of economic development.

Economic cooperation was one of the objectives of the OIC charter. However, and taking into consideration the political factor that constricted the OIC work, economic integration has become a key area on which to focus in order to compensate for the lack of achievements in the political field, as

well as a way to make use of the benefits gained to foster political integration. A number of initiatives have been accomplished in this regard. The 1977 General Agreement on Economic, Technical, and Commercial Cooperation was the first of many such agreements to be adopted. The 2008 amended OIC charter discusses the strengthening of "intra-Islamic economic and trade cooperation; to achieve economic integration leading to the establishment of an Islamic Common Market."[6]

3.1.2 The Structure

The diagram below shows the main institutions used for economic integration in the three models. The main feature in each of the models is reflected in the use of almost the same structure. Each structure is composed of:

1. Principal strategic bodies, responsible for strategic planning and implementation:
    a. The strategic vision is usually handled by the leaders of countries (the European Council Summit, the Islamic Summit, and the Council of the Arab League). In addition, all models show a second body of strategic planning, consisting of the foreign ministers who set the strategic orientation of the organization to achieve its vision.
    b. A principle implementing body, which is the executive organ responsible for achieving the strategic objectives (the European Commission, the Secretariat-General of the Arab League, and the Secretariat-General of the Organization of the Islamic Conference).
3. Specialized committees or councils, to promote economic integration (the European Economic and Social Committee, the Social and Economic Council of the Arab League, and the OIC Standing Committee for Economic and Trade Cooperation).
4. Specialized technical institutions, to develop and promote trade (Islamic Center).

6 Charter of the OIC, CHAPTER I, Objectives and Principles, Article 1

5. Specialized financial institutions, to fund and support financially all projects and activities related to achieving the integration process (the European Investment Bank, the Arab Fund for Economic and Social Development, and the OIC Islamic Development Bank).

European Council (Summit)	▪ Fix goals and set strategies to achieve these goals ▪ Set political guidelines for the Union's development
The European Parliament	▪ Represent people's interests ▪ Pass laws
Council of Ministers	▪ Principal decision-making body, in charge of the EU's foreign, security and defense policies. Also responsible for key decisions on issues of justice and freedom ▪ Pass EU laws
The European Commission	▪ The EU's executive organ ▪ Represent and advocate the interests of Europe as a whole
The European Central Bank	▪ Manage the Euro
The European Investment Bank	▪ Lend money for projects of European interest
The European Economic and Social Committee	▪ Advisory body, which must be consulted on proposed EU decisions regarding employment, social spending, vocational training, etc.

The League Council	▪ Highest authority ▪ Implement policies for the League's development
Permanent Committees	▪ Promote mutual cooperation between Member States
The Secretariat-general	▪ Follow up the implementation of decisions and policies of the Council and the Permanent Committees
Council of Arab Economic Unity	▪ Formulate and coordinate regulations, legislation, and tariffs, aimed at the creation of a unified Arab custom area in 2015 towards a common market in 2020
Arab Fund for Economic and Social Development	▪ Fund economic and social development by financing public and private investment projects and providing grants and expertise
Arab Monetary Fund	▪ Establish policies and modes of Arab monetary cooperation ▪ Promote the development of Arab financial markets ▪ Pave the way towards the creation of a unified Arab currency ▪ Promote trade among Member States

The Islamic Summit	▪ Define strategies for OIC policies and actions
The Islamic Conference of Foreign Ministers	▪ Consider the means of implementing the general policy of the organization
The Secretariat-general	▪ Organization's executive organ
The Islamic Centre for Development of Trade	▪ Promote trade among OIC Member States
The Islamic Development Bank	▪ Foster economic development and social progress of Member States

3.2 Implementation and Achievements

In terms of overall achievements, the European model is still the most sophisticated case of regional integration. The European Union has succeeded in achieving its vision of a common market on the way towards achieving political unity, while the other two models are struggling to accomplish concrete steps in this direction.

After nearly fifty years, Arab Economic Integration (AEI) remains intangible in comparison with the European economic integration experiment. While Arab and European economic integration began at approximately the same time, AEI is still far from the desired common market of the Arab countries, the implementation of the Greater Arab Free Trade Area (GAFTA) is facing many obstacles, and concrete achievements have yet to be achieved. Even now, not all Arab countries have joined this agreement, which is considered an important step towards achieving the desired results. The 18th member (Algeria) joined the agreement only in 2008. In addition, many obstacles related to technical barriers to trade are still delaying the full implementation of this agreement.

The case of OIC economic integration does not differ to the experience of the Arab League. Thirty-three years after its adoption, only 42 member countries have signed the General Agreement on Economic, Technical, and Commercial Cooperation, and only 30 member countries have ratified it. Even worse, the number of member countries that signed subsequent agreements necessary for the implementation of the general one was much less. Only 30 member countries signed the Framework Agreement on the Preferential Trade System of 1990, and 20 ratified it. The Protocol on the Preferential Tariff Scheme of 2005 was signed by 10 member countries, while only two members ratified it.[7]

7 www.comcec.org, 29/7/2007: List of member states that signed/ratified the different agreements and statutes on economic, commerce and technical cooperation among OIC member states

3.3 Strategic Approach

The large gap in achievement between the different models raises many areas of comparison between them: the clear vision, the process, the political will, and the transfer of authority to a single executive supranational institution that could lead the process of integration.

A major difference between the EU and the other two models is the clear vision of integration, which provided the basis for the process followed to achieve this vision. To the founders of the EU, it was clear that the objective of the union was to create a common market with a common external commercial policy, which would eventually allow for the free movement of goods, services, investment, and labor among member states. The European experience shows that integration should be thought of as a whole as well as a process, rather than as a series of separate steps to be undertaken and analyzed in isolation.

3.4 Political Backing

There was strong political backing for integration in the EU model, which is not seen in the other two models. The political will to shift the sovereignty from national governments toward EU institutions was a major basis for the dramatic success in the EU model. Political backing in the Arab League and OIC case is still missing real will.

It is very difficult to prove that there is huge pressure on the institutions of the Arab League and the OIC not to be involved in the regional integration process in any way other than playing the role of a coordinator. However, any observer of how these institutions are managed and the way they influence the integration process may easily reach this conclusion.

3.5 A Central Executive Body

One lesson that may be drawn from trade policymaking in the EU is that responsibility for trade policy and all its outcomes should be clearly lodged in a single entity, ideally an executive that is subject to broad periodic

guidance and review by elected legislatures. To the maximum extent possible, committees of national bureaucrats, whose horizons are necessarily limited, should be avoided. The use of a central executive body like the EC to manage the process, be its guardian, eliminate barriers, provide regional integration as well as the needed arrangements to attain and maintain a positive overall cost-benefit balance and push it forward has been vital to maintaining and advancing integration.

To some extent, the EU model is emulated by the Arab League and the OIC. However, the political will to transfer authority to the Secretariat-General, and provide the necessary conditions for it to lead the process of integration like the EC in the EU model, is not there. In the following, we show the importance of the central executive body in providing the conditions needed to influence regional integration:

3.5.1 The European Commission

The European Commission refers not only to the 27 commissioners appointed by the EU member states after approval by the European Parliament, but also to the institution and its approximately 38,000 staff. It is the EU's executive body. It represents and upholds the interests of Europe as a whole. It drafts proposals for new European laws. It manages the day-to-day business of implementing EU policies and spending EU funds. The Commission also makes sure that everyone abides by European treaties and laws.

The Commission is divided into some 40 directorates-general (DGs) and services, which are in turn subdivided into directorates, and directorates into units. The Commission also administers a number of executive agencies. Additional structures may also be created at need.

The EC acts like the government of Europe, with the DGs as its ministries, the commissioners as the ministers, and the Commission's president as the prime minister. In order to ensure that the Commission acts effectively and as a college, the DGs are required to collaborate closely with each other and coordinate the preparation and implementation of the commissioners' decisions, just as, and maybe more than, the relevant ministries in any country.

Each DG is classified according to the policy it deals with. The Commission services deal with more general administrative issues or have a specific mandate, for example, fighting fraud or creating statistics. The following are DGs classified as per policy area, external relations, and general and internal services:

1. Policies: Agriculture and Rural Development, Budget, Climate Action, Competition, Economic and Financial Affairs, Education and Culture, Employment, Social Affairs and Equal Opportunities, Energy, Enterprise and Industry, Environment, Executive agencies, Home Affairs, Maritime Affairs and Fisheries, Mobility and Transport, Health and Consumers, Information Society and Media, Internal Market and Services, Justice, Regional Policy, Research, Taxation and Customs Union, Development
2. External Relations: Enlargement, EuropeAid-Cooperation Office, External Relations, Humanitarian Aid, Trade
3. General Services: Central Library, Communication, European Anti-Fraud Office, Eurostat, Historical Archives, Joint Research Centre, Publications Office, Secretariat-General
4. Internal Services: Bureau of European Policy Advisers, European Commission Data Protection Officer, Human Resources and Security, Informatics, Infrastructures and Logistics-Brussels, Infrastructures and Logistics-Luxembourg, Internal Audit Service, Interpretation, Legal Service, Office For Administration and Payment of Individual Entitlements, Translation

The combination of these policy areas and services compromise nearly all the areas that any country's government needs to establish in order to achieve its national objectives.

The two main DGs responsible for the economic integration of the EU are the Directorate General of Trade and the Directorate General of Economic and Financial Affairs.

The Directorate General for Trade of the European Commission is in charge of implementing the common trade policy of the European Union. In addition,

it helps through the EU's trade policy to secure prosperity, solidarity, and security in Europe and around the globe. DG Trade supports the EU's Trade Commissioner as well as the whole of the European Commission in shaping a trade environment that is good for people and for business. Its main tasks include:

- Defining the trade interests of the European Community in both defensive and offensive terms, and negotiating bilateral, regional, or multilateral agreements on the basis of directives proposed by the Commission and adopted by the Council
- Monitoring and ensuring the implementation of international agreements by using the WTO dispute settlement system and the instruments for trade promotion or defense adopted by the Community (the anti-dumping and anti-subsidy rules, and the trade barriers regulation – TBR)
- Taking part in devising and monitoring internal or external policies that have a bearing on the Union's trade and external investments (single market, consumers, health, environment, technology, intellectual property, competitiveness, competition, energy, transport, agriculture, sectoral measures)
- Ensuring consistency between commercial policy and the Union's general external relations policy on the one hand, and the contribution of the European Union to global economic governance on the other
- Providing the public, both sides of industry, civil society, and professional circles with clear, comprehensive, and up-to-date information, while seeking their opinions in compliance with the rules set down in the Commission's codes of conduct

These tasks are run by eight directorates of 26 units, and managed by a director general and two deputies.

The Economic and Financial Affairs DG, on the other hand, strives to improve the economic wellbeing of all citizens of the EU through policies designed to promote sustainable economic growth, a high level of employment, stable

public finances, and financial stability. It has nearly 550 permanent staff, most – around 440 – based in Brussels, and the remainder in Luxembourg. In shaping consistent economic policies at EU level, this DG bases itself on the rules provided for in the Treaty on The Functioning of the European Union (TFEU), or in relevant secondary legislation, notably the Stability and Growth Pact/Excessive Deficit Procedure and the Integrated Policy Guidelines. In order to promote a broad, informed, and high-quality policy debate based on sound economic analysis, this Directorate General has an active communication policy, and prepares and publishes a host of regular reports as well as numerous occasional publications. In cooperation and partnership with member states, the DG endeavors to reach out to key stakeholders as well as to the general public in order to raise the level of knowledge and support for economic and monetary union and the Euro.

This Directorate-General maintains close working relations with the European Investment Bank (EIB) Group and the European Bank for Reconstruction and Development (EBRD), representing the EU in their governance, as well as with the World Bank Group and other multilateral development banks, with a view to promoting EU priorities and common positions, and ensuring appropriate coordination of the Commission's financial cooperation with these institutions.

It also aims at implementing a broad-based approach to conducting economic, budgetary, structural, and financial surveillance, as a basis for timely policy assessment and advice.

In addition, this DG designs and implements large-scale macro-financial assistance programs (often in cooperation with the International Monetary Fund – IMF – and the World Bank) to support member states and partner countries facing severe financial or balance of payments difficulties. It also designs and implements, in close cooperation with the EIB, European Investment Fund (EIF) and EBRD, EU-driven investment financing programs, and undertakes financial assistance programs and financial market operations, also on behalf of other commission services.

Activity-based management and strategic planning

A key factor behind the success of the EC's remarkable achievements is the Commission's significant and continuous effort to improve the quality of the planning and organization of its work. This is divided into three basic stages: strategy (setting objectives and priorities), day-to-day (making decisions), and outcome (reviewing results).

In 2000, the Commission acknowledged the need for management focused more closely on results, and decided to develop a conceptual framework for activity-based management. To that end, the Commission split its work into a set of politically meaningful activities.

At the same time, with a view to greater transparency, accountability, and efficiency, the Commission decided to improve:

- the identification of priorities and desired policy impact
- the gearing of decisions to policy priorities and resource allocation
- information on policy results
- information on resources allocated to each activity

With the introduction of activity-based management, the activities become the central element of management. It is with respect to these activities that priorities are set, objectives defined, resources allocated and managed, and performance monitored and reported on. The Commission has developed a set of some 220 politically meaningful activities, which have been grouped into policy areas. They do not necessarily correspond to the administrative structure of the Commission. Besides being responsible for one main policy area, one DG will ask others to contribute to the development of an interdisciplinary policy.

In practical terms, the Commission's work is planned and reported on in a new annual strategic planning and programming cycle, as well as a reporting one.

The orientation debate held amongst the College of Commissioners initiates the strategic planning and programming cycle (SPP) and defines the priorities and strategic objectives of the Commission for the coming year. The Secretary General informs the services of the conclusions of the College, which in turn make proposals to convert College orientations into specific operations.

Based on the orientation debate and the subsequent proposals of the services, the Commission decides upon its annual policy strategy, which sets out the political priorities for the year to come as well as orientations for the allocation of human and financial resources. The annual strategy provides the framework for the preliminary draft budget and for the Commission's annual work program.

Upon entering office, the Commission establishes its five-year strategic objectives that mark its political project over the duration of its term of office. The president of the Commission presents the annual policy strategy to the European Parliament and the Council. The three institutions then engage in a structured dialogue, and each commissioner has a discussion with the relevant parliamentary committee. The result of this dialogue is a stock-taking document, used to prepare the Commission work program for the following year. The Commission work program translates policy strategy into a concrete action plan and a set of deliverables.

Each Commission department (DG) then develops its annual management plan. These describe how departments plan their activities, and how they contribute to the priorities set by the Commission, including the allocation of human and financial resources to the activities. Since the introduction of activity-based management, these plans have to set clear, specific, measurable, and verifiable objectives for each activity, as well as indicators for the monitoring of and reporting on the progress made and the impact of the activities on EU citizens.

At an operational, day-to-day level, the Commission has also introduced an "agenda planning" system in order to provide reliable programming of initiatives anticipated for adoption. A list of planned Commission initiatives is updated every month, and sent to other EU institutions in order to help them organize their own activities. It is accompanied by a list of adopted Commission initiatives.

A new procedure to assess the impact of a given initiative in the economic, environmental, and social area was adopted in 2002. The Commission

services prepare an impact assessment of all major work program initiatives. Impact assessment is an aid to political decision, not a substitute for it. It informs decision-makers of the likely impacts of proposals, but it leaves it up to them to take the decisions.

As the budgetary year draws to a close, all DGs must report on the degree of achievement of the objectives that were set in their annual management plans. They produce an annual activity report. The Commission collects the main conclusions of the different annual activities reports in a synthesis report which is presented to the European Parliament and the Council of Ministers.

Activity-based management therefore clearly helps integrate priorities, objectives, and resource allocation at the operational level. That evaluation is vital in keeping EU policies effective, and ensuring transparency and democratic accountability.

3.5.2 The OIC

There are also many lessons we can learn from the experience of the OIC in terms of the need for clear vision, strategies, and a central executive body to convert this vision into reality.

According to the report on the strategy and plan of action to strengthen economic and commercial cooperation among the OIC member states: a critical evaluation of the OIC Secretariat-General and the Standing Committee for Economic and Commercial Cooperation by the OIC-COMCEC Coordination Office in July 2010, the main factors that negatively affected economic and commercial cooperation between OIC countries were:

Lack of clear vision

Separate processes of preparation of the Strategy and the Plan of Action resulted in a complicated relationship between the objectives of these two documents. This is mainly a result of lack of a central management system that crafts the strategic objectives and translates them into clear-cut action plans. Instead of complementing and complying with each other, the objectives of

the Strategy and those of the Plan overlap with and duplicate each other. All six major objectives of the Plan are already cited in the Strategy, which begs the question as to the appropriateness of their existence. This situation can be interpreted as a sign of poor planning and coordination in the preparatory phases of these documents.

Another important shortfall of the Plan is that there is no distinction between short-, medium- and long-term objectives. Moreover, the absence of a criterion or process by which different objectives may be prioritized is another major deficit of the Plan.

The main reasons for the Plan's inability to set specific time-frames and quantitative targets for achieving its objectives were the developmental focus of the Plan and spreading the cooperation to a wide range of areas rather than intensifying efforts on and consolidating all the objectives around a single practical theme such as trade, especially given the extremely heterogeneous nature of OIC economies.

Lack of coordination and review

Both the Strategy and the Plan assigns COMCEC as the appropriate body to review and evaluate their implementation. During the annual sessions of COMCEC, the progress recorded within the context of the Plan is reviewed under a permanent agenda item entitled “review of the implementation of the Plan of Action.” In practice, however, this modality has been ineffective in providing a sustained monitoring mechanism, and what was basically discussed under that agenda item was the meetings held within the context of the Plan.

The Plan also does not give a place to OIC institutions or what measures should be taken in order to make maximum use of their existing experience, human or institutional capacities. In addition, the Plan does not assign the task of follow-up to any institution that has the ability to take up this mission.

The Plan recognizes the different levels of economic development of the member countries, and determines to reduce the development gaps that exist within the OIC community as one of its major objectives. The Strategy also points out the special problems of the least developed, land-locked and/or

Sahelian member countries. Although these problems have been identified by the Plan, and their mitigation, if not solution, has been emphasized as a major objective, there are no mechanisms or action plans that are aimed to that end. The Plan puts forward the same objectives and action plans for both least developed and high-income member countries, and thus seemingly adopts a one-size-fits-all approach. In fact, the development gap is a major factor in developing or stalling economic integration, and not taking it seriously will badly affect the economic integration process.

Despite the efforts made so far, the implementation of the Plan of Action has still been limited. These setbacks can be enumerated as follows:

Lack of an effective institutional set-up

The Plan of Action does not assign any institution responsibility for its implementation or follow up. It does not include a coordination mechanism that would define the roles of the OIC institutions for the realization or implementation of the Plan. It does not even mention the OIC institutions. Moreover, the Plan failed to establish connection between the Expert Groups Meetings (EGMs) and intersectoral EGMs, which is supposed to be the main instrument for the creation of the cooperative ideas/projects, and the OIC institutions.

As can be seen from the new mandate, the Sessional Committee's main function has remained limited to reviewing and evaluating the projects. In other words, the Sessional Committee is only responsible for the projects; there is still no institutional framework to define the responsible institutions and their roles for the implementation of the whole Plan of Action.

Lack of ownership by the member states

The limited number of EGMs arranged so far is largely due to the difficulty in securing host member countries, as well as delays in getting the already designated host countries to convene the EGMs they offered. This situation illustrates an ownership problem. A limited number of states show interest in the project proposals, and even their interest/response is far from being

clear-cut expression of commitment. The Plan of Action does not establish a mechanism which keeps the interest of member states alive.

Lack of a financing mechanism

The absence of a well-defined financing mechanism constitutes another setback in implementation. Although the Plan stresses the importance of financing in a number of sections, it has not developed a financial framework. The supplementary mechanism, which was an amendment to the Plan, also identifies the problem; however, it does not propose a solution. Due to the absence of a financial mechanism, some projects in which remarkable progress has been achieved found themselves in deadlock. The OIC Cotton Program is one example of this situation. Although the project committee evaluated and adopted a set of projects and applied to the Islamic Development Bank (IDB) for funding, the IDB requested that each project country submit a separate financial application. In other words, due to the absence of a well-defined financial mechanism in the Plan of Action, the IDB naturally used its own methods, on a bilateral basis, for funding the projects. Moreover, in general there is a tendency to expect the IDB to finance all the cooperation projects. However, the resources the IDB can allocate also have their limits. Rather than relying on a single source, it is important to diversify financing resources and tools in order to accelerate the realization of the projects. In the absence of adequate and stable resources for funding the projects, it will not be possible to make any progress in their implementation.

Lack of an effective Project Cycle Management

While the Project Cycle Management was introduced with the supplementary mechanism, it was not used in practice in the project processes, from preparation to implementation, or even in the evaluation of the projects.

At first, it was expected that the Project Cycle Management would facilitate the effective implementation and early realization of the projects due to its systematic framework in which the next step in the cycle is clearly defined. In practice, however, from the preparation to implementation stages of the projects, the project processes have not been compatible with the PCM

approach. One reason is that the supplementary mechanism does not clearly define a body or institution responsible for checking the compatibility of the practices in the project processes with the PCM stages. It also does not clearly explain the roles and responsibilities of the OIC institutions in terms of the realization of COMCEC projects in accordance with the PCM logic.

Unfortunately, the major setbacks in the implementation mechanism such as lack of an effective institutional set-up, lack of ownership by the member states, lack of a clear financial mechanism, and lack of an effective Project Cycle Management have still remained unsolved. One term that may encapsulate all these setbacks is the absence of "a clearly defined institutional framework" for the Plan of Action's implementation, as well as OIC economic cooperation at large.

3.5.3 The Arab League

Since its establishment, the Arab League worked on economic integration between its members, creating the Economic Council to coordinate this integration. The Economic Council – renamed the Economic and Social Council (ESC) in 1981 – was established under the terms of the Joint Defense and Economic Cooperation Treaty (1950). In 1957, the ESC established the Council of Arab Economic Unity (CAEU), which from 1964 began to formulate and coordinate regulations, legislations, and tariffs, aimed at the creation of a unified Arab custom area in 2015, and towards a common market in 2020.

On February 19, 1997, the ESC adopted its Resolution 1317, concerning the declaration on the establishment of a Pan-Arab free trade area over ten years as of January 1, 1998. This declaration was in response to the League's decision in 1996 to establish this area.

The Council commissioned the Secretariat-General to take the appropriate measures and develop the work and functions of the General Department for

Economic Affairs to suit the need to create the Pan-Arab Free Trade Area, or as it is called today, the Greater Arab Free Trade Area (GAFTA).[8]

The situation in the Arab League institutions and its capacity to develop and advance economic integration does not differ to that of the OIC. Even though the League has reached a reasonable achievement on the GAFTA level, it still needs much work to implement fully the agreement to establish this area.

The core issue in the moderate level of achievement goes back to nearly the same reasons addressed in the OIC case. In fact, this conclusion was seen in the decisions of the last Arab Summit held in Libya few months ago. In a press conference after the conclusion of the summit, League Secretary General Amr Moussa announced the need to develop a system of joint Arab action towards the establishment of the Arab Countries Union. The main recommendations in this regard were:

- The development of the Arab League and its principal organs
- The creation of an executive council at the level of heads of government to monitor the implementation of the Arab summit resolutions in areas of economic and social development, as well as other areas of concern. Engaging such high levels in the follow-up process was a shrewd step towards guaranteeing the political backing needed for the process of implementation
- Emulating the EC model, the conversion of the League Secretariat-General into a commission, and appointing the League secretary

8 The Greater Arab Free Trade Area is a multilateral agreement which aims at full liberalization of trade in goods of Arab national origin during a specified time period of ten years, using the method of gradual reduction by 10% per annum on taxes and customs duties of similar effect with the abolition of all customs barriers and other non-tariff barriers that restrict the flow of goods between the Arab States in this area. It was supposed to reach zero tariff 31/12/2007, but was amended to 31/12/2004. Eighteen of the 22 Arab League states signed the agreement. Palestine is treated as a least developed country and began to apply the reductions of tariffs beginning in 2005 by 16% for a period of five years and 20% in the final year. Even though customs duties are eliminated, there are still many obstacles directly related to technical barriers to trade (TBT) measures imposed by the different Arab countries. The council and other related bodies are working to eliminate such obstacles, which in most cases takes a significant amount of time. The ESC continues to administer the Greater Arab Free Trade Area and the Arab Fund for Economic and Social Development, and supervises the Council of Arab Economic Unity and other subsidiary institutions.

general as the commission president, supported by a number of commissioners assigned for specific sectors or areas in order to follow up joint Arab actions

- Assigning the Secretariat-General to evaluate the activities and programs of the joint Arab work organizations and specialized ministerial councils, in order to ensure the effectiveness of and coordination among these mechanisms, thus allowing a great focus on national projects that are beneficial to the Arab citizens

3.6 Key Support Institutions Necessary for Economic Integration in the Region

So far, we have seen that there are many sub-institutions that facilitate and support the central executive body in the implementation of any gradual or comprehensive economic integration. The vision of regional integration – or any other mission – is the first necessary step towards specifying the level of the aspiration as well as its strategic targets, and the creation of institutions and capacity building is the first step in the process of implementation towards its realization. By contrast, knowledge, information, and financial support constitute the heart of the policy formulation, implementation, and evaluation process.

Consequently, there are key institutions in the implementation process that are needed to support effective implementation. The most important of these institutions are the statistical institution of the specific region, joint research institutions (institutions that provide knowledge and information), and financial support institutions. These institutions form the core of any systematic approach to achieve the vision of regional integration. The first two work as the basis for formulation and evaluation of policies, and the third is the tool to finance the implementation of these policies.

In this section, we will highlight such key institutions, with an emphasis on similar institutions in the different models discussed above.

3.6.1 Institutions that provide clear and quality statistics on the region of interest

Integration cannot function properly without institutions that provide a solid basis of reliable and objective statistics on economic integration at the regional level. While national statistics remain important for the member states, statistics on the region of concern are essential for decisions and the evaluation of policies formulated to attain the desired integration.

Without such institutions, evaluation of strategies and policies remains vague; indeed, no effective policies may be created if the necessary information is not available. The following are the statistical institutions used by the models discussed above, and their objectives:

Table 4 \\ Statistical Institutions Used by the Model

EU	OIC	AL
Eurostat: To provide the European Union with a high-quality statistical information service. Its task is to provide the European Union with statistics at the European level that enable comparisons between countries and regions. Eurostat was established in 1953 to meet the requirements of the Coal and Steel Community. Over the years, its scope broadened, and when the European Community was founded in 1958 it became a Directorate-General (DG) of the European Commission. Eurostat's key role is to provide statistics to other DGs and supply the Commission and other European Institutions with data so they can define, implement, and analyze Community policies. With the development of Community policies, Eurostat's role has changed. Today, collecting data for the EMU and developing statistical systems in candidate countries for EU membership are more important than ten years ago.	**Statistical, Economic And Social Research and Training Center for Islamic Countries (SESRIC)**: a subsidiary organ of the OIC established in 1977. The Center aims in particular to: collect, collate, and disseminate socio-economic statistics and information on and for the utilization of the member states; undertake economic and social research on issues of economic and social development in the member states in order to help generate proposals that will initiate and enhance cooperation among them; and organize and support training programs in selected fields geared to the expressed needs of the member states – in particular, to assist them in the training of their administrative and technical personnel in the relevant subjects, as well as towards the general objectives of the Islamic Conference.	

3.6.2 Institutions that provide joint research

Another key element that supports the policy formulation and evaluation process are institutions that provide joint research. The European Commission's Joint Research Center (JRC) provides a good example in this regard.

The JRC is the scientific and technical arm of the European Commission, providing the scientific advice and technical know-how to support a wide range of EU policies. Its status as a Commission service, which guarantees independence from private or national interests, is crucial for pursuing its mission.

The mission of the JRC is to provide customer-driven scientific and technical support for the conception, development, implementation, and monitoring of EU policies. As a service of the European Commission, the JRC functions as a reference center of science and technology for the Union. Close to the policy-making process, it serves the common interest of the member states, while being independent of special interests, whether private or national.

The JRC has seven scientific institutes located in Belgium, Germany, Italy, the Netherlands, and Spain, with a wide range of laboratories and unique research facilities. Through numerous collaborations, access to many facilities is granted to scientists from partner organizations.

Many of the complex challenges ahead cut across traditional policy boundaries, and require multi-disciplinary research. In order to deliver the best support, the JRC focuses its efforts on seven thematic areas, which both respond to major EU and global challenges and take into account the JRC's proven competences:

- an open and competitive economy
- the development of a low carbon society
- sustainable management of natural resources
- safety of food and consumer products
- nuclear safety and security

- security and crisis management
- reference materials and measurements

The JRC employs around 2,750 staff hailing from throughout the EU, and its €330 million annual budget stems from the EU's research budget. Further income is generated through the JRC's participation in indirect actions, additional work for Commission services, and contract work for third parties, such as regional authorities and industry.

3.6.3 Financial institutions that support integration implementation programs

In the three models discussed above, these institutions were key players in moving the integration process ahead, and the cornerstone for all programs necessary to strengthen cooperation and integration. Below are the main institutions used by the models above:

EU	OIC	Arab League
The European Investment Bank (EIB) EIB furthers the objectives of the European Union by making long-term finance available for sound investment. Its shareholders are the member states; the Board of Governors is composed of the finance ministers of these states. EIB funds its operations by borrowing on the capital markets rather than drawing on the EU budget. The Bank enjoys decision-making independence within the EU's institutional system. The EIB is active both inside and outside the European Union. The majority of EIB lending is attributed to promoters in the EU countries (about 90 percent of the total volume), supporting the continued development and integration of the Union. Outside the Union, EIB lending is governed by a series of mandates from the European Union in support of EU development and cooperation policies in partner countries.	**The Islamic Development Bank (IDB)** IDB is an international financial institution. It was established by the OIC in 1973. The purpose of the Bank is to foster the economic development and social progress of member countries and Muslim communities, individually as well as jointly. The functions of the Bank are to participate in equity capital and grant loans for productive projects and enterprises, as well as to provide financial assistance to member countries in other forms for economic and social development. The Bank is also required to establish and operate special funds for specific purposes, including a fund for assistance to Muslim communities in non-member countries, in addition to setting up trust funds. It is also charged with the responsibility of assisting in the promotion of foreign trade especially in capital goods, among member countries; providing technical assistance to member countries; and extending training facilities for personnel engaged in development activities in Muslim countries to conform to the Shari'ah.	**The Arab Fund for Economic and Social Development (AFESD, or Arab Fund)** AFESD is an Arab regional financial institution focused on funding economic and social development by financing public and private investment projects and providing grants and expertise. The Arab Fund's activities are characterized by a number of important aspects that make it a model of cooperation and Arab economic integration, and a reflection of outstanding joint Arab action. With all the Arab countries as its members and concentrating on economic and social development affecting the same countries, the Arab Fund carefully follows guidelines on neutrality in pursuing its activities, and organizes itself under substantive rules to ensure independence from any political considerations when conducting in its operations. The Arab Fund seeks to meet the development needs of member countries, while ensuring feasibility and transparency in all its projects. In this context, the most important aspect of the Arab Fund's operations is to consider the priorities of the projects as well as the policies established by the member countries so that it does not impose any financial or economic conditions that interfere with such policies.

The European Bank for Reconstruction and Development (EBRD)

EBRD is an international financial institution that supports projects in 29 countries, from central Europe to central Asia. Investing primarily in private sector clients whose needs cannot be fully met by the market, the Bank promotes entrepreneurship and fosters transition towards open and democratic market economies.

EBRD provides project financing for banks, industries, and businesses, both for new ventures as well as for investments in existing companies. It also works with publicly owned companies, to support privatization, restructure state-owned firms, and improve municipal services. The Bank uses its close relationship with governments in the region to promote policies that bolster the business environment.

EBRD is owned by 61 countries and two intergovernmental institutions, the European Union and the European Investment Bank (EIB). The powers of EBRD are vested in the Board of Governors, to which each member appoints a governor, generally the minister of finance. The Board of Governors delegates most powers to the Board of Directors, which is responsible for EBRD's strategic direction.

The present membership of the Bank consists of 56 countries. Basic membership conditions are that the prospective member country should be a member of the Organization of the Islamic Conference, pay its contribution to the capital of the Bank, and be willing to accept such terms and conditions as may be decided upon by the IDB Board of Governors.

The loans provided by the Arab Fund to member countries are characterized as being concessional; providing easy financing conditions to assist these countries implement their development plans. In this context, the Arab Fund has paid close attention to improving the concessional nature of its loans by reducing interest rates to 2.5% for low-income Arab countries and to 3% for others. Furthermore, it has increased the grace period for loan repayments to between four and six years, and extended the loan term to between 22 and 25 years. In addition, the Arab Fund continues to provide non-refundable grants as a contribution to various fields of studies, institutional support, and training, as well as support for emergency situations and circumstances faced by some member countries. Achieving Arab integration and consolidating cooperation among the member countries is the main objective of the Arab Fund. Priority is therefore given to financing joint Arab projects of particular importance, specifically to those projects that increase the interdependence of Arab countries. Hence the emphasis on contributing to projects involving the interconnection of electrical power, transportation, and communications. The Arab Fund also pays close attention to social development and reducing poverty by financing projects covering health care, education, drinking water, rural development, and social welfare.

4. Towards an Institutional Set-Up in the Region - Key Issues

Looking at the different models discussed above, there are many lessons we can learn from their background, objectives, strengths, and weaknesses in our search to recommend the institutions needed to support our initiative.

There are key issues that should be taken into consideration for any institutional set-up that will support achieving economic integration and cooperation in the region:

- Institutions are vital for regional integration—with the caveat that it is important to adopt a strategic approach to regional integration by prioritizing areas of action. The European Union began by focusing on particular sectoral issues, including the rationalization of the coal and steel industries. This should be considered more seriously in our case.
- Specialized institutions could be formed in the short run for the purpose of a gradual approach strategy and the need for more focus. However, initial planning of these institutions should take into consideration the mergence of these institutions at a specific point in the integration process. For example, in 1967, the European Economic Community, the European Coal and Steel Community established by the Treaty of Rome in 1957, and the European Atomic Energy Community merged to form the European Community.
- Any form or design of the institutions should take into consideration and expect a large degree of institutional miscellany. The European Union slogan "Unity in Diversity" is a good example, i.e., seeking more integration does not mean ignoring the social and cultural configuration of the different countries in question. Neither the EU institutional design nor any other design can be followed to the letter.
- The variety of political orientation of the OIC and Arab League members was one of the main reasons behind not reaching concrete achievements in their quest for unity and integration since their

establishment. The dispute among Arab rulers and the influence of external powers that might oppose Arab unity can be seen as obstacles towards a deeper integration of the League. This dispute is accompanied by a lack of knowledge on the benefits of economic integration and its effect in attaining social welfare in the region.

- The Arab League differs notably from the European Union in that it has not achieved a significant degree of regional integration, and the organization itself has no direct relations with the citizens of its member states. Governance of the Arab League has been based on the duality of supranational institutions and the sovereignty of the member states. Preservation of individual statehood derived its strengths from the natural preference of ruling elites to maintain their power and independence in decision making. Moreover, the fear by the richer that the poorer may share their wealth in the name of Arab nationalism was a real hindrance in achieving integration. This is a key issue that should be considered as a high priority by any institutional set-up. It is very important that institutions show the benefits of integration clearly in the short- and long-run of the integration process.
- Another fundamental lesson to be learned from EU integration is the importance of supranational institutions in leading economic integration and in achieving its objectives.
- A central executive body to accomplish integration is the only way towards achieving any success. This central executive body should have strong political backing, and work towards a clear vision. The institutional structure of OIC and the Arab League may look remarkable and include nearly all elements required to lead the organization towards its set objects, but the lack of clear vision and strategic planning allowed only limited success on their way towards economic integration.
- The history of European integration shows that more free trade encouraged EU members to deepen regional integration. Consequently, any central executive body should have specific and specialized directorates to promote and develop trade and eliminate all barriers that prevent its realization. Good examples are the EC trade, economic, and financial directorates.

- Such examples may serve our purpose of establishing the central part of any future body that will handle the economic integration in the region as a whole. This core institution will work on formulating and implementing policies for the gradual integration of specific sectors towards full economic integration in the region.
- This core institution should be supported by specialized institutions in each economic sector that will formulate and implement specific policies to promote and sustain integration within each specific sector, e.g., a specialized institution to promote integration in the tourism sector.
- The key institutions necessary to support such a set of institutions in the process of formulating and evaluating policies for regional integration, are:
  - a statistical body, which provides all necessary information in this regard
  - a joint research center or body, to help support formulation, implementation and evaluation of policies
  - a financial support institution such the banks described above, to provide the financial resources needed for the implementation of integration policies
- A cornerstone of the degree of efficiency of such institutions is the commitment of the member countries to their share in the necessary budget for these institutions.

Figure 1 \\ Institutional Setup

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Labor Relations in the MENA Region: More Integration Towards a Brighter Future

Maysa Abu Awad, Tanya Baron, Eran Yashiv

Contents

Executive Summary

This paper presents labor market movements in the Middle East, discusses labor market institutions, and proposes the establishment of a migration authority.

Palestinian Workers in Israel. In 1968, Palestinian workers started to flow to Israel for employment, and the labor market turned into the major link between the two economies. At its peak, almost 116,000 workers were employed in Israel. The Palestinian workers were (and still are) heavily concentrated in agriculture, construction, and manufacturing. Beginning in December 1987, with the outbreak of the first Intifada, the labor links between the Israeli and Palestinian economies underwent a series of severe shocks. Since the end of 1987, Palestinian employment in Israel has been much more volatile and, generally, on a declining trend.

Regional Labor Markets. A salient feature of the labor market in the Arab region is the large intra-regional labor movement. The Arab region, in particular GCC[1] countries, hosts the highest concentration of migrant workers in the world. Arab labor movement is particularly important for countries facing excess labor supply (such as Egypt, Yemen, Syria, Palestine, and Jordan), as well as for countries facing a shortage of labor supply (such as the GCC countries).

ALO. We present in detail the structure and the functioning of the Arab Labor Organization.

Institutional Arrangements. We elaborate on lessons from institutional arrangements in OECD economies regarding foreign or migrant workers. Most of these can be applied to Palestinian workers in Israel, Palestinian workers in other countries, mostly other countries in the region, and Arab migration flows in the region.

1 Gulf Cooperation Council

Proposals. We propose setting up a Regional Labor Authority. This body will: operate employment centers running "matching" services, i.e., matching requests from businesses with the names and skills of interested workers; disseminate up-to-date information on living and working conditions as well as labor market trends; provide legal advice on the formulation of employment contracts; and act to enforce labor laws and protect workers' rights.

We believe that such an authority will be beneficial to both the demand and the supply sides of the regional labor market: employers will enjoy reduced search costs and efficient contract design due to the legal expertise of the authority, and employees will benefit from a broadened and strengthened career perspective resulting from the authority possessing knowledge about changing skill requirements and providing training programs.

1. Facts and Issues

In the following, we present some key facts on worker migration flows in the region. The discussion is based on European Commission (2010), IOM (2010) and UNDP (2009).

1.1 Population and labor force

The Arab region shares a common history, religion, and language, and has created significant integration on the cultural, political, and social levels.

- The Arab world has an estimated population of close to 352.2 million people, and this number is expected to rise to 598.2 million by 2050. Population size varies considerably between the countries of the region, from Egypt which accounts for 23.6% of the total Arab population to Qatar and Bahrain which account for less than 0.5%.
- Demographic changes are leading to an increase in the growth rate of the economically active population in the Arab world. It is expected that the active population will reach 62% in 2015, and that dependents will fall to 35% of total population.
- The share of the labor force in the total population is low in the Arab region due to a high share of young people and a low rate of labor force participation by women. More than half of the Arab labor force is concentrated in four countries – Egypt, Sudan, Morocco, and Algeria – which represent around 70 million workers.
- The unemployment rate is high in the Arab region (14.2% versus a 6% global average in 2009), mainly due to reduced labor demand from the public sector (as a result of privatization in many Arab countries), the slow growth of the private sector, and high job expectations of educated workers after years of guaranteed public sector employment. Unemployment is noticeably concentrated among the young. The distribution of unemployment within the region is also uneven – in

the GCC countries the average unemployment rate is 4.7%, whereas in Jordan it is 14% and in Palestine it is 26%.

1.2 Intra-regional labor movement: magnitude and role

- A salient feature of the labor market in the Arab region is the intra-regional labor movement. The region's share of global trade flows is below 5%; however, about 16% of all remittances paid out to migrants in the world originate from Arab countries, and 10% of global remittances are received by residents of Arab countries (World Bank, 2008). Intra-regional labor mobility has been one of the most prominent manifestations of Arab integration, and is still the most dynamic economic activity taking place across the region. For example, remittances sent to Jordan, Egypt, and Lebanon from other Arab countries are 40-190% higher than trade revenues between these and other Arab countries (IOM, 2010).
- The *Migration and Remittances Factbook* published by the World Bank (2010), provides statistics about Middle East and North Africa (MENA) migration in 2010. Below are some of the main findings:
  - Stock of emigrants: 18.1 million, or 5.3% of the population
  - Top 10 emigration countries: the Arab Republic of Egypt, Morocco, Palestine, Iraq, the Islamic Republic of Iran, Algeria, the Republic of Yemen, the Syrian Arab Republic, Jordan, Lebanon
  - Destinations: high-income OECD countries (40.2%), high-income non-OECD countries (23.2%), intra-regional (31.5%), other developing countries (1.2%), unidentified (4.0 %)
  - Top 10 migration corridors: Palestine–the Syrian Arab Republic, the Arab Republic of Egypt–Saudi Arabia, Algeria–France, the Republic of Yemen–Saudi Arabia, Palestine–Jordan, the Arab Republic of Egypt–Jordan, Morocco–France, Morocco–Spain, Morocco–Italy, the Arab Republic of Egypt–Libya. Two-thirds of migrants from the Mashreq[2] live in other Arab countries and, while intraregional migration dynamics from Maghreb[3] to the Arab region are not as strong, a million migrants from Maghreb countries move for work within the region (DRC, 2007).
- There are several drivers behind the mobility of workers in the region, among them income and development differentials (UNPD, 2009). Some of the richest countries in the world (Gulf countries) and some of the poorest (Yemen and Mauritania) are found here. The average GDP per capita in Arab countries is USD 8,200, ranging from almost USD 75,000 in Qatar to USD 2,090 in Yemen (UNDP, 2009). This imbalance within the region creates an opportunity for a mutually beneficial exchange between the countries facing excess labor supply (such as Egypt, Yemen, Syria, Palestine, and Jordan), and countries with a deficient labor supply (such as the GCC countries). However, it is also worth noting that forced migration is one of the main drivers behind migration in the Arab region; it is estimated that there are 4.7 million Palestinian refugees and an approximately 2 million Iraqi refugees.
- Migration contributes to the circulation of financial and human capital within the region. It is a very dynamic phenomenon, and affects the lives of millions of Arab migrants and foreign workers and their families. As such, it opens a window to support and advance economic, social, and cultural integration in the region.

1.3 Types of Arab labor mobility

Intra-regional Arab labor mobility can be divided into three classes:

- Between the non-Gulf labor-exporting countries to the Gulf labor-importing countries. Since the discovery of oil, the GCC countries suffering from a shortage in national manpower have been employing a large number of migrant workers to meet labor-market needs.

2 Egypt, Jordan, Lebanon, Syria, Palestine

3 Morocco, Algeria, Tunisia, Libya, and Mauritania

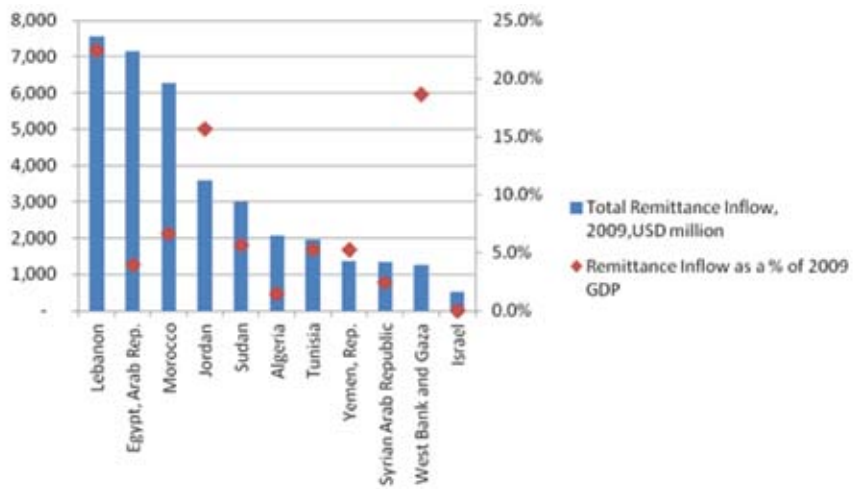
However, the percentage of Arab workers in the GCC has significantly declined from its peak of 72% of all incoming contractual workers in the 1970s to 23% in 2009. The main reason for this decline is the expansion of the private sector in GCC countries, which prefers employing non-Arab workers due to lower wages.

- Between some population-abundant Arab countries and resource-rich Arab countries not located in the Gulf, such as Libya
- Where a country is both a sending and receiving country of migrant labor, as is the case with Jordan, Lebanon, and Algeria (replacement migration). For example, in Jordan there is an over-supply of workers with higher education, and many of them leave the country for better opportunities, mostly in GCC states, where they occupy skilled positions in the public and private sectors. At the same time, according to the Jordanian Ministry of Labor, 303,000 foreign workers were legally employed in Jordan in 2008, with approximately 70% of them coming from other Arab countries. These are mostly low-skilled workers employed in low-paying jobs in social and personal services, agriculture, and manufacturing, which native Jordanians are unwilling to occupy. Most of these workers (67%) originate from Egypt.

2. Remittance Flows

It is estimated that about 16% of all remittances paid out to migrants in the world originate from Arab countries, and 10% of global remittances are received by residents of Arab countries. The Arab region is unusual in that some of the larger remittance-recipient countries are close neighbors to some of the larger remittance-source countries. Lebanon, Egypt, and Morocco are the three main recipients, with remittance inflows averaging over USD 6 billion for each country in 2009. Lebanon, Jordan, West Bank, and Gaza stand out by having remittances inflows especially high as a share of GDP – above 15% each.

Figure 1 \\ Remittance Inflows in Selected Arab Countries and Israel, 2009

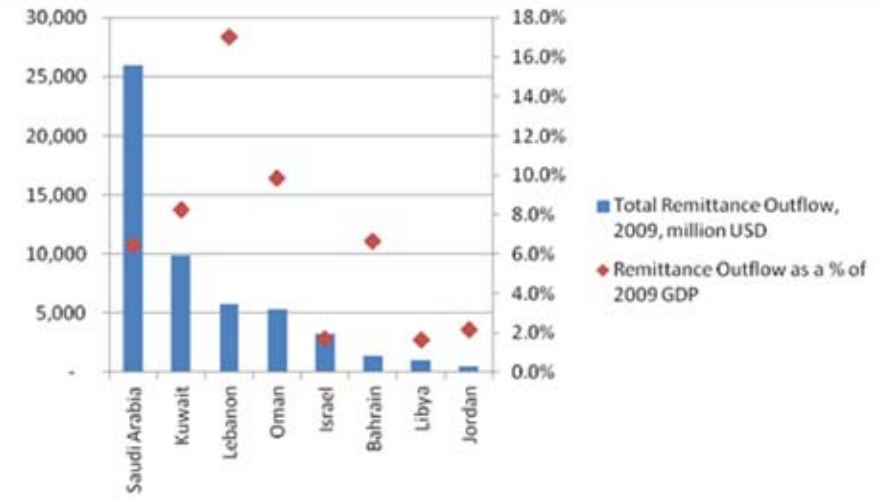


(Source: World Bank 2010)

Saudi Arabia holds first place in the region in terms of remittances outflows, with levels of above USD 25 billion. As has been the case with remittance

inflows, with remittance outflows Lebanon stands out as well for having a high share as a percentage of GDP – this combination reflects the fact mentioned in the previous section: Lebanon as a salient example of the type of labor mobility when a country is both a source and a recipient of migrant labor.

Figure 2 \\ Remittance Outflows in Selected Arab Countries and Israel, 2009



(Source: World Bank 2010)

The economic benefits of these remittances for the Arab labor-sending countries have been felt mainly at the personal and household level (circulating financial, social, and human capital, reducing unemployment rates, and sustaining migrants' families). Governments have also viewed remittances as an important source of foreign currency. However, sending countries have not been successful in establishing well-organized institutional frameworks to mobilize remittances effectively for saving and investment purposes, which is in contrast to the policy and institutional frameworks of countries such as South Korea, the Philippines, and Thailand. Drawing from these countries' experiences and developing such institutional frameworks is one of the major challenges on the agenda.

3. Supply and Demand Trends in the Regional Labor Market

3.1 Supply

Over the last decades, there has been a change in the traditional demographic balance in the Arab countries from high to low fertility and from high to low mortality, which has led to a change in the age structure of the population. In particular, there has been a sharp increase in the proportion of the working-age population (aged 25-64): 42.6% in 2009 compared to 39.9% in 2005, a decline in the young age group (aged 0-14): 33.6 % compared to 35.3% (ESCWA, 2009), and a slow gradual increase in the stock of older persons (65+) in the Arab region (ESCWA, 2007). It is expected that the economically active population will reach 62% in 2015, and that dependents will fall to 35% of total population. This means that the Arab region will enjoy a "demographic gift," where the workforce will increase annually by 2.5% while the dependency rate will decrease, resulting in an annual net increase of 2.2% in the economically active population (UNFPA, 2003).

The Arab region has experienced population and labor force growth rates higher than those in most other regions. The total labor force in the Arab region accounted for 122 million laborers in 2006, which represented about 38% of the total population in the region (compared to 35% in 1995). Though most Arab countries have witnessed a considerable increase in participation rates over the period 1995-2006, the rates vary significantly between the countries: from 66.8% in the UAE to 26.8% in Iraq. However, when compared to other regions, the share of the labor force from the total population is still low in the Arab region, primarily due to a higher share of young people and a lower rate of economic participation by women. More than half of the Arab labor force is concentrated in four Arab countries (Egypt, Sudan, Morocco, and Algeria). These four countries represent around 70 million laborers (Arab Monetary Fund, 2009).

3.2 Demand

Several economic policies in the region have led to a decline in the absorption capacity of key economic areas such as the agricultural, industrial, and public sectors. As many Arab countries commit themselves to structural reforms, privatization programmes have led to the shrinking of the public sector. On the other hand, given the trend of economic reforms and the structural adjustment programmes adopted by most Arab countries, there has been increased dependency on the private sector to generate jobs. The response by the private sector, however, has been weaker than expected.

The informal sector (the part of the economy in which employment is unreported and which is not taxed, and is not monitored by the government) became a leading source of employment in MENA in the 1990s; however, data limitations make it difficult to study the size and dynamics of this sector. It is estimated that informal employment stands at about 46.4% in Egypt and 37.8% in Tunisia (CAPMAS, Labor Force Sample Survey, 2006; Esim and Kuttab, 2002). The ILO estimates that the percentage of youths working without the protection of employment contracts is 70% in Egypt, 35-45% in Yemen, approximately 37% in Morocco, and approximately 33% in Jordan (ILO, Global Employment Trends for Youth, 2006).

In addition to structural factors, the effects of the financial crisis in the region will result in high unemployment rates, especially among the segments of the labor market that are already particularly vulnerable such as youth, women, and workers employed in the informal sector.

According to the ILO (2009), unemployment rates in North Africa and the Middle East might increase by more than one percentage point, which would result in the creation of more than 16 million unemployed persons in the Arab region.

4. Case Study: Foreign Workers in the Gulf

The following case study is an illustration of the very dynamic nature of demand and supply in the market for foreign workers in the region. This renders the smooth operation of matching and the timely provision of information about opportunities, to be proposed below, absolutely crucial for efficiency.

The total number of foreign workers in the Gulf States has grown since the 1970s. The percentage of expatriate workers in the labor force of the GCC countries was 39% in 1975, was growing sharply until 1995 and has been declining gradually ever since, though it is still significant – 70% as of 2005. The main reason for the decline is the increasing pressure of national employment. The largest sending countries are Egypt, Yemen, Syria, Palestine, and Jordan.

The composition of the foreign workforce has also changed – Arab workers have been steadily replaced by Asian workers. In 2005, 70% of the foreign workers in the Gulf were from Asia and 23% from Arab countries. The "crowding out" of the Arab workers by the Asian workers occurred for several reasons:

- A sharp decline in oil prices and government expenditure forced both the government and the private sector to cut costs, including labor costs. This change in economic structure reinforced a fundamental shift in the demand for labor. Most of the infrastructure projects had been completed, and a new emphasis was placed on maintenance rather than on building new projects. In this environment, Asian workers who were less expensive to employ, easier to lay off and, perceived as being more efficient, were an attractive source of labor supply.
- The Asian workers would leave their families behind and come to the GCC countries, while most Arab workers preferred to bring their families with them. The GCC governments preferred migrants who

would come to their countries to work temporarily, rather than with the intention to settle permanently.

- The educational, occupational, and professional skills of the GCC nationals have improved. This resulted in an increase in the domestic supply of skilled individuals in the GCC countries. The GCC nationals were now in a better position to take up skilled jobs, such as that of teachers, journalists, and clerks, which were previously held by skilled Arab migrants.
- Following Iraq's invasion of Kuwait in 1991, there was a change in attitude towards Arab workers. This change was followed by increased demand for Asian workers to fulfill the needs of the GCC labor markets.

The (sparse) evidence on the occupational structure of Arab and Asian workers in the Gulf suggests that despite the large reduction in the number of Arab workers employed in GCC countries since 2000 and the substantial increase in the number of Asian workers, Arab workers still hold the majority of the highly skilled occupations, whereas 86% of the Asian expatriate labor force occupy lower-skilled occupational categories.

5. Background on the Regulatory Situation

The foundation of a common Arab policy for mobility was laid down in the 1960s by policymakers in the Arab world, when there was a flourishing pan-Arab movement and a number of Arab governments ratified the Arab Economic Unity Agreement (1964). Article 1 of this agreement included the freedom of mobility for individuals to live and work, as well as the freedom of mobility for funds and commodities. The agreement also included the right of Arab citizens to own property in any other Arab country. An Arab free trade zone was ratified by the Arab Economic and Social Council three decades later (1995). The Arab labor ministers' conference in 1965 called for legislation to encourage the mobility of Arab manpower and to give it priority over non-Arabs. In a later meeting held in Kuwait (November 25-29, 1967), ministers approved an Arab agreement that encouraged and regulated mobility. The agreement, known as the Arab Agreement for the Mobility of Arab Labor (the second such agreement in 1967), was ratified by 14 governments, including two from the then divided Yemen. The agreement focused on the simplification of official procedures (Article 1), an Arab citizens' priority for employment (Article 4), and equality between national and Arab workers in terms of wages and benefits (Article 6). The agreement also stressed the importance of bilateral cooperation, as well as the exchange of data and information necessary to facilitate labor mobility at least once a year (Article 3).

During its fourth session held in the Libyan capital of Tripoli in 1975, the Arab Labor Conference approved a new agreement that came to be known as the Arab Agreement No. 4. The amended agreement focused mainly on facilitating and regulating migration (including repatriations), with the focus of the agreement shifting from unity to consideration of economic and social development plans. This agreement gave Arabs, particularly Palestinians, employment priority second to nationals (Article 2, Paragraph 2), as well as encouraged mobility of Arab labor (Article 3, Paragraph 1), and the gradual replacement of foreign labor with Arab labor (Article 3, Paragraph 4). The

agreement dealt with the Arab "brain drain," and encouraged their return (Article 2, Paragraph 7 and 8). Article 5 of the agreement sets forth the duties of the Arab Labor Office within the scope of mobility, which included supporting member states in devising national migration policies. The agreement was met with moderate acceptance though; only a third of the members of the organization ratified it (Arab Labor Organization, 2009).[4]

6. The Arab Labor Organization

With the tendency of the Arab countries towards joint work in field of labor and laborers, the issue of Arab labor mobility was the first to be proposed for discussions and negotiations. The Arab Labor Charter was adopted at the first conference of Arab labor ministers held in Baghdad in 1965. This Charter states in its Article 5 provision that Arab countries agree to give priority of employment to Arab workers apart of its citizens, appropriate to their needs (ALO 2010). The Arab Labor Organization (ALO) picked up on this goal to convert it into reality, on the basis of its role entrusted to it under Article 1 of the Constitution, which states that: "[…]arising under this Constitution, an organization with legal personality, called the Arab Labor Organization; its mission is to achieve the objectives set forth in this Constitution, and in the Arab Labor Charter[…]".

4 Ratified by Jordan (1975), Somalia (1976), Palestine (1976), Egypt (1976), Iraq (1977), Yemen (1988), and Syria (2001).

6.1 ALO tools

As part of this endeavor, the ALO referred to tools that its constitution and regulations allowed it to use to achieve its objectives, the most important of which it defined as:

- Standard activity, wherein the ALO adopted three conventions related to the Inter-Arab labor mobility: Arab Convention No. 2 on the Inter-Arab labor mobility of manpower, approved by the Conference of Arab Ministers of Labor in 1967; Arab Convention No. 4 on the same subject (modified), approved by the Arab Labor Conference in 1975; and Arab Convention No. 14 on the right of Arab workers to social insurance when moving to work in one of the Arab countries, approved by Conference in 1981.
- Establishment of institutional structures to support Inter-Arab labor mobility, in particular by establishing the Arab Institution for Employment, which was liquidated only fourteen years after its foundation.

The Arab Economic Summit Declaration in Doha once again raised the issue of Inter-Arab labor mobility within the emerging national conditions. They listed distinct indications that greatly concerned all the stakeholders:

- Arab-receiving countries are facing a reality today that requires considering the issue (of Inter-Arab labor mobility) in terms of how it relates to the maintenance of national identity and national security, as there are some signs of threats to both aspects.
- Intensively populated Arab countries that suffer from the problem of high rates of unemployment must deal with inter-Arab labor mobility as an effective means of resolving this dilemma.
- All Arab countries should base their perspective on inter-Arab labor mobility on the fact that it is an effective method for establishing security and stability in the countries of the Arab world, whether on political, social, or economic levels.

6.2 ALO Goals

The Arab Labor Organization objectives are to achieve the following:

a. The coordination of efforts in the field of employment and labor on the Arab and international levels

b. The development and protection of the rights and liberties of unions

c. The provision of technical assistance in the fields of labor to related production parties in the member states

d. The development and unification of labor legislation in the member states

e. The improvement of the working conditions in the member states to:

- Provide the means of safety and occupational health and ensure appropriate working environments
- Broaden the base of social insurance to include labor categories in various economic activities as well as the inclusion of all insurance branches to gain access to comprehensive social security
- Provide social services for workers and improve the level of those services
- Rationalize the minimum wage and ensure that workers' wages reflect economic and social development
- Develop labor relations
- Provide the necessary protection for working women and juveniles

f. The development of Arab human resources to utilize its full potential in economic and social development, through:

- Workforce planning
- Employment development and the fight against unemployment in all its forms

- The creation of employment opportunities for women suitable to their capacities and circumstances
- The facilitation of movement of the Arab labor force within the Arab world, and the provision of equality in rights and duties between them and national workers as well as of work to replace the foreign labor with Arab labor
- Taking care of the living conditions of Arab immigrant workers, defending their rights, maintaining their cultural identity and national belonging, and motivating them to return to the Arab world to contribute towards further development

g. The development of the Arab labor force and the increase in its productivity efficiency by:

- Developing the labor bodies, and supporting organizations of workers and employers
- Broadening the base of vocational training, and developing its methods and programs
- Disseminating the culture of the workers as reflected by the Arab community culture
- Providing vocational rehabilitation for disabled persons, and ensuring adequate employment opportunities for them

h. The preparation of a guide, and laying the foundations of job classification and descriptions

i. The Arabization of work and vocational training terms

6.3 Constitutional and regulatory bodies within the ALO

The Arab Labor Organization has three constitutional bodies:

1. The Arab Labor Conference
2. The Board of Directors
3. The Arab Labor Office

The Arab Labor Conference

The Arab Labor Conference is the supreme authority in the ALO, and meets annually in the first week of March. The Conference has the power to issue legislation, conclude conventions and agreements, and issue decisions. In addition, the conference has the right to amend the Constitution of the Arab Labor Organization with a two-thirds majority, and it also makes the official decisions regarding the appointment and election of the ALO Director-General, Assistant Director and Advisor, and the Board of Directors. The Conference has legislative, constitutional, administrative, and financial powers, and it is composed of delegations of ALO member states, with each delegation formed of four members (delegates) – two of them from the government, one from the employers, and one from workers – accompanied by an appropriate number of advisors when necessary.

Representatives of Arab, regional, and international organizations and associations may be invited to participate in the conference as observers. At the beginning of each conference session, tripartite committees (governments, employers, and workers) are formed to conduct and follow up on the work of the conference.

There are two types of tripartite committees:

- Technical Committees, which handle issues of a technical nature as contained in the agenda of each session
- Organizational committees, which are formed after each cycle of the conference, as articulated in the work regulations of the Arab Labor Conference: Organizing Committee, Membership Accreditation Committee, Drafting Committee, Agreements and Recommendations Follow-up Committee, Finance Committee

Membership: The Arab Labor Organization includes all the Arab states as members. The ALO's tripartite representation system is unique: it is based on the participation of governments, employers, and workers in all activities of the organization as well as in its constitutional and organizational committees, as a reflection of its belief in the importance of collaboration between all the production parties in the Arab world as a necessary and fundamental

pillar of Arab unity. It also recognizes that effective cooperation in the field of employment is the best guarantee of human rights in a dignified Arab life, founded on social justice.

The Arab Labor Conference deals with the following areas:

- Identifying the basic guidelines for the work of the organization and its policy-making to achieve its objectives
- Providing advice to the League of Arab States in labor-related issues
- Studying annual reports received from member states on a regular basis
- Appointing the ALO Director-General and Assistant Director and the Advisor
- Formulating the Board of Directors and constitutional and organizational committees
- Extending invitations of the tripartite composition of specialized committees, and expert meetings in various fields
- Approving the work plans, programs, and budgets of the organization

The Board of Directors

This is the ultimate authority in the organization after the Arab Labor Conference. The Board of Directors is elected by the Arab Labor Conference – from among its members – for a period of two years.

The Board consists of eight main members: four representing the government team, two representing employers, and two members representing workers. In addition, there are three reserve members – one from each party.

A representative from each of the organizations below participates in Board meetings as observer:

- The General-Secretariat of the League of Arab States
- The International Federation of Arab Trade Unions

- The General Federation of Chambers of Commerce, Industry, and Agriculture for Arab Countries
- The Council of Ministers of Labor and Social Affairs of the Cooperation Council for the Arab Gulf countries.
- The International Labor Organization

The duties of the Board of Directors are to:

- Follow-up on the implementation of the resolutions and recommendations of the Arab Labor Conference
- Monitor the administration of the ALO and the implementation of the approved plans, and prioritize implementation areas and means, evaluate their consequences, control the financial transactions of the organization, and monitor compliance with the organization's laws and labor regulations
- Study the organization's work plans and budgets and make adjustments and necessary related instructions and submit them to the Conference for review and endorsement, as well as for the preparation of the Conference agenda
- Organize conference calls for the convening of an extraordinary session if necessary
- Hold two regular sessions each year, one in May and another in November
- Hold an extraordinary session at the request of two-thirds of its members, to be convened within one month from the date of the request
- The board shall elect from among its main members, at its first session after the conference, its President and two Vice-Chairmen of the two other parties, for a period of one year.

The Arab Labor Office

The Arab Labor Office is the permanent secretariat of the ALO, and is located in Egypt according to the Constitution that specifies the host country. The Office is headed by a director-general, who is responsible for its operation as well as for the implementation of resolutions of the Arab Labor Conference and the Board of Directors. The director-general is assisted by an assistant director and advisor, who are elected for a period of four years, alternating between the two parties of employers and workers. The Arab Labor Office consists of a number of technical departments and offices to achieve the objectives of the Arab Labor Organization.

The Arab Labor Office is responsible for:

- Collecting and distributing information on labor-related issues in the Arab world, and carrying out polls and investigations requested by the Conference of Arab Labor Conference
- Preparing all documentation for the agenda items of the Arab Labor Conference, the Board of Directors, the specialized committees, and meetings of experts, as well as undertaking secretarial work
- Carrying out research in different areas of work and disseminating them
- Providing assistance and advice to the governments of member states
- Overseeing the management of the centers and institutes affiliated to the Arab Labor Organization

6.4 Arab Labor Organization institutions

1. The Arab Institute for Labor Education and Research, Algiers

During the second session of the ALO Conference held in Cairo in March 1973, it was decided to establish a specialized institute whose main mission would be to promote labor education and research. Within the extension of this decision and at the request of the Algerian government, the Arab Institute for Labor Education and Research was created in Algiers. It began its activities in March 1974.

The Institute is specialized in fulfilling the ALO objectives and policy in the field of labor education and research, in particular:

- The training and preparation of staff at different levels in trade unions and labor organizations, institutions, organs of labor education, labor departments, and business organizations
- Carrying out data and statistics collection, as well as research on recent developments and global trends in employment and labor education
- Coordinating between the institutions, organs, and bodies concerned with studies and training in labor issues and labor culture in the Arab world, and providing technical and financial assistance for the neediest labor organizations in this area
- Holding educational sessions, workshops, and seminars involving scholars from the Third World countries, especially from the African and Asian continents.

2. The Arab Center for Social Insurance, Khartoum

The Arab Center for Social Insurance was established in Khartoum in 1982, and began its operations in 1984. The Center's main aim is to develop the knowledge and capacities of workers in the field of social security and social insurance in the Arab world, as well as the dissemination of insurance awareness.

The Center's main activities are:

- Holding training courses to create technical staff in the field of social insurance as articulated in the approved main plans of the ALO Board of Directors and Arab Labor Conference
- Arranging specialized seminars within the scope of its competence
- Developing training programs and preparing educational materials in the field of social insurance

3. The Arab Institute for Occupational Safety and Health, Damascus

The Arab Institute for Occupational Safety and Health was established in Damascus in 1982, and its operations were initiated in 1984. Its main aim is to develop the technical capacity of workers in the organs of occupational health and safety in the Arab countries, and to disseminate health awareness and related preventive measures in this area within the three production parties.

The main activities of the Institute are:

- Holding training courses to create technical staff in the field of occupational health and safety within the framework of approved plans of the ALO Board of Directors and Arab Labor Conference
- Holding workshops and seminars in the scope of its specialization and evaluating their results
- Preparing studies and research related to educational materials in the field of occupational health and safety
- Participating in the implementation of programs of technical cooperation concluded by the Organization with the three production parties

4. The Arab Center for Human Resources Development, Tripoli

The Arab Center for Human Resources Development was established in 1975. Its main activities and aims are:

- Preparing generations of trained professionals needed to conduct training in regional vocational training centers, and contributing towards fulfilling the needs of Arab countries for skilled workers in different professions
- Contributing to the preparation of bodies responsible for activities related to vocational training in Arab countries
- Studying the specifications of different professions, and standardizing terminology between Arab countries
- Studying the different methods of vocational training, and choosing the latest and most appropriate of these methods for Arab countries
- Studying practical and theoretical approaches necessary for the creation of skilled workers and semi-skilled workers, and raising the skill level of workers in industry and in other areas

- Studying, preparing, and producing training audio-visual aids and other related methods

5. Office of the Permanent Mission of the Arab Labor Organization, Geneva

Among the duties of this office are:

- To liaise with the ILO and other international organizations aiming to coordinate cooperation in activities of common interest between them and the Arab Labor Organization
- To coordinate with the permanent Arab delegations in Geneva towards creating a unified Arab stance in international forums towards all issues of concern to the Arab nation

6. The Arab Center for the Management of Labor and Employment, Tunisia

Based on the close association between the Departments of Labor and Employment, the Director-General of the Arab Labor Organization issued Resolution No. 1 (May 22, 2000) for the conversion of the Pan Arab Project for the development of the Department of Labor in Tunisia – which was established in cooperation with the Arab Labor Organization, the International Labor Organization, and the Government of Tunisia – to the Arab Center for the Management of Labor and Employment. The Center has the following objectives:

- To enable labor departments in Arab countries to participate actively in the development and implementation of economic and social development plans, to improve working conditions and environments, to develop good working relationships between the community partners, to assure optimal use of human resources, and to apply the work laws and regulations in a professional manner
- To develop the efficiency of middle and senior officials of Arab labor ministries through training programs to increase their professional capabilities
- To enable work inspectors to play a more effective role in the application of the provisions of laws and regulations relating to working conditions of employment such as working hours, wages, occupational health and safety, and employment of women and young people
- To enable the staff of work relations to familiarize themselves with the procedures and appropriate means to resolve labor disputes – collective and individual – quickly, and to identify ways to establish new working relationships between employers and workers
- To enable the staff of employment offices to organize operations efficiently
- To enable the staff of labor statistics to conduct surveys and analyze statistical data properly

6.5 ALO relations

On the national level

- **The League of Arab States**

  The ALO is involved in all the activities undertaken by the Secretariat of the League of Arab States, especially in events dealing with issues of economic and social development in the Arab world. In addition, the ALO maintains close collaborative links with all joint Arab labor institutions, and the specialized Arab organizations in particular.

- **The International Federation of Arab Workers' Unions**

  Founded in 1956, this Union is the national regulatory frame comprising of worker union organizations on a national level. The ALO and the Union cooperate closely to achieve their common objectives in the field of servicing the Arab labor movement. The Union joins in the meetings of the Board of Directors of the Arab Labor Organization as an observer; it also participates in various activities carried out by the ALO.

- **The General Union of Chambers of Commerce, Industry, and Agriculture for Arab Countries**

This Union was founded in 1951 as the national regulatory frame, comprising all other national employer organizations and chambers of commerce, industry, and agriculture. The ALO and the Union has cooperation and coordination relations to strengthen their efforts towards achieving their common objectives in various areas. The Union also joins in the meetings of the Board of Directors of the Arab Labor Organization as an observer, as well as in various activities undertaken by the ALO.

- **The Executive Office of the Council of Ministers of Labor and Social Affairs of the Gulf Cooperation Council**

  The ALO has cooperation and coordination relations with the Executive Office of the Council of Ministers of Labor and Social Affairs of the Gulf Cooperation Council (GCC). In an agreement signed on May 20, 2000, the ALO and the Office committed to enhancing the cooperation, consultation, and exchange of views between them on all issues of work and workers of common interest on the Arab and international levels, in order to achieve their common objectives.

On the regional and international level

- **The International Labor Organization**

  On June 1976, the Arab Labor Organization signed an agreement with the ILO to identify ways and means of cooperation and coordination between them, including conducting projects and joint programs in the Arab region.

  The ALO has been involved – as an observer – in the International Labor Conference and the meetings of the Governing Council of the International Labor Office.

  The ALO, through its permanent office in Geneva, undertakes the Technical Secretariat activities of the participating Arab Group in the International Labor Conferences and the Council of the International Labor Office, and also participates in all activities that occur within

the framework of the International Labor Organization related to the Arab region.

- **The Asian regional group within the framework of the International Labor Organization**

  In 1984, the Arab countries located in Asia joined the Asian regional group within the framework of the International Labor Organization. The Arab Labor Organization is involved in all activities of this group, and is also responsible for coordinating the positions of Arab countries in the framework of the Asian Group.

- **The United Nations Economic and Social Commission for Western Asia (ESCWA):**

  In 1977, the Arab Labor Organization signed a cooperation and coordination agreement with the Economic Commission for Western Asia, related to the exchange of information and documents in the areas of joint activities. After the addition of the social dimension of the activity of ESCWA, the areas of joint cooperation increased between the ALO and ESCWA in the fields of economic and social development.

- **The Organization of African Unity (OAU – African Union):**

  In 1973, the ALO signed a cooperation agreement with the Organization of African Unity (Labor Committee) with the aim of closer cooperation and friendship between Arabs and Africans in the areas of work and workers, and to coordinate the stances of Arab and African countries in international conferences and forums on issues of common concern.

- **The Organization of African Trade Union Unity (OATUU):**

  The ALO has close links with the Organization of African Trade Union Unity, cooperating through programs of technical cooperation and training of African personnel in the fields of culture, labor, social security, occupational health and safety, and defending the rights of African.

7. Bilateral Labor Agreements on Seasonal and Cross-Border Workers: the OECD Experience

7.1 Cross-border workers

As of 2004, there were a number of OECD labor agreements on cross-border workers (as summarized in Table 1 in the Appendix). Some of these agreements set quotas for the number of foreign workers allowed to be employed (e.g., Austrian agreements with the Czech Republic and Hungary), others do not impose any quantitative restrictions (e.g., the German-Polish agreement and the agreements between Switzerland and other members of European Union). As a rule, the agreements are limited to workers who live in the border region and oblige them to work in the border zone (Austria, Switzerland) and to commute on a daily basis (or once a week in the case of Switzerland). However, there are exceptions – the agreement between Austria and the Czech Republic, for example, provides for a case when a permit is granted to a cross-border Czech worker to work in the whole of Austria, and not only in the frontier region. The validity of the work permit, or the permitted length of stay, also varies: from six months with the possibility of extension (Austria-Hungary), to up to five years on the presentation of an employment contract that lasts more than 12 months (Switzerland vis-à-vis other European Union members). The major sectors in which cross-border commuters are employed in destination countries are services, agriculture, craftsmanship, food processing, trade, metal/machine reparation, hotel services, and construction.

7.2 Seasonal workers. The case of Poland and Germany

The bilateral agreement on Polish seasonal workers in Germany is a success story, and by far the most important such agreement on migrant workers in

Poland, even though it is strikingly simple in form. A declaration, expressed in an act signed on December 8, 1990 by the Ministers of Labor of Germany and Poland, confirmed the significance of the bilateral agreement concluded earlier that year (concerning guest workers and contract workers). It enabled Polish citizens to take up employment in Germany as cross-border workers and seasonal workers and to carry out work designed for students. While the employment of guest workers and contract workers, including posted[5] workers and those in project-linked employment, were subject to separate detailed agreements (and subsequent amendments), the case of seasonal workers has been dealt with only by that one single document, and to be more precise, by just two sentences. Section Four of the declaration stipulates that: "As of 1991, Polish citizens are free to take up employment in the Federal Republic of Germany as seasonal workers for a period of up to three months a year, according to the procedure elaborated by the labor organizations of both states. This employment is not designed for specific sectors of economic activity, but it is subject to labor market analysis before its execution."

The procedures in the declaration were almost instantly agreed upon and put into operation. They turned out very to be simple and transparent. In short, German employers take the initiative in offering a seasonal job to a citizen of Poland. Job offers, which can be personally addressed or non-nominative, are subject to the authorization of a local labor office in Germany. The German labor office then sends the authorized offers to local labor offices in Poland, who either pass job offers to specific workers or, in the case of non-nominative offers, undertake to recruit appropriate individuals. A duly authorized job offer almost automatically gives a Polish citizen the right to a special German work permit visa, and consequently opens the way to seasonal employment in Germany. The only administrative cost an employee has to bear is the German visa fee.

5 According to the European Commission, a posted worker is a 'person who, for a limited period of time, carries out his or her work in the territory of an EU Member State other than the State in which he or she normally works'. The definition of a posted worker does not apply to individuals who decide of their own accord to seek employment in another Member State, seagoing personnel in the merchant navy or the self-employed. Rather, these are the workers posted by enterprises to work temporarily in another Member State. (Source: www.eurofound.europa.eu)

The agreement allows for a stay of no more than three months in a calendar year, not including exhibitions. No quota is imposed on the number of Polish workers permitted to be employed in Germany. The main sectors of employment of seasonal Polish workers are agriculture, hotels, forestry, catering, construction, and exhibitions. The number of Polish workers participating in this scheme has been increasing steadily over the years.

It is believed that the seasonal employment program owes its success less to an efficient bureaucracy and low cost of official recruitment than to the smooth functioning of the informal hiring of labor, that is, recruitment through the networks controlled by the leaders of various migrant teams. These well-developed migrant worker networks are a feature of Poland that is largely missing in other Eastern European countries. Another unique feature of Polish workers is that they were allowed to travel widely internationally prior to 1990, which is fairly unique among the former Soviet bloc countries. This mobility gave way to large-scale clandestine work by the Poles in Germany in the 1980s, and to the establishment of informal contacts between Polish migrants and German employers.

The aforementioned networks and informal contacts made the information on potential employees readily available, and therefore from the very beginning of the program, German employers knew precisely who they wanted to employ as Polish seasonal workers. The number of non-nominative job offers arriving from Poland was invariably low (around 1.5% of all job offers). For a large number of employees, this suggests that they had previously been employed in the German labor market; in other words, they most probably worked there illegally, as there existed virtually no opportunities for the legal employment of Polish residents in Germany prior to 1990.

The bilateral agreement on seasonal employment between Germany and Poland, which was concluded in 1990, redirected thousands of Poles from the informal to formal labor market in Germany, and eliminated the incentives to work illegally. It also seems to have had a positive economic impact on welfare in Poland, as a trend has been observed towards including more unemployed and less employed workers in the program.

8. Building an Institutional Arrangement

Below we elaborate upon some lessons learned from institutional arrangements in OECD economies regarding foreign or migrant workers. Most of these can be applied to Arab migration flows in the region.

The following discussion relies heavily on OECD (2004) and ILO (2010).

8.1 The number of permits and permitted length of stay of foreign workers

The demand for labor is the key driving force behind bilateral labor agreements and other forms of recruitment. Therefore, two central elements in designing a particular recruitment scheme are (i) assessing labor market needs, and (ii) setting the number of permits and the permitted length of stay to be given to foreign workers. The role of governments in identifying and estimating existing and potential labor shortages is crucial. There are several ways in which this may be carried out. In some countries (e.g., the United Kingdom) employers or their representatives communicate their difficulties in filling vacancies to appropriate government agencies and exert pressure in expectation that the hiring of foreign workers will be expedited. Other countries (e.g., the Netherlands, Portugal) use various forms of employment projections.

Depending on a particular scheme, the permits quotas may be divided according to at least five parameters:

- sector (e.g., the 2001 Canadian sectorial agreement was aimed at alleviating skill shortages in foundry and a number of other industries)
- region (in Italy, the overall quota is divided into sub-quotas for regions, and then for provinces)
- type of worker (seasonal, contractual, independent, cross-border, trainee, etc.)

- specific job categories (for example, the 2002 agreement on recruitment of Romanian nurses by Italian hospitals)
- the sending country, with some sub-quotas reserved for citizens of specific nationalities (e.g., the 1990 German-Polish agreement on seasonal workers)

Quotas are usually adjusted every year in response to economic and political changes.

The permitted length of stay depends on the particular labor type. Some forms are clearly more temporary than others (e.g., for seasonal workers the permitted length of stay usually varies from three to nine months, whereas for trainees it is usually for one year with a possible six-month extension, or even totally unlimited, as in the agreement between Ireland and Poland). Some schemes can even lead to permanent settlement through changes in status to permanent residence or even naturalization (e.g., the 2003-2007 project of the Czech Republic on recruiting young qualified workers from Bulgaria, Croatia, and Kazakhstan; or the German point-based system granting eligible labor migrants permanent residence permits under certain conditions).

8.2 How is recruitment carried out?

Different countries have adopted various practices for recruiting foreign workers:

1. Via private recruitment agencies – the feature of most Asian bilateral labor agreements. The absence of official supervision over these agencies gives way to corruption, excessively high commissions, and human trafficking. There is evidence (e.g., from Romania) that the involvement of government authorities in the administration of the recruitment process guarantees better protection of workers, lower costs for the beneficiaries, and greater control over the performance of employers. It must be noted, however, that it is crucial that the regulator of the private agencies does not also serve as an employment agency – otherwise it may find itself with a conflict of interest given its dual role as a supervisor and competitor of private agencies.

2. Via governmental agencies – national, regional, or local. A government employment agency may also have representative offices abroad, in sending countries (e.g., France's International Migration Office has offices in Morocco, Poland, Tunisia, and Turkey).
3. Directly by employers facing labor shortages – this may be implemented even in the absence of labor agreements (e.g., the United Kingdom, Ireland).

8.3 Regulation in destination countries

Low-skilled migration is perceived nowadays as having one of the largest potentials to reduce the depth and severity of poverty in communities of origin. However, there are insufficient legal avenues for migration, especially for low-skilled workers.

The major challenges in formulating temporary migration programs lie in ensuring that they are indeed temporary, and that they protect migrant worker's rights. On the first count, a number of safeguards have been attempted. These include: entering into bilateral labor agreements that place a large degree of responsibility on origin countries, exercised by, for example, withholding a portion of the wages or social security contributions and paying them only upon departure or return; offering incentives in the form of the chance to re-apply for repeat migration after returning; and adopting stricter enforcement measures involving biometric and other checks. On the second count, special efforts should be made to prevent temporary migration schemes from resulting in limitations on equal access to labor and human rights for migrant workers vis-à-vis native workers. This relates in particular to the principles of equality of opportunity and treatment and nondiscrimination, including the rights to equal pay for equal work, decent and safe conditions of work, and the right of association.

The ILO Multilateral framework has laid down clear guidelines for temporary migrant workers:

- Ensuring that temporary work schemes respond to established labor market needs, and that these schemes respect the principle of equal

treatment between migrant and national workers, and that workers in temporary schemes enjoy the rights referred to in principles 8 and 9 of the framework (guideline 5.5)

- Ensuring that restrictions on the rights of temporary migrant workers do not exceed relevant international standards (guideline 9.7)

8.4 Protection of migrant workers

Tolerance of inequalities in treatment between native and foreign workers encourages the exploitation of foreign workers, and facilitates the substitution of native workers by less protected non-native workers. This can contribute to expanding dual labor markets and informal employment as well as the lowering wages and general work conditions, ultimately provoking conflict between native and foreign workers and their respective communities.

Several measures can be undertaken in this respect:

Labor inspection and enforcement

Simply enacting laws and regulations to protect migrant workers is not enough; these measures must be implemented through effective labor inspection and enforcement. This monitoring is crucial to enforcing equality of treatment and decent work conditions for migrant workers, which is particularly important in areas such as agriculture, construction, domestic work, and sectors of informal employment. A lack of labor inspection in sectors and workplaces with large numbers of migrant workers is associated with higher incidences of exploitation and abuse, as well as their informal employment. ILO convention nos. 81 and 129 provide the basic normative guidance for national law and policy regarding labor inspections.

According to the ILO, "the primary duty of labor inspectors is to protect workers and not to enforce immigration law" (ILO, 2006d, paragraph 78). It is essential to keep labor inspection and enforcement separate and distinct from immigration inspection and enforcement. Linking the two areas undermines the effectiveness of both, particularly labor law enforcement. Migrant workers with irregular status generally avoid involvement in labor inspection for fear

of discovery and possible deportation. This is one of the main reasons they are vulnerable to abuse and exploitation by their employers.

Trade unions

One of the most effective ways of preventing the exploitation of migrant workers is by giving them the right to join a trade union – an entitlement often denied them. In recent years, trade unions have begun to pay much more attention to organizing migrant workers, campaigning for their rights, and providing them with direct support. They are also increasingly engaging in international cooperation on policies to further the rights of migrant workers. Major policy shifts and extensive organizing drives among migrant workers have taken place in recent years by mainstream trade unions and national confederations across Europe, as well as in the Americas and Asia. National labor confederations in Argentina, Belgium, Canada, France, Germany, Ireland, Italy, Mauritius, Mexico, the Netherlands, Portugal, the Republic of Korea, South Africa, Spain, Sweden, the United Kingdom, and the United States, among others, now have full-time national staff dedicated to handling issues related to migrant workers and anti-discrimination work. All of them are active in policy advocacy for the improved protection of rights and decent working conditions for migrants.

8.5 Questions regarding tailoring an agreement

How will social security be organized?

Social security contributions may be paid according to the regime of the source or destination country.

The former case (e.g., contract workers in Germany) may result in a significant cost advantage of foreign workers over domestic ones, especially if the domestic social security contributions are high (as in the case of Germany), and may therefore lead to the distortion of competition and serve as a gateway to illegal employment. The government may react by imposing fees on the employer for each foreign employee or by lowering quotas.

The latter case may lead to the kind of problems observed with Slovak workers in the Czech Republic. After working legally for the minimum amount of time to become entitled to Czech unemployment benefits, some Slovak workers applied for the benefits and then returned to the Slovak Republic, where they worked legally while continuing to receive the Czech benefits. The extent of this problem was limited by new administrative procedures in an agreement signed in 2001 that prolonged the minimum period of employment in the Czech Republic required for entitlement to unemployment benefits from 6 to 12 months, to avoid the eligibility of seasonal workers.

Will the creation of a common database of workers be efficient?

In Italy, the Ministry of Labor has launched a rather effective database for seasonal workers. This system registers eligible seasonal workers, either those with past experience or from authorized countries, and allows employers to draw from this pool for rapid recruitment.

A key issue in assessing the value of such a database is the form in which the requests arrive from employers – are they nominative (for a particular worker that an employer already knows) or non-nominative? Obviously, the latter case gives more grounds for creating a database.

Should one focus on net or gross flows, or both?

The same net inflow-outflow of foreign workers may be a result of both high and low gross flows, which are in fact different labor market situations, and this may be important for tailoring labor agreements.

Should one turn from bilateral recruitment to qualification-based or sector-based (not distinguishing the country of origin) recruitment?

This question may be relevant if there several contracting parties – e.g., Israel vis-à-vis other countries in the region. Sectorial or qualification-based agreements have been used in many countries, e.g., in Germany, and they are generally perceived as economically more efficient since, by definition, they recruit for the specified occupational need and nationality is not a factor.

What is the home labor market status of the foreign workers arriving to work in the host country?

The situation in which most of these persons have a job in the sending country and work in the host country to supplement their household income with additional earnings is different from the situation in which working abroad is the only source of income and the wages received abroad are used to finance necessities. Moreover, if one of the goals is increasing welfare in sending countries, it is important to direct the offers towards the unemployed, in order to include more and more unemployed in the recruitment program.

8.6 Readmission agreements

Readmission agreements lay down the procedure of repatriation of foreign residents to their country of origin. These procedures may vary by the degree of bureaucratic steps needed to deport a foreign citizen. Host countries use bilateral agreements to manage migration by asking sending countries to sign readmission agreements for migrants in an irregular situation in exchange. Any agreement on migration signed after a readmission agreement is considered to be a second generation agreement. Some countries (e.g. Italy) used readmission agreements as a prerequisite for the signing of bilateral labor agreements.

9. Case Study: European Employment Agencies

9.1 IEA: International Employment Agencies in the Netherlands

Emergence

At the beginning of the 2000s, responding to strong domestic demand, non-state actors in the Netherlands made a profession of the recruitment of migrant workers from Poland for the Dutch labor market. The creation of these staffing agencies was also prompted by the abolition in the Netherlands, in 1998, of the licensing that temporary staffing agencies previously needed to acquire. As an intended consequence, opening an agency became much easier, and the number of operational agencies sharply increased. Farmers, growers, and farmworkers discovered a market niche, and became labor recruiters. This is how the first International Employment Agencies (IAEs) emerged, to bring agricultural Polish workers of German origin to the Netherlands for unskilled agricultural work. Now that the labor market has opened up, their services have expanded to include all Poles, as well as citizens of new member states, in different sectors.

Development

Over the past few years, the legally operating IEAs have matured in several ways:

First, they expanded into other parts of the national economy, notably industrial mass production, logistics, and construction. The larger IEAs, those that contract between 1,000 and 5,000 people annually, direct approximately 70% of their workers to the logistics industry, 25% to industrial production and only 5% to agriculture. The lengths of these contracts, usually two to three months, allow people to alternate their stays in the Netherlands with short periods of return (a week or several weeks) to Poland.

Second, the organization of recruitment and selection expanded and commercialized. As the demand for German Poles increased, the market of temporary international employment has come to cover a larger part of the country. A typical IEA now has headquarters in the Netherlands, and (two or more) local offices or contact points in both the Netherlands and Poland. The latter are staffed by Polish or Polish-speaking personnel, who advertise in the local media, provide those interested in migrating with the necessary information about working and staying in the Netherlands, and carry out selection procedures.

Third, the service provision of the IEAs widened. In order to strengthen ties with client firms, they offered to take over the payroll process of temporary Polish workers. Also, several IEAs have embraced flexible learning trajectories. Whereas in the past the labor (not necessarily the laborers) on, for example, the asparagus and strawberry fields was unskilled, today, there is a growing demand for skilled labor – welders, metal workers, carpenters, construction workers, and truck drivers. For this reason, the IEAs enroll their workers on courses and training programmes in order to obtain proficiency certificates (issued in accordance with Dutch standards), which further increases the workers' availability.

Finally, in 2004, the Association of International Employment Agencies was established. The Association's main goal is to enhance the reliability and overall image of cross-border labor recruitment, to be achieved by the introduction of a "quality mark" which sees to the provision of, amongst other services, housing and transport for migrant workers. The quality mark obliges IEAs to accommodate workers in accredited bungalow parks or upgraded locations, such as former monasteries. As regards transport, most participating IEAs own a fleet of cars and mini-buses or vans, moving workers between the various housing and employment locations. However, due to a permissive legislative context in the Netherlands, just over 30 of the approximately 1,300 registered temporary staffing agencies are members of the Association of International Employment Agencies. It is estimated that 5,000 IEAs are involved in recruiting or posting activities that are not entirely,

or not at all, legal. These activities concern about 80,000 people, the majority of whom are from countries that are not members of the EU.

Benefits for employers

Benefits for employers of being a partner of an IEA include:

- **Cost advantage and legal advice**

  In the Netherlands, professional IEAs compete by engaging in strategic alliances with accounting and legal firms. These firms design the contracts of migrant temporary workers in such a way (often using the margins of labor law) that IEAs are able to save on tax and social security expenditure. Cost advantages are certainly realized by the IEA client firms. Since migrant flexiwork is difficult to organize entirely legally because the Dutch and Polish labor laws, taxation laws, and social security systems do not correspond, employers seize the opportunity to outsource the administration of payroll processes. For client firms, it is very difficult to understand the legal constructions of this complexity. Obtaining legal advice from an IEA provides a cost advantage for client firms.

- **Flexibility in adjusting the number of employees**

  Non-state recruitment of this kind has the potential to contribute to the creation of durable business networks. Firms that operate in dynamic innovative surroundings may benefit from long-standing contacts with IEAs able to deliver capable personnel in time, without costly searching efforts. It is not the client firms but the agencies that are at the center of networks extending not only to accountants and lawyers, but also to car and accommodation renters, bungalow park managers, and so forth.

- **Risk management**

  When outsourcing temporary labor, firms are better able to cope with cyclical downturns, and the legal risk implied in employing undocumented workers is passed on to the agencies.

Benefits for workers

Benefits for workers of participating in an IEA include:

- **Skills accumulation and training**

  Lasting engagements with IEAs can broaden and strengthen career perspectives, as IEAs usually possess knowledge about changing skill requirements. For low-skilled workers, IEA contacts may actually help people improve their chances on the regular labor market. The training programmes offered by the IEAs could well be exemplary here. It is, however, unclear whether, and in which ways, Poles can use these Dutch certificates to develop further their skills on their return to Poland. This relates to the issue of the recognition of skill certificates within a wider (European or EU) context, but also to the sometimes very different educational backgrounds of migrant flexiworkers. In addition to the many low- or unskilled workers, there are numerous students and unemployed university graduates who temporarily opt for flexiwork abroad.

- **Shorter unemployment spells**

  More efficient matching results in more workers finding jobs more quickly, i.e., to shorter periods of unemployment.

Shortcomings for workers

There is a downside for workers of participating in IEAs:

Employers indicate to the IEAs the number of workers they need at very short notice, implying that there can be intervening periods (days, weeks) when temporary workers are actually out of work. When this occurs, they are not usually given permission to return home or to enjoy leisure time. Instead, they have to stay in the often semi-closed premises arranged by the IEAs, waiting to be called to work. During such periods off the job and hence without earnings, the workers have to continue to pay rent. They must also be available 24 hours a day, six days a week, literally sleeping with a mobile phone by their bedside. And if one is lucky enough to get a job to go to, it could be for four or four-and-a-half hours, perhaps five. One can also be

called on a day off as a result of there being more work than anticipated. Therefore, the workers, not the employers, bear the economic risk of business fluctuations.

EURES: European Employment Services

Background

EURES, set up in 1993, is the portal to job mobility in Europe with a network of specialist advisors to back it up. It comprises the European Commission and the Public Employment Services (PES) of the member states of the European Economic Area, plus Switzerland, as well as their social partner organizations. Over the years, EURES has facilitated geographical labor mobility by addressing the fragmentation of information on the availability of labor, vacancies, and living and working conditions, as well as education and training opportunities.

The main objectives of EURES are:

- to inform, guide, and provide advice to potentially mobile workers on job opportunities as well as living and working conditions in the European Economic Area
- to assist employers wishing to recruit workers from other countries
- to provide advice and guidance to workers and employers in cross-border regions

EURES structure

The members and partners of EURES are:

a. the national and local employment services

b. the employment services responsible for the cross-border regions

c. other specialized employment services notified to the Commission

d. the trade union and employers' organizations designated by the members

Administrative coordination is provided by the European Coordination Office, managed by the European Commission's Employment, Social Affairs, and Equal Opportunities Directorate General (DG). It is also responsible for analyzing mobility in Europe, formulating a general approach, and monitoring and evaluating EURES activities. EURES uses extensively the information provided by national employment services on trends in the labor market in order to help identify and anticipate surpluses, shortages, and bottlenecks. EURES members are required to draw up, present to the EURES Coordination Office, implement, and evaluate the three-year activity plans. These plans must state the main activities, the human and financial resources allocated, and the follow-up and evaluation measures planned for this period. The Office assesses the consistency of the activity plans against the guidelines and makes its comments in the Commission's biennial report.

For strategic planning purposes, the Commission consults the High-Level Strategy Group, comprising the heads of the members of the network and chaired by a Commission representative. The group meets twice a year, and invites to its meetings the heads of the European social partner organizations. It provides guidance for decisions concerning the implementation of services and activities, and helps draft the annual and biennial Commission reports.

How it works

Mediated service

Mediation is provided through the advisor network, which offers information to employers, jobseekers, and job changers, and facilitates job matching. The network consists of some 850 EURES advisors that are in daily contact with jobseekers and employers across Europe. The number of advisors in each country varies, with half of all advisors working in six countries: Belgium, Germany, Spain, France, Italy, and Sweden.

The advisors work within the Public Employment Service of each member country, or within other partner organizations in the EURES network. They spend on average 75% of their working time on EURES.

EURES advisors are trained specialists. EURES training consists of two components: in-country training and European-level training. In-country

training comprises a range of different activities, including pre-training, which is a prerequisite for new advisors before they attend the European level "Initial Training" course and conference. During 2006-2008, European-level training was delivered by a private contractor, which provided around 20 individual training courses each year. The training offer was a mix of beginners' and advanced courses, and delivered training for EURES advisors and their line managers. For the various training courses, EURES advisors and managers were hired as trainers, and worked with the contractor's team. In general terms, training delivered at the European level as well as in-country training are complementary, with the former concentrating on theory, and the latter on practical issues.

The network is also supported by EURES assistants, with over half of the member countries also employing assistants to support the advisors and deliver EURES services. The human network directly associated with the delivery of EURES services is therefore much bigger than the advisor network alone.

Unmediated service

The unmediated service is provided through the EURES portal, where jobseekers, job changers, and the unemployed have access to job searches as well as an opportunity to publish a resume, while employers have access to resume searches and an opportunity to publish vacancies.

The jobs advertised on the EURES portal come from EURES members and partners, in particular the European Public Employment Services (all jobs that are advertized by European Public Employment Services are, with a few exceptions, made visible on EURES site). The EURES job-search database is updated daily by the European employment services, and vacancy notices stay on the system only as long as they are current.

The vacancies cover a wide range of occupations, and include permanent and seasonal job opportunities. Each vacancy has information on how to apply and whom to contact. The contact may be either a EURES advisor, who will process the application, or in other cases, contact can be made directly with the employer. Over five million visitors visited the portal in July 2010.

The human network of EURES advisors adds value to the already existing information available on the portal, especially when it comes to their knowledge and experience of topics such as taxation or the recognition of qualifications. Some of the main benefits of the advisor network appear to be their assistance in helping clients navigate the portal themselves, especially those with low IT skills, their knowledge of the portal, and speeding up the job search process.

Other services

In addition to the advisor network and the Job Mobility Portal, a number of other types of activities are carried out in order to promote job matching; these include job fairs and other recruitment events, information sessions and meetings (e.g., with employers), and promotion activities. During 2006-2008, more than 11,000 successful job matches took place at 248 events. In addition, a further 15,000 job outcomes were registered by the EURES network in the same period.

EURES and cross-border partnerships

The EURES network has an important role to play in cross-border regions, where EURES advisors provide information and advice to cross-border workers as well as employers wishing to recruit from the other side of the border. Commuters need assistance with information about insurance, taxes, the social system, education, self-employment, etc.

During 2006-2008, a total of 22 EURES cross-border partnerships (CBP) were involved in the delivery of EURES services, and made a vital contribution to the development of EURES activities. Most EURES CBPs are located in central-western Europe, with nine CBPs in Germany, and six in France.

As well as the activities delivered by cross-border partnerships, almost all EURES members undertake some form of cross-border activities outside the scope of the existing partnerships. The location of EURES CBPs corresponds largely to the pattern of commuting. The number of commuters has increased in the past few years, with most of the commuting activities concentrated in central-western Europe. The main destinations are Switzerland, Luxembourg, Germany, the Netherlands, Austria, and Belgium. These countries receive around three-quarters of all commuters. The main countries of origin are France, Germany, and Belgium, which account for approximately 60% of all EU outgoing commuters. Correspondingly, these countries participate in the largest number of EURES CBPs.

EURES budget

The EU has steadily increased its investment in EURES over time. At EUR 21 million, the budget for 2007-2008 was almost EUR 4 million higher than in 2005-2006. Some of this increase is due to the expansion of the network, with Bulgaria and Romania joining the EU in 2007.

Almost 75% of the total Commission funding for EURES is allocated to members for the delivery of the activities identified in their activity plans. The remainder of the available funding is used for the EURES Job Mobility Portal, EU-level training, the EURES helpdesk, and other support activities, such as communication support, translation services, and publications.

In general, the funding structure for EURES has been successful, but it also has shortcomings.

Grant consumption is running at approximately 75%, with the result that an average of 25% of the available funding allocated to members was unspent each year during 2006-2008 (see the table below). Factors that contribute to underspending are unsupported activities, administrative requirements to justify expenditure, and when the resources are actually received.

Table 1 \\ Budget commitments and payments 2006 – 2008

	2006	2007	2008
commitments	16 420 284,55	18 370 275,72	20 802 275,36
payments	11 636 119,76	14 546 709,36	14 738 651,59

The budget allocated to EURES is fairly small compared to total program funding in the employment field, both at the EU level and relative to total Public Employment Services' expenditure in the member countries. The financial resources allocated by the EURES members (especially on wages of EURES advisors) are more than three times the budgeted resources provided by the Commission, and four times the eligible expenses. This means that the funding made available by EURES members is essential in terms of delivering EURES services.

Plans for future development

To develop a standard multilingual dictionary of occupations and skills to enhance the quality and transparency of vacancy information, and improve matching between jobseekers and vacancies.

To establish a European Labor Market Monitor with periodic, up-to-date information on short-term trends in the European labor market. This monitor will improve data collection in order to identify and anticipate surpluses and shortages in labor markets better and analyze mobility flows. This would allow workers or jobseekers with the relevant skills and qualifications to know where they have a good chance of securing a job.

To modernize the EURES Job Mobility Portal by adding more interactive sections, more graphic presentations, a link to the Europass resume creation tool, a more user-friendly resume search functionality, a social networking section for jobseekers, and a virtual job fair.

To create a scheme entitled "Your first EURES job," aimed at financially supporting mobility among young people across Europe in their efforts to enter the labor market. In addition, to develop a section specifically dedicated to young graduates, which will bridge the gap between academia and business.

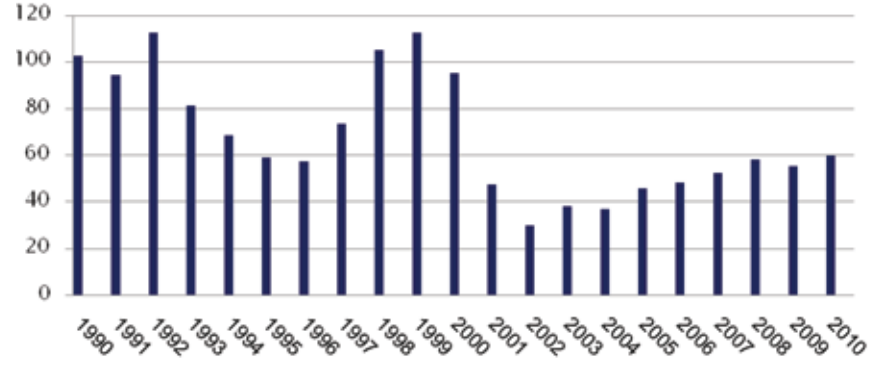
10. Palestinian Workers in the Israeli Labor Market

10.1 Facts

Since 1967, the Palestinian economy has changed its formation and labor structure, from an economy in which agriculture accounted for 37% of GDP, into an exporter of cheap labor that is highly dependent on the Israeli market.

The share of salaried employees working in Israel began at 22% in 1970, climbed to around 50% three years later, and then fluctuated between 49% and 61%, falling off in the late 1980s. At its peak, almost 116,000 workers were employed in Israel, and these constituted about 9% of Israel's business sector employment. Palestinian workers were (and still are) heavily concentrated in agriculture, construction, and manufacturing. Analyses of their employment patterns can be found in Angrist (1996) and Yashiv (2011).

Figure 3 \\ Number of Palestinian Workers in Israel, 1990 - 2010 (Thousands)

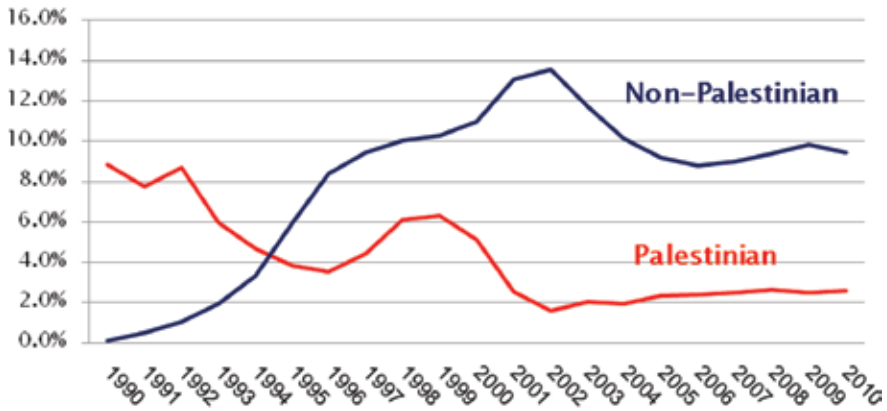


Source: Israel's Central Bureau of Statistics, 2010

Beginning in December 1987, with the outbreak of the first Intifada, labor links between the Israeli and Palestinian economies underwent a series of severe shocks. The strikes, curfews, and new security regulations, such as occasional closures of the Palestinian territory, reduced Palestinian employment in Israel. The Israeli labor market also became more accessible to workers from the West Bank than to those from the Gaza Strip.

Palestinian employment in Israel since the end of 1987 has been much more volatile and, generally, on a declining trend. In 1990, Palestinian workers constituted 8.8% of business sector employment in Israel, while only 0.1% were non-Palestinians. Since then the Palestinian share has fallen, reaching a low of 1.6% in 2002 and staying low, between 2% and 2.5% in the years since. By 2007, 90.7% of the Palestinian labor force worked inside the Palestinian territory. Concurrently, the share of non-Palestinian migrant workers coming from Eastern Europe, East Asia, and West Africa rose, reaching a high of 13.5% in 2002 and remaining relatively high, at around 10% (see Bank of Israel Annual Reports 2008-2010).

Figure 4 \\ Share of Palestinian and Non-Palestinian Foreign Workers in the Business Sector in Israel, 1990 - 2010



Source: Israel's Central Bureau of Statistics, 2010

Non-Palestinian migrant workers – all of them low-skilled – entered the same industries in which the Palestinians had previously worked. This substitution is evident also at the micro level: in the construction sector, which is a major industry for migrant workers in Israel, Palestinians constituted 43% of employment in 1992 with no other migrant workers; by 1996 the Palestinian share fell to 12%, while the non-Palestinian share stood at 26%; these new migrant workers were employed in the same occupations as the Palestinians within the industry (Amir (1999)).

According to the latest Bank of Israel report, using Israeli CBS data (see Bank of Israel, 2010, Table 5-2) in 2010 there were 60,600 Palestinian workers in Israel and 220,900 non-Palestinian migrant workers. The Palestinian CBS estimated remittances of about USD 650 million by these workers in 2008, which is more than 10% of Palestinian GDP and larger than Palestinian exports.

Palestinian labor in Israel is characterized by low and insecure wages, lack of union representation, often sub-standard working conditions, employment confined to low-wage jobs, prohibitions on living in the areas of their employment inside Israel, and frequently being forced (by laws of passage) to return nightly to Palestinian territories (or stay over illegally inside Israel).

10.2 Costs and Benefits of Palestinian Employment in Israel

For Palestine:

The benefits of employment in Israel to the Palestinian economy include:

- Income on a relatively large scale
- Employment with all its concurrent benefits, rather than unemployment or non-participation
- Exports of labor services, which reduces the current account deficit

The costs of employment in Israel to the Palestinian economy include:

- Employment in low-skill sectors, which is not conducive to human capital accumulation. A large share of Palestinian human capital remains underutilized and social returns on education are low.
- Negative effects on education wage premia, which deter investment in education
- Dependence on Israeli labor market employment, which increases the uncertainty facing the Palestinian economy due to security and political developments. This uncertainty is detrimental to many economic activities, including foreign investment.
- Large inflows of remittances which lead, as mentioned, to real appreciation
- The danger of being stuck in low education; high fertility-poverty trap

For Israel:

The benefits of employment of Palestinians to the Israeli economy include:

- The import of labor services substituting other migrant workers, which may be more costly to the economy
- Revenue for the Palestinian economy, which is beneficial to Israel

The costs of employment of Palestinians to the Israeli economy include:

- The possible crowding out of local workers, including Israeli Arabs, as well as lower wages
- The employment of low-skill, low-wage workers in construction and agriculture, which delays or even prevents the adoption of more modern production technology that would encompass higher productivity and higher wages. This cost is not related to the national identity of the workers.

10.3 Demographic Issues

UN data indicate that the Palestinian population is much younger than the Israeli one. This creates very different dependency ratios. In 2010, the median age in Palestine was 17.6, and the dependency ratio (people aged below 15 and above 65 relative to the rest) was 0.90. In Israel, the median age was 29.7 and the dependency ratio was 0.61. By 2030, the median age in Palestine is expected to rise to 22.7 and the dependency ratio to fall to 0.64, with dependents being mostly children. It is then expected to fall further to 0.51 by 2050. By 2030, the median age in Israel is expected to rise to 33.7 and the dependency ratio to fall to 0.58, with an increasing share of the elderly. It will rise back to 0.61 by 2050. These forecasts imply that Palestine is expected to have a much bigger share of people able to work with support going mostly to children, while Israel will have the same share of working age people, needing to support an increasing share of the elderly.

This demographic configuration reinforces arguments with respect to the need to invest in human capital in the Palestinian economy.

11. Policy Proposals

Given the above analysis, there is room to set up a Regional Labor Authority. This body will handle the following tasks:

a. **Operate employment centers for "matching" i.e., gathering requests for workers and the names and skills of interested workers**

On the demand side, the Authority would establish partnership with individual employers and employers' associations. Having become partners of the Authority, the employers will be able to submit vacancies to a centralized database.

On the supply side, the Authority would establish contact, or partnership, with the migrant workers' informal networks or with public employment services in the sending countries in order to identify interested workers.

At the same time, local officers in public employment services in the sending countries would be trained to be able to provide job-seekers with the relevant information on jobs available abroad. Another option is to have an Authority employee – an advisor – located in each sending country. This person would consult potential migrants on all aspects of employment abroad (including Israel).

b. **Disseminate up-to-date information on living and working conditions and trends of the labor market**

The Authority would establish a public Internet portal and update it with the above information, which would be available in the languages of all participating countries.

c. **Provide legal advice on the formulation of employment contracts, taking into account differences in legislation and administrative procedures across countries**

The Authority would engage with legal and accounting firms, both in the receiving and the sending countries. These firms will design

the contracts of the migrant workers in such a way that will both be consistent with the labor legislation in the receiving and the sending countries and will allow employers to optimize their tax and social security expenditures.

d. **Act to cater to countries' security checks as well as to the workers' welfare**

The Authority would engage in a partnership with the receiving countries' security services, as well as with the sending countries' security services, in order to be able to check the eligibility of potential migrant workers to obtain working permits.

e. **Collect and publish information on migrant workers in the region**

f. **Act to enforce labor laws and protect workers' rights**

The Authority will perform regular on-site checks of employers with respect to working conditions. It will also encourage the creation of workers' unions.

g. **Lobby for lower intra-regional labor barriers and for smaller differences between countries with respect to legislation and administrative procedures**

Employers will benefit from:

1. the legal expertise of the Authority in designing the contracts
2. reduced search costs and better matching

Workers will benefit from:

1. a broadened and strengthened career perspective – being a hub of job requests, the Authority will possess knowledge about changing skill requirements
2. possible training programs

12. Conclusions

The Arab world does not fully utilize the available labor force and workers' remittance flows, and does not employ them efficiently enough to foster development. Arab countries would benefit from changing their labor market and migration policies, and from the creation of integrated strategies to broaden employment opportunities and keep up with the increased supply of workers. In addition, strategies are also needed to develop the skills of the work force to match the requirements of employers in the region as well as in the world at large.

Greater collaboration between Arab countries is required to create a suitable environment for regional cooperation, such as linking labor with trade and capital investment flows. In addition, special attention should be given to developing and upgrading the current educational programmes, including technical and vocational training, so as to meet market demands and requirements. There is a need to strengthen coordination between the education systems of different Arab countries to make sure that that the skills of graduates from labor-abundant countries match the demand of labor-receiving countries. This also includes the mutual recognition of qualifications and programs.

Although the mandate of the Arab Labor Organization covers the major issues related to intra-regional Arab labor movements, it still lacks the power to create and implement a labor strategy for all Arab states as one integrated region. Therefore, there is an urgent need to empower the Arab Labor Organization to fulfill its mandate, especially in the field of regional consultation and in creating proper mechanisms to optimize the benefits of labor migration.

There has been very limited coordination between sending and receiving governments on intra-regional migration, resulting in a lack of information on job opportunities and the underutilization of the potential financial and social benefits of intra-regional labor mobility. Bilateral and regional agreements on migration and the return migration of workers need to be

formulated (such as agreements on regional labor mobility of skilled and semi-skilled workers in line with GATS Mode 4 (Abdalla et al., 2007)) and geared towards enhancing the mutual benefits of migration within the Arab region (Wahba, 2008).

Finally, and most practically, there is a need to establish a Regional Labor Authority, which would implement a "matching" technology between employers and workers, collect and disseminate information, provide legal advice, protect workers' rights, and possibly offer training programs.

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Appendix

Table 1 \\ Agreements on cross-border employment by OECD countries

Reprinted from OECD (2004, p.244)

- Similar

Country	Signatories	Quotas	Length of stay	Number of cross-border commuters	Sectors	Aims
Austria	Czech Rep.	Under negotia-tion	Up to one year	3 992 Czech workers in Austria (March 2003) or 1.86% of the foreign workforce	Services	The agreement is limited to cross-border workers who live in the border region and commute on daily basis. Working permits are required. Exceptionally can allow commuter to work in whole region of Austria not only in border regions. Working permits are issued after testing whether vacancy cannot be filled from domestic labour supply.
	Hungary	1 400	6 month work permits, with possibility of extension	1400 in Austria	60% to 70% in agriculture	Burgenland and Bruck/Leitha districts in Austria and Vas, Gyor, Zala counties in Hungary.
Germany	Poland	No quota	n.d.	n.d. for Germany No labour received in Poland.	Craftsmanship, agriculture, food processing, reparations	Declaration signed by the Ministries of Labour of Poland and Germany on the employment of residents of the border zone (commuting frontier workers, mostly odd jobs).
Switzer-land	EU member countries	No quota	Permit limited to the length of the employment contract if it is for less than 12 months. On presentation of an employment contract lasting at least 12 months, a 5-year cross-border commuter permit is granted.	168 088 (2001), or 7.8% increase on 2000. Details (2001): 68% male 33% aged 20-34 47% aged 35-49 19% aged 50-64 51% French 23% Italian 23% Germans	20% metal/machine 16% trade 8% construction 8% sales representation 8% hotel	Regulated by Bilateral Agreement on Free Movement of People. When the cross-border commuter permit is issued, the commuter must work in the frontier zone and must return home once per week. Commuters may be contracted employees as well as self-employed

Towards a Regional Development Bank for the MENA Region

Jacob Yaron

Contents

Executive Summary

The proposed Regional Middle Eastern Development Bank (RMDB), if properly established and structured, could become an efficient vehicle for enhancing foreign and domestic investments in the region as well as playing an important role in inducing potential States and salient donors to increase their economic and financial support to the region. The RMDB could assist in introducing economic and social policies necessary for both sustainable and accelerated economic growth and mitigation of poverty. Presently, many countries in the region benefit from various programs of foreign aid. However, these programs are often lacking the necessary continuity, they do not possess a comprehensive, integrated view of economic development, and they lack a related set of priorities and coordination among the various donors. It is unrealistic to expect that the RMDB would succeed in fully eliminating such weaknesses, but the RMDB, could overcome many of them. Additional benefits are, improving the cost-effectiveness in design, implementation and control of financed projects, facilitating and giving priority to cross- border projects with externalities, creating a more stable and promising investment environment in the region including insuring against political risk and ascertaining better preparedness with respect to policies and measures aiming at addressing the impact of global or regional economic crises.

List of Acronyms

ADB- Asian Development Bank

AFDB- African Development Bank

CGAP- Consultancy group for assistance to the poor

DFID- THE UK Department for International Development

EBRD-European bank for Reconstruction and Development

EU- European Union

FDI- Foreign Direct Investment

IFC- International Finance Corporation

IBRD –International Bank for Reconstruction and Development—(The World Bank)

IRDB—International or Regional Development Bank

MENA - Middle East and North Africa

MIGA- Multilateral Investment Guarantee Agency (a member of the World Bank group)

NGO- Non Government Organization

SODB-State Owned Development Bank

RMDB- Regional Middle East and North Africa Development Bank

TNC- Transnational Company

1. Regional Middle East and North Africa Development Bank (RMDB)

1.1 The objectives of the paper

The objective of this paper is to review the prospects and potential benefits of establishing a Regional Middle East and North Africa (MENA) Development Bank with core focus on financing investments in MENA countries including cross-border projects. The main objective of the proposed bank is to design, promote and finance projects with potential for substantial acceleration of economic growth in the countries involved, to enhance employment prospects and to carry out projects characterized by cross- border externalities and economies of scale. The proposed bank would pay particular attention to issues of poverty reduction and desirable changes in income distribution in the member countries.

The proposed bank could also play a significant role in bolstering confidence among potential private investors by providing insurance against political risks, encouraging and financing much-needed social and economic reforms that would contribute to political stability and strengthen civil society.

This paper highlights the potential advantages and difficulties associated with establishing this bank. It highlights several aspects regarding possible types of ownership, potential ways of mobilizing funds, various modes of operation and control although it deliberately makes no attempt to propose a blueprint for the bank itself at this stage. There are two basic prerequisites for ensuring that Palestine and Israel will be able to benefit substantially from the establishing of this regional MENA Development Bank (RMDB):

a. A comprehensive peace agreement between Israel and Palestine is reached

b. A group of developed states and other salient entities to be referred to in this draft as "contributing entities" are committed to contributing substantial sums to finance the RMDB's objectives as an important instrument aimed at developing the countries involved

and bolstering the Israeli- Palestinian peace agreement economically and politically.

There is a long history behind the idea of creating a multilateral bank for the MENA region. About 15 years ago[1] it even reached the stage of preparing a blueprint for operations by an international team of experts. Then launching the proposed Bank for Economic and Cooperation and Development in the Middle East and North Africa was aborted due to political developments in the region and budgetary considerations in the USA.

Then, it was estimated that establishing the RMDB could play a substantial role in stabilizing capital flows to the region through signaling the creation of a more stable political economic environment to potential investors and donors, which would augment the value of foreign direct investment (FDI). The introduction and deepening of necessary reforms in the region were considered necessary to make MENA more attractive to private investments, domestic and foreign. The other major roles of the bank were intended to be enhancing investors' confidence by reducing political risk and facilitating long term borrowing, badly needed for essential investments in the region.

2. The Expected Benefits from Establishing the RMDB

An essential question ought to be addressed first, namely, whether the RMDB is really the preferred instrument when accelerated economic development and financing specifically joint, cross border projects with externalities are the overarching challenges?

The alternative option is quite simple and a straight forward one. It is to leave the path of regional development and the investments regime to specific separate negotiations among the countries involved and their various funding donors, whenever investors, either from the private or public sector are considering investments that are characterized by externalities that impact on the welfare of people living in neighboring countries.

1 The author couldn't obtain this blue print or any other document related to the plan to establishing the proposed MENA bank that took place in the past

The backdrop for this discussion is a well founded assumption that the "contributing entities" are able and willing to invest large sums in developing the region and to shoulder much of the organizational effort necessary to pave the way for it.

Hence, the ultimate consideration is whether the creation of the RMDB is likely to generate any added value by better serving the objectives of regional development than any other option short of founding the RMDB. To address this issue it would be helpful to define three categories of potentially active stakeholders:

a. The beneficiary/borrowing countries in the region

b. The "contributing entities" that comprise the large rich developed countries and salient entities that are likely to take part in such endeavor, either as a separate state or as a grouping of countries, (such as the European Union) and

c. All other potential donors and bilateral donor agencies (such as USAID, DFID, and other large development agencies and NGOs) not included in the category of "contributing entities".

The main difference between categories B and C above is that participants in category B could opt for becoming a shareholder in the proposed Bank while entities belonging to category C could not.

Similarly, there are four substantial issues that the proposed RMDB could play a major role in resolving or mitigating compared to other existing organizational forms of economic and financial support currently provided to the region. These are:

1. Resolving and mitigating conflicts of interest in the design and operation of projects with cross border and/or implications of externalities.

2. Ensuring better project design and resource allocation as well as increasing the value of funds that would be contributed for development, reconstruction and settlement by the "contributing entities" and other donors compared to the current state of affairs.

3. Saving on overall administrative costs related to the design, implementation and monitoring of projects.
4. Mitigating political risk associated with project design, implementation and related lending and insuring against political risk.

It appears that the added value of the proposed RMDB compared to other alternatives lies in (a) better coping with the issues of enhancing the value of funds to be contributed by the various donors, (b) ensuring an efficient mechanism of approval of qualifying projects, (c) sound and effective monitoring of project implementation, (d) creating predetermined agreed-upon instruments for conflict mitigation and rapid resolution when disputes erupt, and (e) proper handling of procurements related to projects' implementation- a very sensitive issue in view of the international campaign against corruption.

The proposed RMDB, like most other international and regional Development Banks (IRDB) could ensure, when built soundly, the capacity to address the above challenges more effectively compared to any other alternatives.

Conversely, the alternative of leaving the arena open to an enormous number of separate voluntary negotiations between counties, potential donors and investors with respect to each single, stand alone investment/project is likely to yield a reduced number of agreed upon projects, reduced amount of funds contributed by the "contributing entities" and various other donors, lengthy and futile negotiations on projects characterized by externalities, less effective monitoring of projects and degraded capacity to address political risks and resolve inevitable disputes.

In particular, any option short of creating the RMDB would require the "contributing entities" to be actively and directly involved in conflict mitigation among the beneficiary/borrowing countries and coordinate activities with numerous other potential stakeholders including donors and NGOs that may have an interest in selectively contributing to a specific project or to a specific part of a project, thereby shouldering very demanding administrative tasks that could also be politically counterproductive for them. Most other IRDBs have already established effective, quick and deft mechanisms for

resolving such conflicts of interest - a subject that will be discussed in finer detail later on in this document.

The table below summarizes the advantages of creating an RMDB with respect to the issues involved and the impact on the potential stakeholders described above.

Table 1 \\ Impact on stakeholder

Impact on other potential donor agencies and NGOs	Impact on the main "contributing entities"	Impact on beneficiary countries in MENA region	Objective
Improved - No need to be directly involved in any dispute or disagreement among the countries/parties involved, since responsibility for conflict mitigation is delegated to the RMDB. Avoidance of damage to reputation or damaging political consequences from being directly involved in projects involving unresolved conflicts and disputes.	**Improved** - No need to be directly involved in any dispute or disagreement among the countries/parties involved to the RMDB. Avoidance of damage to reputation or damaging political consequences from being directly involved in projects involving unresolved conflicts and disputes.	**Improved** – The RMDB is likely to minimize such conflicts or effectively resolve them. Achieving quick resolution reducing friction due to a prior signed agreement to use the "honest broker" services of RMDB.	**Resolving conflict of interests in design and operations of projects with cross border and/ or implications of externalities.**

Added flexibility - Donors given the option to contribute to a pool managed by the RMDB or to finance specific projects (or part of) that suit their priorities without having to cover all expenses related to design and implementation.	**Higher**- The "contributing entities" avoid separate negotiations on contributing to each specific project, and instead, ensuring bulk contributions to establish the solid financial structure of the RMDB.	**Higher**- Capable of negotiating bulk, "lump sum" contribution to the RMDB instead of small-scale contributions for each specific project.	**Capacity to increase the value of contributions for development and reconstruction in the region.**
Substantial saving - Much of the necessary work related to design and monitoring of projects is carried out by the RMDB. More effective than when carried out by other much less experienced donors.	**Substantial saving**- Much of the necessary work related to design and monitoring of projects is carried out by the RMDB. More effective than other alternatives.	**Substantial saving**- Much of the work necessary, which is related to design and monitoring of projects is carried out by the RMDB. More cost-effective than other alternatives.	**Saving on overall administrative cost related to project design and implementation.**
Substantial - The RMDB would insure against political risk, avoiding implementation disruptions due to disputes. The RMDB would provide "honest broker" services in resolving disputes.	**Substantial** - The RMDB would insure against political risk, avoiding implementation disruptions due to disputes. The RMDB would provide "honest broker" services in resolving disputes.	**Substantial** - By creating a conflict mitigating mechanism similar to MIGA, the RMDB is better positioned to ensure progress and enhance investments in projects facing political risk.	**Mitigating political risk associated with project implementation and related lending and insuring sovereign risk.**

Table 1: The RMDB advantages with respect to a) conflict of interests and dispute resolutions b) capacity to mobilize funds c) saving on administrative cost and d) mitigating political risks

Obviously, creating The RMDB wouldn't be problem-free or cost-free. However, net savings in design, operating and monitoring of projects is likely to be generated as well as the higher likelihood of mobilizing more funds for regional development compared to any other alternative. The creation of the RMDB would require, however, solving and reaching agreements on several complex issues.

Among other, the process of founding the RMDB will require reaching agreement on sensitive issues, such as the clear mission and detailed mandate of the RMDB, agreeing on articles of association, ownership, minority shareholder rights, composition of "contributing entities" and the beneficiary/ borrowing countries in the Board of Directors and staff mix, activities in areas earmarked for outsourcing, types of investments eligible for financing, investment preferences, if any, that may be eligible for more favorable terms of financing and the like.

Unlike other IRDBs, the RMDB would face a unique issue that may have an impact on diversifying the lending terms as one country (namely Israel) already enjoys a standard of living that is far higher than some of its neighboring countries.

3. Projects to be Financed by the RMDB

The projects that are sound candidates to be financed by the RMDB are diversified by nature. In particular, the focus is likely to be on projects with cross-border significance. These are projects characterized by externalities and scale economies that are essential to economic development. Examples are large scale projects such as power stations and other electricity generating projects, water desalination, sewage, water purification and recycled water, building or expanding canals, roads, ports, railways, and industrial zones, transportation facilities, waste management and health and education projects.

Many of these potential projects are clearly characterized by cross-border externalities, economies of scale and may often require mitigating and smoothing conflicts of interest among parties involved. The project design and the loan agreement would have to address sensitive issues such as how the investment is to be shared among different investors and beneficiaries, how the debt service is to be shouldered, how cost of unit of output is determined to beneficiaries and how changes in cost or quantity of units sold would impact on price of unit of output.

Several IRDBs have already gained some experience in designing and monitoring cross border projects - this is discussed in finer detail in the following chapters, which include some concrete examples of cross-border projects that were designed to benefit citizens of neighboring countries. Cooperating with these IRDBs and partial outsourcing of design and monitoring of these projects could be mutually beneficial to both parties.

Some of these projects have the capacity to introduce and maintain cost recovery facilities through fees, thereby possessing the potential to fully debt service loans granted by the RMDB, while still benefiting from the capacity of the RMDB to mobilize funds at a relatively very low price with the addition of only a small margin. An additional benefit of the financing of these investments is the capacity to obtain funds for long periods and when necessary with adequate grace periods - a clear advantage for investors, irrespective whether from the private or the public sector.

Investments could receive subsidies, preferably through direct grants and not through concessionary lending rates. The RMDB would have to decide on criteria and policies related to projects that are not likely to fully ensure related debt service and would have to rely partially or fully on subsidies in view of their social desirability and contribution to achieving agreed upon social and economic goals.

The possibility of mixing financial resources of a grant and commercial borrowing is a sound solution in financing this type of investments. This, however, might become an effective instrument, provided the "contributing entities" and other donors are willing and able to contribute to these activities – a practice already common in some IRDBs.

The RMDB could and should also finance "soft" sectors, namely health and education. Some of the projects in these areas have the capacity to fully service their debt without any subsidy. Cooperation among countries in these areas may assist in realizing comparative advantages as well as addressing pressing needs of the population in the region. The trend of including "soft" sectors in development finance rather than concentrating exclusively on financing of physical infrastructures and capital intensive investments has increased over recent years among salient IRDBs. This trend reflects the growing consensus regarding the high social returns on investments in these sectors in developing countries.

The RMDB could also develop in-house capacity of research related to issues that are crucial for regional development, such as preventing desertification due to climate change and improved water usage. The RMDB could carry out such research directly or indirectly by outsourcing part of it to external entities. There are merits to the RMDB carrying out part of this research itself, since it may often be difficult to structure incentives to outside researchers that will ascertain the delivery of the kind of research that is the most relevant to economic development and regional integration, as would derive from the mandate of the RMDB.

Without some level of high quality, in-house research capacity, which facilitates integration of the research results into the RMDB routine operations and thereby equipping policy makers in the borrowing countries with such results, there is a risk that the research findings and recommendations will not be integrated properly into the day to day operations of the RMDB. Furthermore, this direct research is even more important in ensuring that warranted policy changes in the borrowing countries are implemented.

4. The History of International and Regional Development Banks

IRDBs were established primarily to achieve economic and social goals, chief among them were enhanced economic growth and poverty reduction. Their heyday can be traced to the end of the Second World War, in 1946, when the

International Bank for Reconstruction and Development (IBRD) or in its popular name, the World Bank, was founded. Its main activity was to borrow funds and further on lend these funds to qualifying member governments, to public sector institutions or other entities for agreed projects. If the borrower was not the government itself, it required the borrower to provide its government's guarantee. The IBRD loans are granted for medium and long term periods and are lent at a small mark-up over the IBRD'S AAA rating.

Later, several regional Development Banks were established too, copying to a large extent the IBRD's structure and methods of operations. Among the regional Development Banks, the salient ones are: the Asian Development bank (ADB), the Inter-American Development Bank (IDB) and the African Development Bank (AFDB). After the disintegration of the soviet block the European Bank for Reconstruction and Development (EBRD) was established to facilitate the economic reforms for accelerate growth in the former centrally planned countries in Europe and Central Asia. The EBRD lends to these counties in transition and also assists in designing structural reforms considered essential for revitalizing the economies and promoting the private sectors there.

There is some geographical overlap in lending to borrowing countries by these IRDBs, whereby more than one IRDB may be serving the same country and often even the same sector in the same country. As an example, a country in Central Asia may potentially borrow from the IBRD, the EBRD, and the ADB. While efforts are made among these IRDBs to better coordinate the support granted to the same country or sector, it is also evident that a given level of competition among the IRDBs still exists, although constructive cooperation among these institutions is recently on the rise.

The box below presents an example of joint financing by two IRDBs of a project with clear cross-border significance:

Box 1 \\ Example of cooperation and co-financing by two salient IRDBs in lending to the same project - a Loan Totalling us$ 200 Million to the Republic of Azerbaijan for a Highway 2 Project

"[…]The proposed project would focus on upgrading key sections of the Baku-Alat-Astara road of the Baku-Iran highway (M3) and rehabilitating the 2nd category road (M4) linking Baku to Shamakhi (see Map in Annex 15). The former, with a length of 230 km, would be widened to four lanes in line with modern standards, mostly along a new alignment which will shorten it by about 30 km and bypass the main cities, as well as improve overall traffic safety. The Bank (IBRD) project will finance works on the first 136 km of the Alat-Astara road section, while the Asian Development Bank (ADB) will finance the upgrading of the 60 km between Masalli and Astara."

Furthermore, the design of the project and the evaluation of its economic and social returns are based on strong cooperation with neighboring countries and the growth in their demand for transportation services as indicated in the paragraph below:

"Achieving Azerbaijan's potential as a transit economy is essential for non-oil economic development. Azerbaijan's geographical position makes it an important link between the Black and Caspian Seas and between Russia and Iran. There are a number of reasons to expect that the long-anticipated regional transit corridor will take off over the next few years. First, the large oil and gas pipeline projects now in place will likely result in increased trade in oil products and equipment, as well as building confidence in cooperation between South Caucasus countries. Second there is the likelihood of two of Azerbaijan's biggest and fastest growing neighbors - Russia and Kazakhstan - joining the WTO in 2006. Azerbaijan itself has set a target of joining the WTO by 2007. Third, the recent start of EU accession negotiations with Turkey and the inclusion of the three South Caucasus countries as European Neighborhood Policy (ENP) countries are likely to bring to closer trade links within the region and with Europe. Fast paced growth, not just in Azerbaijan but also in neighboring countries, is generating strong demand for goods and services. Fourth, Baku, as the only capital city on the Caspian Sea, is well situated to become a competitive logistical trade hub".

Source: Appraisal report, IBRD (2005)

Political interests and the relative share of equity share ownership have influenced the allocation of loans and their terms to some countries and sectors, although since the disintegration of the Soviet block the impact of these political interferences in determining lending allocation and their terms has substantially diminished.

Initially these IRDBs almost exclusively financed long term investments (including permanent working capital) that were considered essential for accelerating economic growth and removing bottlenecks impeding economic development with a clear emphasis on infrastructure.

The combination of cheap and long term credit that was not available elsewhere shaped the substantial demand for these loans that eventually faced rationed supply. The latter was determined by the scarcity of financial resources available to the IRDBs and by their assessment of the often inadequate debt-service capacity that characterized many of the borrowing countries.

Different terms of lending were established by the IBRD with respect to borrowing countries based on their degree of poverty as measured by their average annual GDP per capita. A special lending "window" was founded to serve the most impoverished countries that benefited from very low interest rates (less than 1 percent per annum), very long loan repayment periods in excess of 20 years, as well as generous grace periods for principal loan repayments.

The combination of these favorable lending terms allowed the eligible impoverished countries, to benefit from a substantial grant element embedded in these described concessionary loans that reached, by and large, about 85% of the original value of the loan. Not surprisingly, the demand for these "window" loans was exceptionally high but the financial resources earmarked for this "window", which are contributed by some of the rich, developed countries, are determined by the ability and willingness of these countries to continue to contribute to this "window" lending program. The present value of the sum of the loan repayments and interest payments under this "window" was usually lower than 20% of the original value of the loans, therefore the scope

of this "window" lending is totally dependent on replenishment of the funds by the rich contributing countries.

The end result is that there is a substantial gap between the lending interest rates paid by most impoverished countries while lending from this special “window" and the interest rates paid by all the other, relatively wealthier developing countries. This observation regarding the substantial distinction between the interest rates paid by different types of borrowing countries may be of some relevance to the structure of lending terms to be applied by the proposed RMDB.

In general, the interest rates charged by the IBRD on its "regular" loans are based mainly on financial resources the IRDBs mobilize in international finance markets in the form of financial debentures. Consequently, the "regular", wealthier borrowing countries pay interest rates on such loans that reflect the cost of mobilizing funds by the IBRD plus the service fee designed to cover the administrative cost associated with preparing the feasibility studies, the cost of monitoring the projects' implementation as well as other general administrative costs and a modest contribution to profit.

The cost of capital for the IBRD is based on the cost of mobilizing capital as applicable to the rich countries. The rich developed countries provided the callable capital of the IBRD that facilitates mobilizing funds at a very attractive price from the point of view of the IBRD's borrowing countries. Many of these borrowing countries, let alone the more impoverished among them, couldn't have borrowed at that cost elsewhere and they would hardly have been able to access long term borrowing facilities anywhere else.

5. Recent Developments in IRDB Operations

Over the recent decades, the significant changes in the global economy, the rapid promotion and sophistication that occurred in international financial markets and the accelerated growth in GDP per capita in several borrowing countries had an impact on important modes of operation of the IRDBs. These changes also shaped transformations in the demand for loans from IRDBs by some countries that have substantially improved their access to international financial markets and no longer considered credit from IRDBs

as the most favorable source. Financing infrastructures, once the main activity of IRDBs lending is now replaced in many countries by private capital and through foreign direct investments (FDI) as well as by diversified operations of transnational corporations (TNC). TNC production worldwide generated added value of approximately US$ 16 billion or about a quarter of the global GDP in 20102.

The total annual loans granted by IRDBs compared to total international capital movements has been reduced substantially over the recent decades as did their relative importance in financing the needs of middle income developing countries that can increasingly tap financial resources elsewhere and attract FDIs.

Accordingly, the IRDBs, while continuing to finance infrastructure and other traditional preferred sectors (e.g. agriculture, rural development) increasingly shifted to underscore financing of "soft", society-centric sectors, such as health, education, microfinance, small businesses and rural community development. The initiation and creation, about 15 years ago, of the Consultancy Group for Assisting the Poor (CGAP) with a contribution from the retained earnings of the IBRD to promote the microfinance sector is a telling indicator of these shifts in priorities in IRDBs' lending.

These "soft" sectors haven't been attractive to profit-maximizing private investors and have not attracted domestic or international private capital, because of the relatively low financial rates of return that are usually obtained on these investments (to be clearly distinguished from their often much higher economic rates of return).

Originally, about 60 years ago the economic justification for creating and operating the IRDBs, was the perception of market failures in the international capital market. C.L. Gilbert however, argued a few years ago, that this argument is no longer valid. He suggests instead that the IBRD should now help to resolve global market failures in the development process. As a result he claims that presently the IBRD has three key "rationales" for its renewed existence: the

2 Source: World Investment Report, 2011, UNCTAD

rectification of government failures, the rectification of information failures and the provision of global public goods.[3]

Accordingly, in recent years the relative share of loans dedicated to financing investments in strengthening public sector institutions, judicial systems, various social reforms including pension programs and education, and health systems - has grown substantially, reflecting recognition of their potential contribution to the welfare of the target population. Even with respect to financing the traditional priority sectors (e.g. agriculture), small farmers became the main recipients of loans rather than the sector as a whole, reflecting a perception that poverty has to be mitigated through direct action.

Fighting poverty and the belief that enhancing activities and operations that directly aim at mitigating poverty have gained momentum in recent years and have increasingly become an important component of the IRDBs' lending. Lending to microfinance and to community development, almost unknown sub-sectors twenty years ago, has increasingly become important within the current IRDBs' strategy of poverty reduction.

Initially, much of the lending of the IBRD went to state-owned development banks (SODB) that were established all over the world with the intellectual and financial support of the IBRD that considered them then to be the main vehicle for ensuring accelerated economic growth and poverty reduction. In the last two decades however, some disappointment from over-reliance on the SODB and wide dissemination of assessments often indicating poor performance of SODB in terms of cost-effectiveness, encouraged the IBRD to increasingly underscore the potential role the private sector could play in reforming the countries in transition and fighting poverty[4]. This perception was also characterized by driving for structural reforms to liberalize the economy and reforming the financial sectors in many developing countries.

3 "The World Bank Structure and Policies", C.L. Gilbert and David Vines, Cambridge University press, 2000, page 39.

4 State- Owned Development Finance Institutions -The political Economy and Performance Assessment, J. Yaron, Savings and Development No 1,2006, Milan, Italy

6. Cross-Border Development Projects

Cross-border development projects are projects that impact the welfare of the population in other, neighboring countries. Typical cases in point are the construction of dams or channeling river water flow in one country that results in diminishing water flow to the another downstream country. Incentives for designing and operating cross-border projects may arise also from investments that are characterized by economies of scale that are typical to many infrastructural investments like power stations and water desalination, which could serve inhabitants of more than one country. The cost savings in original investment and daily operations per unit of output enhances the internal rate of return yielded on such investments, thereby benefiting the final users through facilitating reduced paid fees.

An example of a comprehensive regional strategy of development and benefits of shared uses of energy and water in Central Asia from which several countries are planned to benefit is detailed in the box below.

Box 2 \\ The IBRD's Strategy for development of Energy and Water in Central Asia

Central Asia Energy-Water Development Program

Central Asia is endowed with water and rich with varied energy resources. Water resources, which are increasingly under stress, have an important geographic and economic dimension, with downstream countries highly dependent on upstream countries for essential water for irrigation. Hydropower resources are concentrated in the Kyrgyz Republic and Tajikistan, the upstream countries of Central Asia's Amu Darya and Syr Darya rivers. Thermal resources are concentrated in Uzbekistan, Turkmenistan and Kazakhstan. Thus, energy-water linkages are inextricable from perceptions of national security, regional stability and economic growth.

The World Bank recognizes that the sound management of water resources for both irrigation and power generation is critical for the sustainable development of all the countries in Central Asia. The Bank's approach to water and energy issues in Central Asia is based on both regional and country level programs which must deliver benefits to each country in the region.

At the country level, the World Bank is supporting a number of energy and water resources projects and studies in Central Asia. Many have regional significance and benefits and others have more localized project or country level benefits. At the regional level, in response to requests from Central Asian governments, the World Bank is actively engaged in dialogue on energy/water issues with Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan, acting in the best interests of all its member countries and taking maximum care in the application of its policies, including environmental and social safeguard policies.

As part of its regional approach, the Bank has initiated a comprehensive Central Asia Energy-Water Development Program (CAEWDP), initially a four-year program, which aims to improve diagnostics and analytical tools to support the countries of the region in well-informed decision-making to manage their water and energy resources, strengthen regional institutions, and stimulate investments. The main components of the CAEWDP are:

Energy development to promote highest value energy investments and management. Areas of focus include: infrastructure planning, winter energy security, energy trade, energy accountability, and institutional development;

Energy-water linkages to improve the understanding of linkages between water and energy at the national and regional levels. Areas of focus include: energy-water modeling, regional hydrometeorology, climate vulnerability, and energy-water dialogue;

Water productivity to enhance the productivity and efficiency of water use in both agriculture and energy sectors. Areas of focus include: capacity strengthening, 3rd Aral Sea Basin Management Program, national action plans for water productivity, and rehabilitation of infrastructure.

Source: Central Asia Energy-Water Development Program, IBRD (2010)

In particular, it is worth highlighting the broad coalition of several IRDBs and various other donor agencies that agreed to cooperate in supporting this strategy and assist in financing specific projects or sub-projects that constitute integral parts of the overall comprehensive regional development strategy, as detailed in the box below:

Box 3 \\ Cooperation among Many IRDFIs and Development Agencies in a Comprehensive Cross-Border, Regional Development Water and Energy Project

The Central Asia Energy and Water Development Project (CAEWDP) also aims to coordinate and leverage the contributions of other development partners, to provide critical technical support as well as financial resources for the program. Several development partners are currently involved in Central Asia, in both water and energy, including the Asian Development Bank (ADB), the Islamic Development Bank (IsDB), the European Commission (EC), Eurasian Development Bank, UNDP, UNECE, Germany (GTZ), Switzerland (SECO), UK (DFID), the US (USAID), and the Aga Khan Foundation.

Source: Central Asia Energy-Water Development Program, IBRD (2010)
Cooperation among Many IRDFIs and Development Agencies in a Comprehensive Cross-Border, Regional Development Water and Energy Project

The objectives and characteristics of a cross- border regional project that is now under preparation for trade in energy among participating (exporting and importing) countries in Central and South Asia is described below. This regional project is currently scheduled for launch in 2012:

Box 4 \\ Key Development Issues and Rationale for IBRD Involvement in Financing Central Asia –South Asia Regional Electricity Market

The Central Asian Republics (CARs), with large energy resource potential relative to their domestic needs, have been pursuing energy export-led growth strategies since their independence in 1991. Kazakhstan, with its significant oil & gas resources, has been the most successful, followed by Turkmenistan

and Uzbekistan with their gas resources. However, the hydro-rich Kyrgyz Republic and Tajikistan have not been able to realize their potential, in part because of

a. Significant resources needed to develop the hydropower plants and associated transmission lines
b. Limited regional cooperation
c. Lack of clarity about the main electricity export market.

The neighboring South Asia Region, on the other hand, is energy deficient and its energy import needs are increasing, fueled by robust economic growth and consequent increase in energy demand. The growing deficit between the energy demand and the available domestic supply could potentially be covered, in part, by imports of electricity and gas from the Central Asia region.

CASAREM – "Central Asia - South Asia Regional Electricity Market" – is a concept for developing electricity trade among the countries of the two regions through a set of projects and concomitant investments, underpinned by the relevant institutional arrangements and legal agreements. The development of the first phase of CASAREM, which is to establish the necessary transmission and trading infrastructure and systems to enable a trade of about 1300 MW of summer surplus electricity between the Kyrgyz Republic and Tajikistan in Central Asia and Afghanistan and Pakistan in South Asia, is referred to as "CASA-1000". However, it is envisaged that other countries would join the initiative as the trade expands.

Source: Planned CENTRAL ASIA SOUTH ASIA REGIONAL ELECTRICITY AND TRADE 2010 IBRD Project (CASA 1000)

Box 5 \\ Macedonia- Second Trade and Transport Facilitation-Environmental Assessment

... in technical and engineering terms of this corridor. This project covers a section starting from the border crossing Tabanovce and ending at the point where the existing highway... to implement plans for improvement of the existing road infrastructure. The Project...The Fund of International and Regional Roads of the Republic of Macedonia is aiming to implement

plans for improvement of the existing road infrastructure. The Project for which it is required to develop an Environmental Impact Study is a section of the international corridor E-75 (forming part of Corridor 10). It represents an artery passing through the country in a north-west direction along the valley of the most important water course—the Vardar River. Apart from the East-West transportation corridor (Corridor 8, connecting the neighboring countries Bulgaria, Macedonia and Albania), this corridor is regarded as most important development axis, since it enables connection of Macedonia with the developed European countries from the north, while it also provides exit to the Aegean Sea in the South, through Greece. Completion of the highway in its full length is considered a priority, which is supported by the fact that the Government intends to obtain EU pre-accession funds (IPA) to finalize a very difficult section in technical and engineering terms of this corridor. This project covers a section starting from the border crossing Tabanovce and ending at the point where the existing highway is terminated at its leaving the town of Kumanovo, in total length of 8.34 km. Some of the environmental impacts and corresponding mitigation measures are: air pollution, to be mitigated by planting vegetation buffer zones; endangerment of wildlife, to be mitigated by relocation and tracking; construction waste and debris, to be mitigated by appointment of a waste manager; cultural issues, to be mitigated by compensation of the local population; and hazards, to be mitigated by a hazard management plan.

Source: IBRD Appraisal report and environmental assessment , 2009

It is worth noting that projects that require cross-border considerations and resolution of inherent externalities and environmental issues are not necessarily large expensive projects. Small scale projects that cause environmental issues such as air pollution, small scale water purification and sewage investments can be relevant as well and might therefore be relevant for investments along the borders of Palestine, Israel and Jordan as well as along other borders of Middle Eastern and North African countries. An example of handling of environmental issues associated with implementing a small scale transportation project in Macedonia that was financed by the IBRD is detailed below:

7. Disputes and Conflict Mitigation

Investors in emerging markets are particularly sensitive to political disruptions that could put their investments at risk. Expropriation, breach of contracts by governments involved and dependence on uncertain and deferred decisions taken by domestic judicial systems constitute substantial disincentives when FDIs are concerned. To resolve or mitigate this issue the IBRD established a separate entity that provides insurance against political risks. This body functions as an integral part of the World Bank group – the Multilateral Investment Guarantee Agency (MIGA).

A similar institutional arrangement is particularly useful when the objective is to substantially enhance investments in MENA, a region that has suffered from wars, military confrontations, and political friction that to a large extent stemmed also from unfulfilled expectations related to past, signed peace agreements. The experience of MIGA and the broad coverage insurance it provides against various political risks should be thoroughly studied to ensure that the RMDB, when established, will possess such capacities either directly or indirectly (i.e. through outsourcing). The efficiency of providing political risk insurance to potential investors in the MENA region is a key area where the RMDB can play a crucial role in creating a favorable investment regime.

In essence MIGA provides insurance to investors and lenders against non-commercial risks including insurance against inconvertibility of currencies and money transfer restrictions, expropriation, terrorism, war and civil unrest, breach of contract and failure to honor sovereign financial obligations.

Moreover, the benefits provided to investors and lenders by MIGA go far beyond providing a simple insurance against political risk. The very existence of MIGA helps in deterring harmful conduct as the governments in the countries in which the FDIs are made are also MIGA's members/shareholders. This, in turn, provides additional protection against engaging in harmful conduct against lenders and investors by a member country. MIGA is capable of intervening at the first sign of trouble to resolve a pending conflict before it reaches the stage of official claim.

Hence, MIGA provides an umbrella of deterrence against government actions that could disrupt insured investments and helps resolve potential disputes to the satisfaction of all parties, thereby enhancing investors' confidence in the safety of their investments. In order to prevent a potential claim's situation from escalating, MIGA provides dispute resolution services to all of its clients. In order to decrease the likelihood of risk losses in the case of investment disputes, MIGA requires that the insured investor notify it of emerging difficulties with a host government that might give rise to a claim of loss under the guarantee as early as possible.

Helping clients keep projects going – A dispute may arise when an investor alleges that the government has breached its contractual obligations or expropriated its investment. Conversely, a dispute may be brought by a host government alleging that the investor has breached its contractual obligations. Both sides may disagree regarding who is at fault and over how the aggrieved party should be compensated. MIGA would then use its good offices of honest broker, to examine areas of responsibility and potential liability, thereby helping the parties reach an agreement that would settle the dispute to both sides' satisfaction.

If eventually the parties involved are unable to settle their dispute and a compensation claim is brought by an investor under a MIGA guarantee, MIGA will review the facts of the dispute and make a formal determination. If MIGA findings are in favor of the insured investor, MIGA will pay the compensation to which the investor is entitled under the guarantee.

In order to specifically encourage small scale investments MIGA has designed a special insurance "window" program for small businesses, whereby clients benefit from concessionary insurance premiums paid. The eligible businesses should have up to 300 employees and the value of their assets and annual sales should not exceed $ 15 million.

8. Ownership, Management and Staff of the Proposed RMDB

There are a number of ways to shape the structure of ownership, control and upper management of the proposed RMDB. Detailed analysis of this subject is out of scope of this paper. However, it should be pointed out that in light of their importance, it is likely that the "contributing entities" would insist on protecting their interests as the main providers of the RMDB's equity capital, irrespective whether by offering callable share capital, by direct equity investment or by providing guarantees for the financial resources mobilized in international finance markets.

It is also soundly expected that the "contributing entities" would insist on shaping the modes of operation, procedures of purchasing related to investments financed by the RMDB, the intensity of monitoring progress of implemented projects, lending terms and key decisions on fees and tariffs related to cost recovery of investments financed by the RMDB.

The capital structure of the proposed RMDB can be based, in addition to the share capital to be owned by the "contributing countries" and the interested regional countries, on debentures and other financial obligations mobilized in the international financial markets. The "contributing entities" would then have to provide the financial guarantees backing these obligations or to ensure investment in callable equity that could be called upon when needed. Either way, in light of the solid, preferred financial standing of the "contributing entities" in the international financial markets, this mechanism would allow the proposed RMDB to mobilize financial resources at the lowest cost available.

The financial structure of the RMDB, in whichever form it is decided on, wouldn't rule out the possibility of applying different lending terms (i.e. interest rates charged, grace periods and durations of loan repayments) to different countries or sectors based on objective criteria (e.g. GDP per capita). The proposed structure would also leave open the option for any other arrangements that allow the borrowing countries to seek and obtain

grants or concessionary loans from other sources aimed at covering their share in any project that the RMDB will agree to finance.

This approach leads to the option of establishing a small Board of Directors of high level representatives of the "contributing entities" as well as a small number of representatives from the participating countries in the region. Board voting will likely reflect the contribution made by the entities involved and is likely to be controlled by the representatives of the "contributing countries". Past experience in similar IRDBs does not rule out the possibility of some disagreement among representatives of "contributing entities".

The staff of the proposed RMDB may be kept to an absolute minimum. This approach can be achieved by using, whenever warranted, outsourcing of professional tasks and assignments necessary for ensuring effective performance. Various IRDBs could be relied upon to provide assistance and cooperation in areas that would not necessarily require the creation of in-house capacity in the RMDB or when this in-house capacity should be built only gradually.

Some of the above mentioned IRDBs are already active in various operations and lending to the region (e.g. the World Bank, the ADB). Shifting priorities in some IRDBs as well as reduced demand for their services by some of the wealthier client countries that have ceased borrowing from them is likely to induce these IRDBs to respond favorably to requests from the RMDB to take part and provide technical assistance in selected aspects of project design and monitoring. This, in turn, could enrich the agenda and impact favorably on the reputation of the IRDBs involved in contributing to badly needed economic development in the region. The related fees to be paid for such services by the RMDB, when needed, would also be instrumental in encouraging the IRDBs to cooperate by allowing them to better absorb their related administrative and payroll costs.

9. Policies of the RMDB

The RMDB policies should aim at the following:

a. Initiating and financing large scale projects that can potentially make a substantial contribution to economic growth and poverty reduction including initiating and financing "non physical" projects that are typically financed by the state budgets, namely education and health.

b. Initiating research, studying and financing of needed reforms in policies, sectors and public sector institutions which, when successfully implemented, can stimulate economic growth and poverty reduction.

c. Giving priority to financing of economically sound, cross-border projects characterized by externalities that could enhance cooperation among the region's countries and contribute to political stability in the region.

d. Creating, managing and contributing financial resources to an instrument that provides insurance against political risk related to investments. This is an essential tool for attracting private entrepreneurs to invest in the region and augment FDIs in the region.

e. Inducing regional SODBs to gradually adopt policies and procedures that facilitate serving their societies more efficiently. This should not be done by crowding out other financial institutions that can effectively serve the target clientele. A level playing field with respect to operating financial institutions can be achieved more easily if the RMDB also functions as a second tier bank that lends to the SODBs and other related financial institutions that eventually lend to projects along predetermined, agreed-upon social and economic objectives of the RMDB.

f. Supporting the introduction of the right social and economic policies in the countries involved and allocation of financial resources for facilitating the amendments needed in policies whenever applied. The RMDB should act to enhance economic integration within the

region and of the region's countries in international markets. To achieve this goal, a balanced, long term plan must be applied, aimed at eliminating excessive protectionism, but also taking into account the need to avoid harming domestic employment.

g. Ensuring that the countries in the region have developed, with the RMDB's assistance, an adequate social-economic emergency plan to mitigate the impact of global or regional crises. The emergency plan should aim at reducing the adverse impact of the crisis with particular emphasis on the plight of the poor. This plan should take into consideration the necessary coordination with other IRDBs operating in the region to avoid duplication of effort and sending confusing signals to the countries in the region.

10. Concluding Remarks

The proposed RMDB can become an efficient vehicle for enhancing foreign and domestic investments in the region. The RMDB can also play an important role in inducing potential "contributing entities" to increase their economic and financial support to the region and to introduce policies necessary for sustainable and accelerated economic growth as well as mitigation of poverty.

Presently, many states and various donors are involved in contributing through grants, concessionary loans and technical assistance to projects and "preferred" sectors in the region. However, these activities are often lacking the necessary continuity, and in particular they do not possess a comprehensive, integrated view of economic development, lack a related set of priorities and coordination among the donors. While it would be unrealistic to expect that the RMDB would succeed in fully eliminating such weaknesses, the RMDB, if properly structured, could overcome many of the deficiencies that currently characterize the assistance granted to the region.

The following expected benefits could accrue to the region from establishing the RMDB:

a. Increasing the total value of investments and loans granted to the beneficiary countries by the contributing entities and various other donors.

b. Ensuring that a set of policies and investment priorities is agreed upon so that the derived flow of funds reaches their intended uses through improved design and monitoring.

c. Correcting the current situation whereby numerous contributing donors often without a clear sense of priority and sometimes even while competing with each other, decrease the likelihood of implementing the necessary changes in policies and procedures essential for economic growth.

d. Reducing costs and achieving improved cost-effectiveness in design, implementation and control of financed projects.

e. Facilitating and giving priority to the design and implementation of cross-border projects. This can be done through providing "preferred" concessionary lending terms and grants to these projects compared to lending terms granted to "regular" projects.

f. Creating a more stable and promising investment environment in the region by creating a political risk insurance mechanism that is currently conspicuous in its absence and badly needed for augmenting investments and FDIs.

g. Developing a comprehensive view of the region's economic potential and its needs, recommending and financially supporting the introduction of the right policies and their implementation.

h. Ensuring better preparedness with respect to policies and measures aiming at addressing the impact of global or regional economic crises, particularly with respect to the plight of the poor. The capacity of the RMDB to mitigate the adverse impact of a global or regional crisis is clearly limited and it would largely depend on the size, assets and financial resources available to the RMDB and its success in coordinating and cooperating with other salient IRDBs that are likely to continue operating in the region (e.g. The World Bank, the ADB).

Regional Cooperation in Transportation

Michel Kawas, Assaf Sarid, Amos Ron, Yoram Shiftan

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Executive summary

In this paper we present suggestions for cooperation between the countries in the region in the field of transportation. We distinguish between two types of infrastructure: physical and institutional. Our analysis is based on the assumption that under the API the region will experience large flows of both goods and passengers. We analyze the existing infrastructure and demonstrate that it can not support the expected flows of goods and passengers, especially in no-

GCC countries. The main flaws are: (i) The existence of bottlenecks in border crossing points and especially in ports; (ii) Lack of harmonization of transportation regulations; (iii) Underinvestment in physical infrastructure; and (iv) Nointernational connection between national railroad grids. We show that these flaws decrease both the welfare in the region and the ability of entrepreneurs to compete internationally. We suggest the following projects: (i) Implementing the Euro-Med Plan and extending it to the mashreq countries; (ii) Reorganization of ports to models used in major ports in the world; (iii) Connecting internationally the road and railroad grids; (iv) Upgrading Amman international airport to a regional hub; (v) Constructing high-speed trains in the major passengers routes; and (vi) Harmonization of all aspects of transportation to facilitate the free movement of vehicles between all countries in the region. Since the projects suggested require an adjustment period, some of the processes can be implemented even in the near future, regardless of political environment.

1. Introduction

The MENA region is strategically located on an important trade route between the East and Southeast Asian countries and the Western markets. In the last decade, the East and Southeast Asian countries have experienced a massive increase in trade volumes, and consequently the volume of trade in the MENA countries rose as well. MENA's international trade (imports and exports) more than tripled between 2000 and 2010. The increased volume of trade was reflected in growing pressure on regional sea ports and the Suez Canal, as the total volume of containerized shipments handled by MENA ports grew by two thirds between the years 2002-2008.[1] This increase requires investment in transportation infrastructure. However, as GCC countries have initiated infrastructure investment plans, especially in the infrastructure of ports, other countries are only in preliminary stages of such investment.

In this paper, we develop an outline for cooperation between Israel, Palestine, and other MENA countries in the field of transportation. Our analysis and suggestions are based on the assumptions that under the Arab Peace Initiative, all the countries in the region will experience higher economic growth and prosperity; this in turn will enhance the flow of both trade and passengers between the countries. We also assume that once peace is achieved, a steady flow of passengers – including tourists and businessmen – will continuously cross the borders between the countries in the region, and therefore we suggest a cooperative plan that will provide the countries with the necessary infrastructure for the expected flow of goods and tourists.

Following a comprehensive analysis of the existing infrastructure, we claim that it is insufficient to support the expected flows of goods and passengers. We suggest several optional projects to answer this problem, among which are connecting roads and railroads in the MENA region, and

1 The increase in containerized shipments during this period in the United Stated was about a third, and in Europe about 45%.

transforming Amman's international airport into a regional hub. We also suggest implementing European transportation standards.

We also emphasize the institutional framework needed to fulfill the economic potential of such cooperation. In particular, we claim that the present frictions in the movement of goods and passengers between the countries at the border crossing points create a major obstacle in transportation, and therefore increase its costs. It is worth noting that at this stage, unlike projects of physical infrastructure, the process of implementing some of our institutional suggestions may begin even at present, as a preliminary step towards the political feasibility for future cooperation in physical infrastructure projects.

This paper is constructed as follows: In the next section, we survey the existing infrastructure in several MENA countries. In section 3, we describe future transportation plans in the MENA region. In Section 4, we derive the outline for cooperation, both in the medium term and in the long term. In section 5, we derive the outline for cooperation in forming the institutional infrastructure needed. In section 6, we conclude our findings.

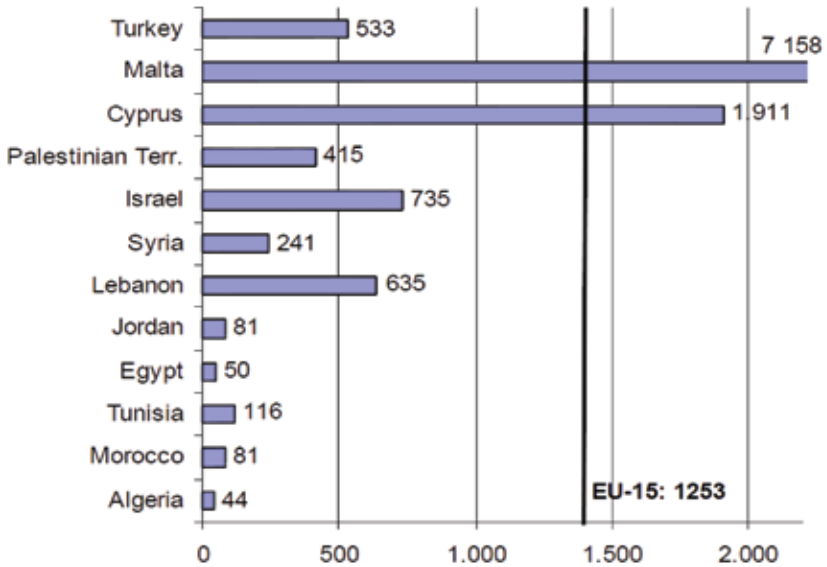
2. The Existing Physical Infrastructure in the MENA Countries

Many MENA countries suffer from underinvestment in transportation infrastructure, which can be clearly seen in all infrastructural indicators. The following two figures are examples for this empirical finding. Figure 1 shows the road density (the length of roads per square km) in the countries that lie on the Mediterranean Sea, with the European countries as a benchmark. It is clear from the figure that the road density in all countries of the Mediterranean Sea is below the European average. Furthermore, the average road density in the Mediterranean countries is about 7.5 times smaller than the average road

density in the European countries. Figure 2 presents the rate of motorization (the rate of passenger cars per 1,000 inhabitants) in the Mediterranean countries. Similar to the pattern of Figure 1, the motorization rate in the Mediterranean countries lies far behind the rate in Europe, as none of the Mediterranean countries has a motorization rate close to the European average of 460 passenger cars per 1,000 inhabitants. As discussed above, these figures are mere examples of the scarcity in investment in physical infrastructure in the region; there are many other indicators which present the same picture. The lack of physical infrastructure, coupled with the lack of cooperation in institutional framework as discussed in this study, as well as the relatively low competitiveness of international transportation firms in the region yield an altogether poor state of the transportation system.

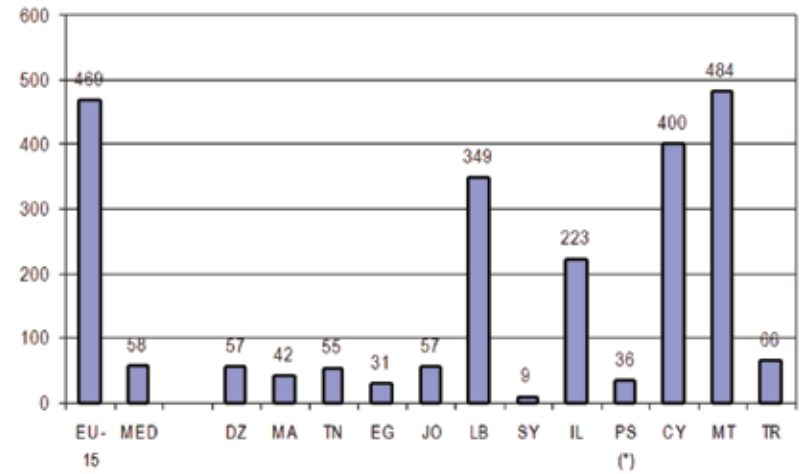
Interestingly, the Arab countries have recognized their state of underinvestment in the field of transportation, and many of them are in the midst of change in their transportation infrastructure. The major changes are happening in the GCC countries, where countries invest in expanding their ports and constructing land bridges between them. These changes are discussed in the next section.

Figure 1 \\ Road Density in km per square km, 2000



Source: Strelow, (2003)

Figure 2 \\ Rate of Motorization, Passenger Cars per 1000 inhabitants



(*) 1999 data

Source: Strelow, (2003)

2.1 The Transportation Sector in Various Countries in the Region – Share of GDP and Structure

Share of GDP

The following table shows the contribution of the transportation sector to the GDP in various countries in the region:

Table 1 \\ The Transportation Sector as a Share of GDP, 2008 (%)

Country	Share of GDP, 2008 (%)
Egypt	8
Israel	6
Palestine	11.2
Jordan	8
Syria	10

Source: EuroMed (2010a)

As the table shows, the transportation sector has a significant impact on the economy of the countries in the region. In particular, it contributes about one tenth of the GDP in all Arab countries that surround Israel and Palestine. These figures are similar in other MENA countries.

Freight Sector Structure – Mix and Firms Structure

It is important for our purpose to look at the mix of freight transportation, because interestingly, in all the aforementioned countries, rail freight transportation is relatively small, and has been decreasing in the last few years. The only exception to this is Syria, where rail freight transportation has recently increased.

When discussing the haulage transportation sector in these countries, we must bring attention to the fact that it is usually privately owned. Generally speaking, the haulage sector is divided into two segments. The first segment consists of small firms providing basic transport services. Firms in this segment compete especially on price, and entry and exit to this segment is relatively easy, as the required capital for entry is low (usually one truck). The second segment consists of a few firms that provide more sophisticated transport services. These firms compete on price, distance, and quality of their services. This second segment is considered more important for international transport, as it experiences economies of scale and can thus provide its services on a broader level. Interestingly, in all Arab countries the haulage sector consists of firms that belong to the first segment, namely small private firms that have only one truck in which the owner is the driver himself. As a result, the trucks are usually old due to the lack of capital for purchasing new vehicles. This structure impedes the haulage transportation sector, especially in Egypt, to be competitive on an international level because most of the haulage transportation firms are considered to be from the first segment. Consequently, international transportation firms are scarce in the region.[2]

2 Although the structure of this sector in Israel is somewhat more advanced, due to political reasons, Israel is unable to export or import by land, and therefore there are no international haulage firms in Israel.

2.2 Existing Infrastructure

2.2.1 Roads

Regional

A basic road network in the MENA region has already been built. The main road system consists of a coastal road that passes from Morocco in the west through Algeria, Tunis, and Libya to Egypt; from Egypt, the road connects to Jordan, Syria, and through Turkey to Europe. Another road connects Jordan with Iraq and the Arabian Gulf, and a different one connects Jordan with Saudi Arabia and other countries in the Arab Peninsula.

Egypt

The Egyptian road grid is relatively well developed, connecting all major population centers. Egypt's system of highways almost tripled over the last three decades. Its network of highways and intercity roads carries 85% of domestic freight and 60% of passenger travel. Egypt plans to expand its highway grids by constructing six more highways: Saloum-Natroun, Alexandria-Fayoum, Dayrout-Fayoum, Aswan-Dayrout, Dayrout-Farafra, and Kharga-East Oweinat.

Iraq

Iraqi highways have a total length of 45,550 km, 38,339 km of which is paved. The main roads connect Baghdad with Mosoul and Turkey in the north, Baghdad with Basrah and other ports in the south, and Baghdad to all neighboring countries. Due to ongoing disputes in Iraq, the road system suffers from underinvestment and disrepair.

Israel

The Israeli road network consists of five major north-south roads and several east-west roads that connect them to one another. The major north-south roads are:

- Roads 2 and 4, which connect Rosh Haniqra (on the Lebanese border) with the Gaza Strip. These two roads are stretched along the sea shore, and pass close to the ports of Ashdod and Haifa.

- Road 6, which connects Yoqneam with Be'er Sheva.
- Road 40, which connects Ra'anana with Be'er Sheva.
- Road 90, which connects Metula (on the Lebanese border) through the Jordan Valley and the Dead Sea with Eilat (and Aqaba).

The major east-west roads are:

- Road 65, which connects Hadera to Afula and Beit She'an. This road is important for our purposes, because it passes a few kilometers from Jenin and ends just a few kilometers from Sheikh Hussein Bridge (a border crossing point with Jordan).
- Roads 75 and 70, which connect Haifa Bay to eastern Israel, Afula, and the northern West Bank.
- Road 5, which connects Tel Aviv to the center of the West Bank (near Salfit).
- Road 3, which connects Ashkelon to Road 1.
- Road 1, which connects Tel Aviv through Jerusalem to the Allenby Bridge.
- Road 25, which connects the Gaza Strip through Beer Sheva to the Arava Valley and the southern end of the Dead Sea.

Jordan

The main road network in Jordan is paved and in good condition. Moreover, it has 3,440 km of main roads and about 4,600 km of side and rural roads, which connect all parts of the country. Jordan hopes to be able to exploit this network as a crossroad for transporting goods both from its port in Aqaba in the south and, with progress of the peace process, from the Israeli Mediterranean ports to the Mashreq countries.

Lebanon

Lebanon has 7,300 km of highways, 6,100 km of which is paved. The main artery is the coastal road that connects all ports to the capital, Beirut. Another north-south road passes along the mountain hills from the northern border of Al Qasayr via Ba'lbakk to Marj'iun. Two east-west roads connect Damascus

and Beirut, while several more east-west roads connect the coastal road to the eastern border with Syria.

Palestine

In the West Bank, Palestinian domestic trade routes rely on a road network that connects all cities in the West Bank. This network consists of a major north-south route that connects Jenin in the north through Nablus, Ramallah, and Bethlehem to Hebron in the south (Road 60). Road 60 has two border crossing points with Israel, one in the north and the other in the south. There are also several east-west routes that connect Road 60 to other major cities in the West Bank, such as Qalqilia and Jericho, and to border crossing points with Israel and Jordan. This network is in a state of disrepair, and passes through densely populated areas. This forces Palestinian traders to suffer from high transportation costs due to car accidents and slow movement through the West Bank.

In the Gaza Strip, there is one major north-south road that connects the Erez Crossing Point to Rafah through the city of Gaza. About 50% of the roads in the Gaza Strip are unpaved, causing high transportation costs for traders in this area.

The state of the roads and the fact that they pass through densely populated areas affect both fixed and variable transportation costs. A survey conducted by the Palestine Trade Center quoted by the World Bank in 2008 showed that the state of the roads caused an increase in maintenance costs and longer periods of driving time. This in turn caused the transportation cost per km in the West Bank to be approximately 2.4-3.7 times greater than in Jordan.[3]

Syria

Syria has a total length of 43,381 km of highways; only 10,021 km is paved. The main roads connect the capital, Damascus, with Homs, Aleppo, and the ports of Latakia and Tartous. Other major highways connect Damascus with the adjacent countries of Jordan, Iraq, Turkey, and Lebanon.

3 We compare the West Bank to Jordan, because Jordan has many similarities with the West Bank (such as the size of the population, stage of development, and abundance of natural resources).

2.2.2 Railroads

Egypt

The Egyptian National Railways operates railways at a total length of 5,063 km with a standard gauge of 1455 mm. The main route is a north-south railway, which passes through Alexandria, Damietta, and Port Said that lie on the Mediterranean Sea in the north, along the Nile through Cairo, to Aswan in the south. Other lines go from Cairo through the delta of the Nile; as well as to the west, which could connect Egypt to Libya, as it did during World War II (this line is currently not operational). The track carries both passengers and cargo. Figure 3 depicts the Egyptian railway grid.

Figure 3 \\ The Egyptian Railway Grid

Iraq

The Iraqi Republic Railways Company runs trains on the Iraqi railway grid, which consists of tracks to the length of 2,339 km, of standard gauge. As shown in Figure 4, the railway connects Turkey in the north to Baghdad and Basra on the Arabian Gulf in the south. Another line runs from Baghdad towards Syria. The tracks serve both passengers and freight, carrying 2,900 tons of freight in 1997.[4]

Figure 4 \\ Iraq's Railways Grid

4 Unfortunately, due to political reasons in Iraq, no newer data are available.

Israel

Israel Railways Ltd. currently runs tracks of a total length of 1,011 km, of standard 1455 mm gauge. There are passenger lines from northern Israel to southern Israel, as well as to Jerusalem in the east, that serve around 36 million passengers yearly, with a moderate increase in number each year. The busiest lines are the ones that connect the northern part of Israel to Tel Aviv.

Israel Railways Ltd. also operates cargo lines, and connects the Mediterranean ports of Ashdod and Haifa to major industrial regions. In 2009, it transferred 5,683 thousand tons. The main cargo stations are:

7. The Haifa Transportation Center, which connects Haifa Port to the center of the country, as well as to factories in the north
8. The Ashdod/Lod Transportation Center, which operates cargo from Ashdod to Haifa, and from Ashdod to the south
9. The Dimona Transportation Center, which operates cargo from the factories in south-east Israel to the ports of Ashdod and Haifa

In addition, there are cargo terminals in Hadera, Bnei Brak, Ramat Hovav, and in the factories in northern and south-east Israel.

Figure 5 \\ Israel Railways – Present and Future Tracks

Jordan

Jordan has two corporations that operate railroads, with a total length of 620 km, 110 km of which is inactive. The Jordan Hejaz Railway operates a daily passenger train between Amman and the Syrian border. The Aqaba Railway Corporation transfers phosphates from the mines in southern Jordan to Aqaba Port. The gauge of the railway in Jordan differs from the standard gauge used in all neighboring countries, but Jordan plans to change to the standard gauge in the coming years.

Figure 6 \\ Jordanian Railway Grid

Lebanon

Lebanon used to have an active railway under the Ottoman and French governance, but these railways of a narrow 1050 mm gauge have not been active since World War II.

Palestine

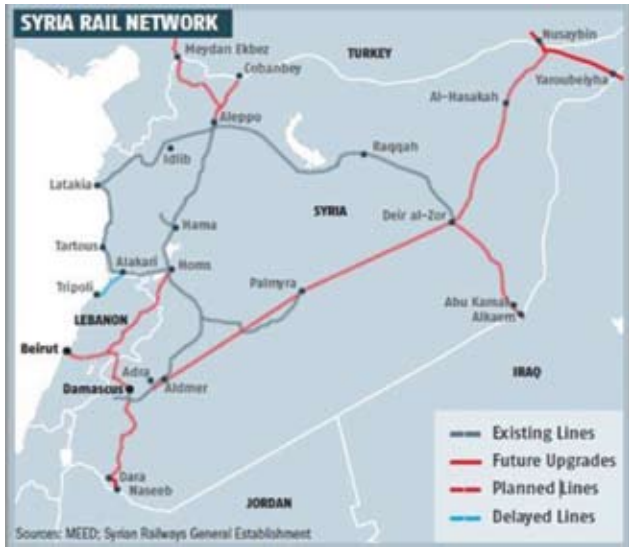
Railroad services do not exist in Palestine currently, and we can assume that they will not exist in the near future. Our recommendations, as discussed further on, suggest changing this status quo.

Syria

Chemins de Fer Syriens, the national operator of Syrian railways, operates a total track length of 2,750 km, 2,423 km of which runs on standard gauge, with the rest running on a narrow 1050 mm gauge. Figure 7 presents the railways in Syria, showing the main lines connecting Damascus with the ports of Latakia and Tartous in the north-west, and to Aleppo and Turkey in the north. Another line connects Syria to Iraq via Deir al Zor, but it is not

currently activated. The rails carry both passengers and goods on these lines. The rail is maintained at low level, and therefore their speed is limited on most of the lines. Currently, the only Syrian international railway connects Syria with Turkey, but there is a plan to revive the railway with Jordan and Iraq, subject to funding.

Figure 7 \\ Syria's Existing and Future Railways



2.2.3 Ports

Five of the forty largest container ports are located in the MENA region. These ports are Dubai Port (the largest in the world west of China), Khor Fakkan (UAE), Jeddah (Saudi Arabia), Salalah (Oman) and Port Said (Egypt). Interestingly, only one of these ports is located on the Mediterranean Sea. This fact reflects the development of the transportation especially in the GCC, and at a lower magnitude in other MENA countries. Other important ports in the region include the following:

1. Egypt – Egypt has many ports, both on the Mediterranean Sea and on the Red Sea. The largest port on the Mediterranean Sea is Port Said, followed by the Port of Alexandria and the Port of Damietta. The

largest ports on the Red Sea are Port Suez, the Port of Berenice and the Port of Safaga.

2. Iraq – Iraq has two major ports, both in the Arabian Gulf: the Port of Basrah and the Port of Umm Qasr.
3. Israel – Israel has three major ports, two of which are on the Mediterranean Sea (Ashdod and Haifa), with the third (Eilat) on the Red Sea. The ports on the Mediterranean Sea serve both Israel and Palestine for trade with Europe and American countries, whereas Eilat Port serves for trade with Asia.
4. Jordan – Jordan has only one port, on the Red Sea, in Aqaba.
5. Lebanon – The Lebanese Port of Beirut is the largest port in the country.
6. Syria has several ports on the Mediterranean Sea, the largest of which is the Port of Latakia.
7. GCC countries:
   - United Arab Emirates – Besides Dubai Port (planned to be expanded by two thirds in the next decade) and Khor Fakkan Port, a third major port at Khalifa is under construction, near the Khalifa Free Trade Zone.
   - Saudi Arabia – Saudi Arabia has several ports in the Arabian Gulf (the major ones are King Abdul Aziz Port and King Fahd Industrial Port). The major ports in western Saudi Arabia are Jeddah Port and the new King Abdullah Economic City Port that is under construction and plans to begin operations by 2013.
   - Kuwait – Kuwait has two major ports: the Shuwaik Port, which is the major commercial port, and the Port of Shuaiba, which is the main industrial port.
   - Qatar – The major port of Qatar is the Doha Port, but by 2015 it will be replaced by the New Doha Port. Two additional ports in Qatar are Umm Said Port and Ras Laffan Port.

   - Bahrain – Port Salman is the major port of Bahrain, but it is relatively small compared to other ports in the Arabian Gulf.
   - Oman – Salalah Port is the major port of Oman, and the second busiest in the Arabian Gulf (second to the Port of Dubai). Oman's second largest port is Port Sultan Qaboos.

It is worth noting that there was never a sea port in Gaza, except for the existing fishing port. The planned site of the Gaza sea port was destroyed in the second Intifada in the year 2000. In 2005, Palestinians and Israelis agreed to rebuild the site, but the seizure of control by Hamas of the Gaza Strip, followed by a naval siege enforced by Israel, has quashed these plans for the time being. For now, the Palestinians do not have any port.

2.2.4 International Airports

All countries in the region have international airports. For our purposes, we survey the most important ones:

- Egypt – There are nine international airports in Egypt. The major ones are Cairo International Airport, with capacity of about 16 million passengers a year, Aswan International Airport, and Luxor International Airport.
- Israel – Israel has one major airport, Ben Gurion Airport, which is close to Tel Aviv. It serves both Israeli and Palestinian traders, as well as some 10 million passengers a year.
- Jordan – Queen Alia International Airport that lies south of Amman is of special interest in this paper, due to its strategic location at the connection point of the Middle East and Africa, as well as its relative proximity to Europe and other countries in the region. At present, Queen Alia International Airport is responsible for approximately 97% of all international flights to and from Jordan, yet in the last few years it has failed to meet the increasing demand for flights (about 7% annually) due to capacity problems. In 2007, the World Bank and the International Finance Corporation initiated a plan to expand the airport; however, this project has not yet begun to materialize.

- Lebanon – The only international airport in Lebanon lies near the capital, Beirut.
- Palestine – There was an international airport in the Gaza Strip (Yaser Arafat Airport) that could serve large aircrafts, but since the second Intifada it is no longer in use. Another airport exists north of Jerusalem (Qalandia/Atarot Airport), which was used by Israelis for domestic flights. It is currently out of use.
- Syria – There are two international airports in Syria, the major one in Damascus, and a second one in Aleppo.

2.3 Current Institutional Framework

The countries in the region lack the institutional framework to support sustainable transport. According to 2009 United Nations report, regulations relating to the transportation sector in the Arab states as a whole "are either non-existent or not sufficiently enforced" (p. 8). Furthermore, according to a report by EURO-MED (2010a), although most of the countries in the Eastern Mediterranean have adopted a regulatory system that is close to the European one, they have not yet implemented most of the United Nations Economic Commission for Europe (UNECE) agreements that aim to enhance the transportation industry, increase traffic security and commodity, and reduce transportation costs. The absence of institutional frameworks, both on a state level and on a regional level, creates several bottlenecks that impede the Arab states from enjoying sustainable transportation that is important both for economic growth and for enhanced trade. In this section, we survey the existing institutional framework in the region.

In 1977, the Arab states signed the Transit Regulation Agreement, which aimed to facilitate the passage of goods and means of transport through their countries, as well as increase the collective ability to use their ports as an entry point for imported goods. Moreover, instead of using several customs invoices, it aimed to legalize and recognize a single customs invoice, known as the Arab Transit Invoice, and to ensure, as a general rule, that goods would not be inspected by the customs services in Arab countries as long as their seals were not tampered with. Although almost 35 years have passed since

this agreement was signed, road freight transport is still facing difficulties, which negatively affects internal trade flows between Arab countries.

It should be pointed out that Israel has not signed the Arab Transit Regulation Agreement. The poor structure of the haulage transportation sector and the fact that current agreements between Israel, Palestine, Jordan, and Egypt do not allow for free movement of vehicles from one country to the other have caused a large increase in transportation costs for all exporters and importers in these countries.

Israel and Palestine consist of similar institutional frameworks, as Israeli traffic law is implemented in Palestine as well. Moreover, licensing procedures follow almost the same regulations in the two countries, and it is worth mentioning that these laws and regulations are close to the ones applied in Europe. Nevertheless, there is a relatively wide gap between the Israeli-Palestinian institutional framework and the ones that exist in their neighboring countries. As we describe in detail below, one of our suggestions is to implement the European institutional framework in all countries of the region.

2.3.1 Current Bottlenecks

National Borders – Lack of Reforms on the National Level

Although the Arab states decided to facilitate the movement of goods and passengers between countries, the implementation of such a decision has in fact never occurred.[5] The use of a single administrative document by customs authorities throughout the region is still not as widespread as it could be. Furthermore, generally speaking, the information technology systems used at border crossing points do not support the use of modern risk management techniques. According to Muller-Jentsch (2009), it is common for goods imported through ports to wait 10-20 days for customs clearance. In other cases, it takes longer to have customs clearance than to import the goods all the way from Hong Kong. There is also clear evidence that port inefficiencies constitute major bottlenecks in maritime chains. Consequently, goods suffer long queues at borders, which may lead exports

5 For its part, Israel has closed borders with some of its neighbors, and with the others, the agreements do not enable free movement of freight and passengers.

to be less profitable. For example, in Egypt, the direct and indirect financial cost of port inefficiencies has been estimated at up to $2 billion annually. These frictions require transportation reforms on a national level.

Other Bottlenecks that Require Reforms on the Regional Level

Lack of harmonization in the transportation field on the regional level adds more frictions to the transport system. Some of the delays in border crossing are due to the lack of harmonization in products and customs. The lack of harmonization of fuels in use, traffic rules, safety tests, and other aspects that are crucial to support free movement of goods and passengers between countries are yet to be developed. The 2009 Kuwait Declaration stressed the importance of linking land, marine, and air transportation networks among Arab countries as a first step toward the harmonization of these issues on a regional level, yet the implementation of such reforms have yet to begin. Furthermore, all these reforms and declarations do not include Israel due to political reasons, which must be changed in the near future.

3. Expected Physical Situation of National Sectors

3.1 Vision and Strategic Plan

We assume that when peace initiates, there will be a free movement of goods, capital, and people across borders.[6] Consequently, the future infrastructure should be efficient, in order to facilitate the movement of goods between Israel and Palestine and the rest of the world. Efficient transportation systems require two types of infrastructure: an international physical infrastructure grid that connects all industrial and urban centers in the MENA countries; and a sound regulation and institutional infrastructure that facilitates the movement of passengers and goods between countries. In this section, we survey the plans for investment in infrastructure for different countries.

6 This does not mean, however a free movement of labor. Instead, we believe that labor will be highly immobile, as is the case in other peaceful parts of the world.

Since Israel lies on the Mediterranean, the traffic of Jordanian, Iraqi, and some Palestinian exports and imports to Europe and the Americas will have to pass through Haifa Port.[7] The following tables provide the estimates of the Israeli Ports Company for transit traffic through the Israeli ports; the assumptions upon which this table was calculated are detailed in Annex C:

Table 2 \\ Transit Traffic Potential for Israeli Ports – Exports (2005 US $ billions)

Item	2015 forecast	2030 forecast	2050 forecast
Palestine	17.6	105.7	440.5
Jordan	43.2	163	342
Iraq	3.3	20.8	122
Gulf Countries and Saudi Arabia	0	504.9	1079.5
Iran, Yemen, and Sudan	0	0	83.3
Total	**64.2**	**794.5**	**2067.3**

Source: Israeli Ports Development and Assets Ltd. (2006)

Table 3 \\ Transit Traffic Potential for Israeli Ports – Imports (2005 US $ billions)

Item	2015 forecast	2030 forecast	2050 forecast
Palestine	1.4	4.6	13.6
Jordan	1.6	6.5	12.9
Iraq	3.3	11.4	19.4
Gulf Countries and Saudi Arabia	0	20.5	41.8
Iran, Yemen, and Sudan	0	0	5
Total	**6.3**	**43.1**	**92.8**

7 Goods from the southern West Bank will be exported through the Gaza Strip.

Source: Israeli Ports Assets and Development Ltd. (2006)[8]

We also assume that when peace initiates, the flow of Muslim tourists to Israel and Palestine will be of great importance for both countries. Hence, the two countries should implement an infrastructure plan that will consist of both an international road grid between the two countries and other neighboring countries, as well as a network of railroads that will facilitate the movement of goods and people across these countries. We now turn to describe the official plans of Israel and Palestine in the context described above.

3.2 Future Infrastructure Development

3.2.1 **The Euro-Med Plan**

The European Union and Mediterranean Sea countries have developed a plan to turn their area into a free trade zone. In order to facilitate trade between all countries in the region, an analysis of the transportation infrastructure in all the concerned countries was conducted, and suggestions made to upgrade both the physical and institutional infrastructure. The following two figures display the proposed suggestions of this analysis. Figure 8 displays the proposed roads to be upgraded or paved. The pink lines represent the proposed roads within the Mediterranean countries, and the orange lines are the proposed links to other countries in Africa and the Middle East. Figure 9 provides a suggested railway grid in the Mediterranean countries. The turquoise lines represent the suggested railway grid in the Mediterranean countries, and the green lines represent links to other countries in Africa and the Middle East. In addition, the research of the Euro-Med Plan suggests harmonizing many aspects of the transportation system, since most bottlenecks in the transport chain lie in the lack of an institutional framework in Mediterranean countries as discussed above. We turn next to survey some of the transportation projects that countries in the region plan to implement in the near future.

8 The estimates in the last two tables were made at the request of Israel Ports Development and Assets Ltd. by "Haskoning" and "Economic Models Ltd."

Figure 8 \\ Proposed Roads According to the Euro-Med Plan

Figure 9 \\ Suggested Railway Grid According to the Euro-Med Plan

3.2.2 Israel

Israeli Planned Roads

According to the Israeli Ministry of Infrastructure, Israeli roads will consist of one major north-south road (Road 6) and several east-west roads. Road 6 will be extended to the north until the Lebanese border and to Be'er Sheva in the south. South-east of Haifa, another road will be constructed to reach Tiberias and the Syrian border. Road 75 will run east-west, connecting Haifa to Beit She'an and Sheikh Hussein Bridge. Other roads will connect Ashdod and Ashkelon with Be'er Sheva, as well as with Road 1, which currently connects Tel Aviv to Jerusalem.

Israeli Planned Railroads

The main objective of Israel Railways Ltd. is to enable cargo and passengers to travel easily from Israeli ports to all major parts of the country, and in the future to connect with railroads in neighboring countries. In order to do so, several projects are either planned or under construction:[9]

- A new line from Haifa to Beit She'an is under construction, and is planned to be completed by 2015. This line is important for our purposes because of its proximity to the border crossing with Jordan, and to the industrial zone of Irbid.
- A new line from Tel Aviv to Jerusalem is under construction, and is planned to be completed by 2015. This line will enable travel from Tel Aviv to Jerusalem via Ben Gurion Airport in about half an hour.
- A new line to Eilat, which will enable the transportation of cargo from Eilat Port to the country's center, or to other ports
- Expanding the line that reaches from the north to Ashkelon until the Erez Crossing Point with the Gaza Strip.
- A new line from Kiryat Gat to the Tarqumia Crossing Point, connecting the West Bank to Israel's Mediterranean ports via railroad.

9 See Figure 5 for a full view of the planned projects of Israel Railways Ltd.

In addition, Israel Railways Ltd. plans to electrify the railways and shift to electricity as the main energy resource for the trains, as is the case is in Europe. This plan, however, has been postponed due to unresolved technical problems.

Israeli Planned Ports

Israel does not plan to build another port; instead it intends to extend the ports of Ashdod and Haifa according to the cargo projections given in tables 2 and 3. These cargo projections include the possibility of moving cargo from Jordan and Iraq to Europe and the Americas, and vice versa.

Israeli Planned Airports

Ben Gurion Airport is and will continue to be the major airport in Israel. Its location, 20 km away from Tel Aviv and 40 km from Jerusalem, provides it a strategic importance concerning tourists and cargo. Israel plans to build another international airport near Beer Sheva that will be large enough to serve all-size aircrafts, but this plan is at a very preliminary stage.

3.2.3 Palestine

Palestinian Roads

Palestine plans to upgrade its road grids by constructing one north-south road and several east-west roads in the West Bank, among which are:

- A north-south road that will connect Jenin to Hebron through all major cities in the West Bank. This road will connect to the Safe Passage, and through Gaza Strip to the border with Egypt.
- A road from Tulkarem through Nablus to the border crossing with Jordan at Prince Mohammed Bridge.
- A road from Jerusalem to King Abduallah Bridge in the Jordan Valley.

Palestinian Railroads

A recent research conducted by the RAND (2005) suggests constructing a railway to connect all cities in the West Bank that will eventually continue to the Gaza Strip. The railway will be located about 8-15 km away from the city. This project, called the "Arc", provides an alternate to Road 60, and

would allow workers to commute daily from one Palestinian city to another quickly and easily.

Palestinian International Airport

The Palestinian National Authority has decided to rebuild the international airport in the Gaza Strip due to the fact that it was completely destroyed in the second intifada, and to use the Qalandia/Atarot Airport north of Jerusalem as a domestic airport. Moreover, its main priority is the construction of an international airport in the area of Albuqaia in the southern part of Nabi Mousa within the Jerusalem Governorate. A draft design of this airport has already been completed, and the airport program has already received confirmation from the International Civil Aviation Organization (ICAO). This airport will be considered the major regional airport in Palestine, and will be able to serve large aircrafts; it will also contain a cargo village with a capacity of five million tons of exported and imported goods.

3.2.4 Other Major Projects in the Middle East

In 1997, the Regional Economic and Development Working Group of the peace partners (Israel, Jordan, Palestine, Egypt) agreed on the construction of a railway network to connect Jenin to Israel through Afula in the north and Rafah to Egypt in the south. This plan has not materialized so far. Instead, there are many projects in progress, which each individual country is planning and implementing separately with no regional cooperation or planning. This sub-section surveys these projects.

According to the Euro-Med Plan (2010b), by 2013, Jordan, Syria, and Saudi Arabia will have connected their railway grids. Furthermore, a plan for a railway grid between Bulgaria, Turkey, Syria, Jordan, and Saudi Arabia on one hand, and Bulgaria, Turkey, Syria, Jordan, and Iraq on the other has already been considered, and is in the planning and financial consideration stages. Moreover, according to the Israel Ports Development and Assets Ltd. (2006), the following railroad projects in the Middle East are to be completed by 2025 and 2050:[10]

10 Annex A provides a map with these projects.

- By 2025, Saudi Arabia will connect its capital Riyadh to Jeddah, which lies by the Red Sea. By doing so, there will be a continental bridge from the Arabian Gulf to the Red Sea.
- By 2050, Saudi Arabia will construct a railroad to Aqaba, Eilat, and Port Said, thus creating a continental passage to the Mediterranean Sea.
- By 2025, Jordan plans to connect Aqaba by rail to the southern part of the Dead Sea.
- By 2025, Israel and Egypt will connect Ashdod Port and Port Said through the Port of Gaza.
- By 2050, Jordan and Iraq will connect Baghdad and Amman by railroad.

According to a 2009 United Nations report, the following projects are in various stages of development:

- A bridge between Qatar and Bahrain: this will be one of the longest suspension bridges in the world, stretching 40 km over the sea.
- In 2003, the Agreement on International Roads in the Arab Mashreq became operational, taking into priority roads that will connect Iraq, Jordan, Palestine, and the southern Mediterranean. Another road with high priority in this project is one that will connect Syria, Jordan, Saudi Arabia, and Yemen.

4. Cooperation in Physical Infrastructure

In this section, we suggest cooperation projects in investment in physical infrastructure between countries in the region (suggestions for institutional infrastructure are listed in the following section). We distinguish between projects to be implemented in the medium and long term, as the difference between them lies in the stage of development of the Palestinian economy. Since physical infrastructure in general and transportation infrastructure in particular experiences economies of scale, the Palestinian economy should develop enough in order for some of the projects to increase welfare

and contribute to economic growth.[11] We assume that the Palestinian economy will experience higher growth rates in the two decades following its independence, and therefore the long-term projects that require a higher level of development should be postponed for now.

4.1 Implementation of the Euro-Med Projects

We begin our recommendation with a strong suggestion to implement the Euro-Med projects to connect the national grids or roads and railways as shown in Figures 8 and 9. Since about 50% of trade in the Mediterranean countries is to the European Union, these projects will enable all countries in the region to reduce transportation costs, and thus increase the welfare of the citizens in the region. Due to financing problems, we suggest that the countries in the region prioritize the projects and implement them according to this prioritization. Since the Euro-Med Plan is beyond the scope of this paper, we now turn to suggest other projects that complement our vision with the Euro-Med Plan.

4.2 Medium-Term Cooperation

4.2.1 Roads

We suggest connecting the road grids of the MENA countries to facilitate the movement of passengers and goods between them. Connecting the grids will include many institutional adjustments, such as using the same signaling system. We emphasize this sort of cooperation in the next section. It is worth noting that from a physical infrastructure point of view, connecting the grids should include constructing highways from all major cities and logistical centers in each country to their border crossing points. In the next sub-section, we highlight several projects that should be implemented in Israel and Palestine in particular.

11 This is especially true for the case of a sea port in Gaza.

Roads in Israel and Palestine

In sub-section 3.2.2.1 we described the Israeli plans for an international road network. We suggest extending this plan and including Palestine in this network. In order to do so, we suggest the following:

- Construct Road 60 as an international road that will connect the West Bank in the north near Jenin to the planned international road between Haifa and Sheikh Hussein Bridge. This highway will connect to another international road in the center of the West Bank, which in turn will connect Tel Aviv and Palestine to Jordan through Allenby Bridge. Finally, Road 60 will be connected to the Safe Passage between the Gaza Strip and the West Bank south of Hebron. As part of this project, Road 60 should bypass all urban areas in the West Bank, and have intersections to all cities and major towns in the West Bank as suggested in a previous stage of the Aix Group research (2007).
- An international road should connect Israel to Egypt through the Gaza Strip; this road will connect Ashdod Port to Port Said, as well as to the Port of Gaza, once it is rebuilt. This road will also be connected to the West Bank through the Safe Passage.
- As suggested in the trade section of this research, a road for goods should be constructed to connect Egypt directly with Jordan. This road will enable countries from North Africa to export to and import from Jordan, Syria, and other countries in the Middle East more easily.

4.2.2 Railroads

Genera

Parallel to the international road network, we suggest a dramatic expansion of the railways in the countries of the MENA region, as well as the connection of the railway grids of these countries (below we also suggest constructing very fast railway grids between the countries). These railways may connect industrial zones in one country to ports in the other, and thus facilitate the import and export of raw materials and goods; they may also connect all major cities in the region and thus serve a large portion of passengers

between them. Furthermore, an efficient railway grid is a good substitute for other modes of transportation such as buses and private vehicles, and hence may reduce traffic congestion in the different countries. In order to achieve the advantages from an international railway grid, we suggest the following projects in particular:

- Connecting the grid from Turkey to Syria, and from Syria to Amman.
- Connecting the two railroads in Jordan. This project will provide a railroad from northern Jordan to Aqaba through Amman. We also suggest connecting this railroad to Saudi Arabia.
- Constructing a railroad from Amman to Baghdad.
- Constructing a railroad from Damascus to Beirut.
- Connecting Ashdod Port to Port Said through the Gaza Strip.

The three first projects will enable the movement of goods from Europe to the Middle East relatively easily, and allow exporters and importers from the Arabian Gulf to reduce transportation costs by moving their goods by land to and from the Mediterranean Sea. The last two projects will reduce transportation costs as well, as they will enhance competitiveness between the Israeli, Lebanese, Egyptian, and Palestinian ports.

It is worth noting that both Israel and Jordan plan to construct a railroad from the Red Sea to the Dead Sea. We believe that constructing two rails between the two seas is redundant. Instead, we suggest that only one railroad should be constructed, connected by the Israeli railroad to Ashdod Port.

Creating a High-Speed Railway Grid

As part of connecting the railway grids between all countries in the region, we suggest constructing a high-speed railway grid. Construction of this type of railway usually results in a lower total cost. Furthermore, the traveling time in this type of train is much shorter, since its average speed is about 200-300 km per hour, and hence passengers are willing to pay more for this type of ride. We suggest constructing high-speed trains between all major cities in the region, with an emphasis on tourist sites. This will attract more tourists to visit the region as a whole, as transportation costs will be lower.

4.2.3 Transforming Queen Alia International Airport into a Regional Hub

Due to Jordan's strategic location that connects the Arabian Gulf with Europe, Africa, and the Mediterranean Sea, we suggest transforming Jordan's international airport into a regional hub. The advantages of such a hub are well known, among them an increase in the efficiency of flight services, and an increase in the frequency of flights. Transforming Queen Alia International Airport will require expanding the airport in order to be able to serve some 13 million passengers a year, about three times its current capacity.[12]

4.2.4 Ports

The only marine gateway Palestine has is the Mediterranean shore in the Gaza Strip. There has never been a port in Gaza other than the small fishing port. Moreover, there has been an initiative to build a deep water port in the past, and the funds have already been provided, however, due to political reasons this project has been delayed and hence we suggest this idea be implemented in the long term.

As a substitute, we suggest that Israel allocate an area in Ashdod Port that will serve as a Palestinian port. This port will be under Palestinian supervision alone, and will include all necessary portal services, such as uploading and downloading platforms, open and closed storage areas, access to the transportation routes, cranes and docks. We should emphasize at this point that this part of Ashdod Port will be Palestinian in all aspects, and will have to meet international standards, including security. This part of the port will be Palestinian until the Palestinian economy is developed enough to justify the construction of a deep water port in Gaza.[13]

12 This project was already approved by the World Bank in 2007. For more details see www.ifc.org.

13 The shore of Gaza suffers from a sedimentation problem from the Nile Valley. This problem might make the port of Gaza economically unfeasible. There are several possible solutions, such as constructing a "floating tongue" by the shores of Gaza.

4.3 Long-Term Cooperation

4.3.1 The Port of Gaza

After the Palestinian economy is developed, we suggest constructing a deep water port in Gaza that will be connected by railroad to Egypt and Israel. Accompanied by the appropriate continental transportation infrastructure, such a port will add to the competitiveness in the area, and therefore will reduce trade costs and increase the welfare of the citizens in both countries.

5. Institutional Infrastructure and Standardization

The projects suggested above are of great importance in reducing trade and transportation costs, and thus increasing the welfare of the citizens in the surrounding countries. However, without the institutional infrastructure, the benefits of these projects will be significantly lower. If, for example, shipments of goods experience large queues at the border crossing points, the transportation costs will not decline as much as they could. In fact, according to the Global Economic Forecast Report (as quoted by Euro-Med, 2010), each extra day spent at customs or ports increases total costs by 0.8%. Hence, facilitating the movement of goods through an institutional infrastructure would enhance trade dramatically. The institutional infrastructure should first and foremost facilitate the movement of passengers and goods between the countries. Furthermore, it should enhance competitiveness between similar sectors in different countries. We suggest that the steps towards facilitating the movement of goods and passengers in the region will include harmonization in standardization in all aspects of transportation, such as roads, fuels, railroads, security measures at the ports, and other aspects that are necessary for the projects to fulfill their economic potential. Due to the proximity of the region to Europe, we suggest implementing European standards of transportation, as described by EuroMed (2010a and 2010b). This standardization system has been adopted partially by most of the countries in the region, and has been used as a benchmark for Asian countries as well. Hence, adopting the European agreements would also enhance trade with Asia.

5.1 Removing Bottlenecks According to Euro-Med

5.1.1 Harmonization in Roads

Israel and Palestine should apply the same standardization in international roads as suggested above (sub-section 4.1.1). The standardization should comprise all aspects of the road, including constructing materials, road signs, traffic laws, and guardrails.[14] Since the roads suggested are international, we suggest the standardization be coordinated with the neighboring countries.

We also suggest that the MENA countries implement the UNECE agreements as detailed in Euro-Med (2010a). The UNECE agreements are used as a benchmark for Asian countries too, and thus will allow countries in the eastern Middle East to connect to Asia relatively easily. By implementing these agreements, the countries will be able to harmonize technical and institutional parameters, thus cutting costs for international road transport. The use of standardized documents and institutional frameworks will reduce border waiting time, and will allow road haulage firms to operate internationally, thereby reducing costs for the economy at large. It is expected that, once trucking companies in different countries operate on an equal footing, competition between firms from various countries will set in, and thus transport costs will decrease and the level of service will increase.

5.1.2 Harmonization of Border Crossing Points

As discussed in sub-section 2.4.1.1, many of the obstacles for the free movement of goods and services lie in the border crossing. Parallel to the suggestion raised in the trade chapter of this research, and in connection to the Euro-Med Free Trade Area, we suggest that once there is a free trade area in the region or one customs envelope to the region, border crossing will be dramatically facilitated. This requires many reforms, including, among many others:

14 As discussed above, Israel and Palestine already use similar traffic signs written both in Arabic, English and Hebrew

- Introducing a harmonized information technology system in each country that will reduce the number of inspections at each border crossing.
- Enforcement and harmonization of a regional customs invoice for all countries in the region.
- Facilitation of the movement of goods that are sealed and not damaged without inspection.

5.1.3 Harmonization in the Railroad Network

We suggest that the countries use the same gauge. The gauge in Israel and many other countries in the region is the standard gauge of 1435 mm. Jordan railways (and some lines in Syria) are the only railways that have a narrow gauge of 1055 mm. Jordan plans to replace it to the standard 1435 mm gauge until 2013. We suggest that the railroads in Palestine use the same gauge.

In this context, it is worth noting that Israel plans to change its freight car standardization to fit double-stack rail cars. We suggest that countries that will have commercial relations with Israel on a large scale (e.g. Palestine and Jordan) adopt the same standardization.

In addition, we suggest that the all the countries in the region use the same signaling system in the railroad network, in accordance with the European signaling system. Since Israel already has a railroad grid, we suggest that the Palestinian railroad grid use the same signals. All the aforementioned steps will enhance the interoperability of rail transport between all countries in the region.

5.2 Construction of a Council of Ministries of Transportation in the Region

Similar to the European Union, we suggest establishing an inter-governmental organization, in which ministers of transportation from the MENA countries could meet and promote the facilitation of transport between them. In particular, we suggest adopting the European Conference of Ministers of Transport (ECMT), an organization whose main role consists of helping

create an economically and technically efficient integrated transport system, which meets the highest possible safety and environmental standards and takes full account of the social dimension. Such an organization in the MENA countries could set the targets and priorities of the transport sector, and accelerate the intra-regional transport of goods and passengers. It is worth noting that a regional council of ministries of transportation will be able to conduct thorough research concerning optimal transportation cooperation in the region – research that is beyond the scope of this paper.

5.3 Ports Reorganization

Due to the inefficiencies in the ports as discussed in sub-section 2.4, we suggest liberalizing the ports in the region and shifting their regulatory and institutional structure to ones that have proved successful in the rest of the world, namely the “landlord port” for larger ports and the “tool port” for smaller ports. The “landlord port” model involves three institutional layers: a governmental agency that defines sector policy; port authorities that are in charge of regulation; and private companies that compete in the provision of port services. The "landlord port" model is becoming the norm in the EU, with 88 of the 100 largest ports in the world already adopting this operating structure. The “tool port” model is one in which the port authority owns the equipment and rents it to private operators. We suggest that some of the major ports in the region (Port Said in Egypt; major GCC ports; Ashdod Port in Israel; Latakia Port in Syria; Aqaba Port in Jordan, and several more) adopt the "landlord port" model, whereas smaller ports (the future Port of Gaza, Lebanese ports, and others) adopt the “tool port” model.

5.4 Enhancement of Competitiveness of Haulage Transportation Sectors in the MENA Region

In sub-section 2.2.2, we argued that the haulage transportation sector is competitive only in the first segment of haulage services, but is not well developed in the second, more sophisticated segment of these services. We also argued that the sector lacks the capital structure that enables international transportation to be competitive in the MENA countries. We suggest that

the countries enhance the competitiveness in this sector by harmonizing the standard of equipment, personnel, and cabotage services. This will enable a reduction in transportation costs, and an increase in the quality of services provided by the firms involved in this sector. Since in some countries this sector has not yet reached the level of international competitiveness (e.g., Egypt), we suggest the following:

- Each country should analyze the sector – its capabilities, its structure, and the capital structure of the firms' ownership.
- The countries should cooperate between themselves and with EuroMed experts in order to provide the necessary know-how information flow to the less competitive countries.
- The countries should support the evolution of the sector to become competitive on the regional level.

5.5 Technology Harmonization

5.5.1 New Technologies for Vehicles

We suggest that the countries adopt new technologies for vehicles such as those run by electricity and compressed natural gas (CNG). The economic advantages of these technologies are tremendous, especially when environmental aspects are taken into account.[15] CNG is relatively clean, and adopting it as a substitute for gasoline will improve the welfare of the citizens in both countries. Since Israel and Palestine, as well as Egypt, have resources of natural gas, this adoption should be relatively cheap.

As with CNG, electricity is much cleaner an energy resource than gasoline, and in addition, cars that run on electricity are more silent, hence the environmental advantage of adopting this technology is higher than the case of natural gas. For now, Israel is preparing itself for the adoption of electric

15 In fact, the cost of pollution of petrol vehicles is estimated at 0.38-2.43% of Israeli GDP. For more details, see Israeli Ministry of Transportation, 2008. As we show in the Energy Cooperation chapter, since Israel plans to produce electricity mainly by gas, the emission of gases will decline dramatically along with the shift to electric cars.

cars. There is still no import of electric cars, but a prototype based on Renault cars is already under inspection. Furthermore, charging points for electric cars are widespread in urban areas. We suggest Palestine do the same.

5.5.2 Technology Standardization of Vehicles

Since we assume free movement of people between the countries, we suggest that the countries in the region share a common standard of fuels for vehicles. That is, cars in different countries should use the same octane.

As discussed above, we also suggest that Israel and Palestine both countries and their neighboring countries adopt CNG as a substitute for gasoline, and have gas stations for CNG. Since the discovery of natural gas in the shores of Israel and Palestine is relatively new, we suggest the two countries adopt the same standard as used in other countries.

We also suggest that the countries adopt the same standardization in all aspects of air pollution caused by vehicles. This suggestion is discussed in further detail in the chapter concerning the environment.

A new technology that the countries in the region should adopt and for which they should have a common standardization is electric cars. We suggest that all the countries in the region adopt the same standardization of electric cars regarding battery sizes, voltage, and charging points.

We also suggest that all countries in the region adopt the Euro-5 emission standards. These standards pose strict requirements on nitrogen oxides and particular matter emissions that pose serious health and environmental problems. These standards were accepted by the European Union in the last decade, and we suggest adopting the same standards in the region, both for improving the welfare of the citizens in the region, and also as a preliminary step towards the free movement of vehicles between Europe and the MENA region.

6. Conclusions

In this paper, we sketched an outline for cooperation in the field of transportation for the MENA region. We suggested connecting the road and railroad grids of the countries in the medium term, and constructing a railroad in Palestine in the long term. We also suggested the construction a deep water port in Gaza in the long term, and the allocation of a part of Ashdod Port to Palestine as an alternative port until the Palestinian economy is developed enough to justify the deep water port in Gaza. In addition, we suggest implementing the EURO-MED suggestions, and transforming Amman International Airport into a regional hub. The infrastructure for transportation described above is crucial for the countries to enjoy accelerated economic growth and prosperity, but it is not sufficient. In order to reduce the transportation costs efficiently, the countries must first and foremost cooperate in standardization and other institutional infrastructure methods. We suggest adapting European standards in order to facilitate the movement of passengers and goods not only within the MENA region, but also between the region and Europe and Asia. In order to enjoy some of the benefits described above, these methods should be implemented as soon as possible, as they do not require high level of cooperation between the countries.

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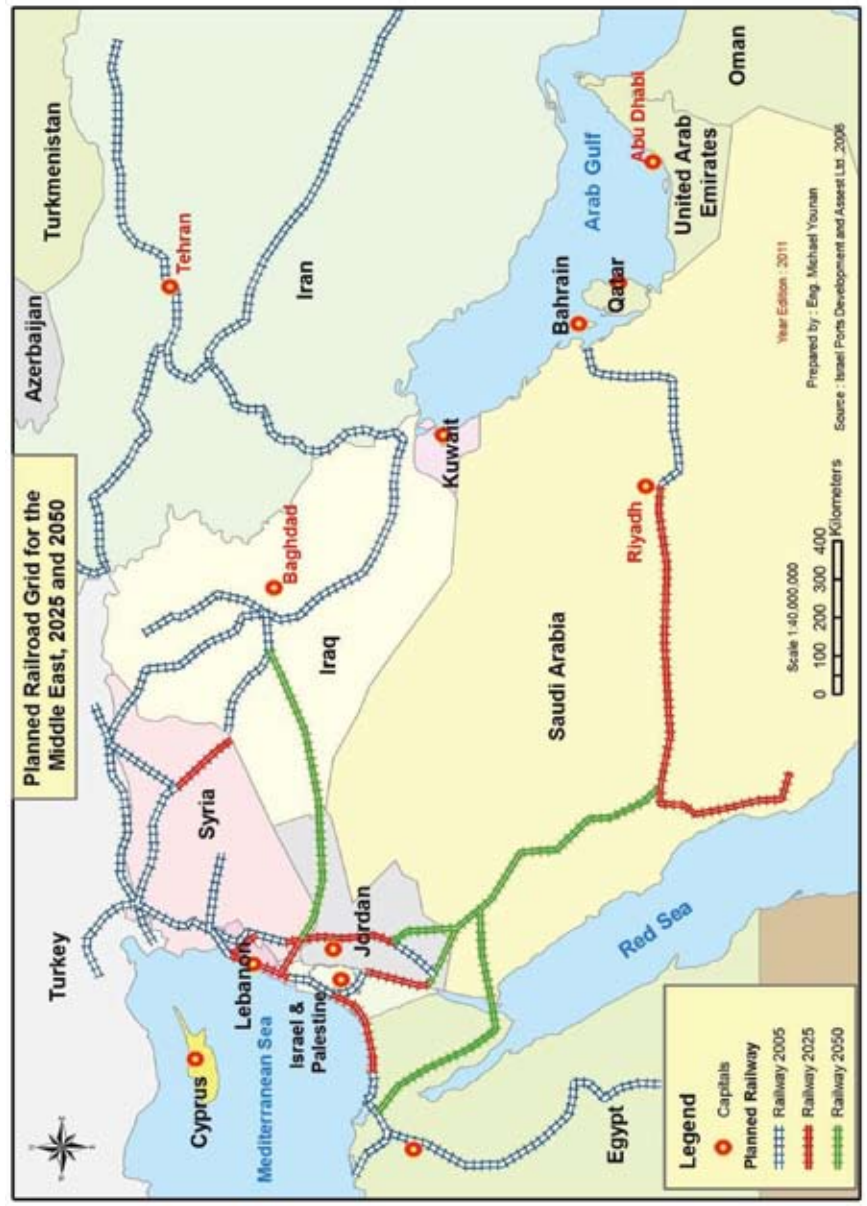
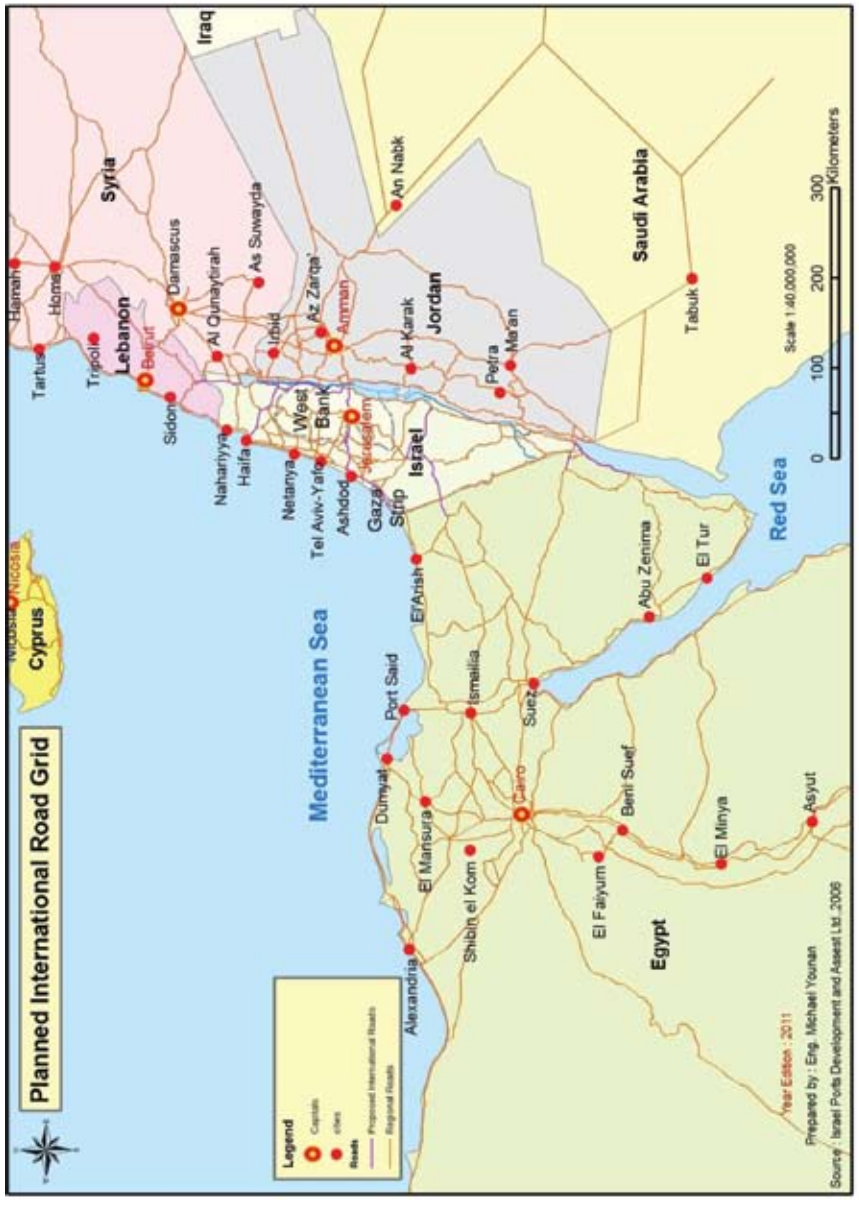
Appendix

Annex A – Planned Railroad Grid for the Middle East, 2025 and 2050



Source: Israel Ports Development and Assets (2006)

Annex B – Planned International Road Grid



Source: Israel Ports Development and Assets Ltd., 2006.

Annex C - Key Assumptions for Forecasting the Transit Cargo Projections

1. In the long term (2030 and on), economic relations with all Muslim and Arab countries will normalize. In the medium term, however, relations will normalize only with Palestine.
2. The population in Jordan, Iraq, and Palestine is projected to grow to 85 million by 2050, whereas the population of the rich Gulf Countries and Saudi Arabia is projected to grow to 70 million by 2050. The total population of relevant countries is projected to become 400 million by 2050.
3. The growth rate of GDP in the aforementioned countries is expected to remain high.

Regional Cooperation in Energy

Michael Younan & Eitan Popper

Contents

Executive Summary

This study aims at drafting an outline for cross-border cooperation in the energy sector. Cross-border energy cooperation between Israel, Palestine, and their neighboring countries has the potential to convey substantial economic, environmental, and political benefits to the entire region. Economic benefits may be achieved by reducing the consumption of costly imported fuels, optimizing the use of existing infrastructure, avoiding redundant reserve capacity, increasing energy security, and taking full advantage of the resources available in the region. Environmental benefits may be attained through the increased use of natural gas, and the implementation of renewable energy, made possible through cooperation. The recent gas discoveries in the East Mediterranean basin, as well as the development and availability of advanced renewable energy technologies, provide great opportunities for regional cooperation between these countries.

In the present study we analyze the current demand and supply of energy in the region, the resulting economic effect, and consequently the potential for the implementation of positive change. Subsequently we present specific energy profiles for each of the relevant countries, and finally, we propose specific energy cooperation project initiatives.

We focus mostly in the power and natural gas segments. Moreover, we emphasize the importance of energy security through fuel and source diversification. In this respect, cooperation is considered crucial. The scope of the study is limited to energy cooperation between Egypt, Israel, Jordan, Lebanon, Palestine, and Syria, as these countries have a common border with Palestine and/or with Israel.

Ultimately, the study shows the value and contribution of energy cooperation projects for the region. Jordan's replacement of liquid fuels made possible through the import of Egyptian natural gas, Israel's access to more than one gas supplier, and Lebanon's interconnection to Syria are real and lucid examples of the significance and implication of cross-border energy cooperation as well as of the need for its further implementation in the region.

The culmination of the Arab Peace Initiative will allow for the broad implementation of energy cooperation projects between Palestine, Israel, and the adjacent countries.

The economic benefits resulting from such energy cooperation could add up to more than US$ 1.0 billion per year for the region, and would enable further economic growth while gradually building regional stability and prosperity.

1. Introduction

Cross-border energy cooperation between Israel, Palestine, and their neighboring countries has the potential to convey substantial economic, environmental, and political benefits to the entire region. Economic benefits may be achieved by reducing the consumption of costly imported fuels, optimizing the use of existing infrastructure, avoiding redundant reserve capacity, increasing energy security, and taking full advantage of the resources available in the region. Environmental benefits may be attained through the increased use of natural gas, which will in turn generate lower emissions than other fossil fuels. Moreover, the implementation of regional cooperation in renewable energy will increase overall competitiveness in terms of cost. Politically, cross-border energy projects create true economic and strategic dependency, contributing considerably to regional stability. Such projects may build, strengthen, and maintain peace.

The recent gas discoveries in the East Mediterranean basin, as well as the development and availability of advanced renewable energy technologies, provide great opportunities for regional cooperation between these countries, and so in this study we aim at drafting an outline for cooperation in the energy sector. The fact that some of the countries in the region have scarce natural energy resources, and consequently resort to the import of costly and environmentally detrimental fuels, further strengthens the case for energy cooperation.

Energy demand in the region is rapidly growing, and is expected to grow further at a higher rate in the next few years, particularly in Palestine, due to immigration and economic development. Natural gas, renewable energy, and the efficient use of infrastructure may play a major role in addressing this increasing demand effectively and in a cost-competitive manner.

In view of the above, we focus on specific regional cooperation opportunities, mostly in the power and natural gas segments. Moreover, we emphasize the importance of energy security through fuel and source diversification. In this respect, cooperation is considered a key issue concerning these matters. We also stress the importance and potential of renewable energy in the region, and point out the region's relative advantage, particularly for solar

energy. It should be noted that in this study, we do not address the issue of transporting fuels.

The scope of this study is limited to energy cooperation between Egypt, Israel, Jordan, Lebanon, Palestine, and Syria, as these countries have a common border with Palestine and/or with Israel. Although cooperation could obviously go beyond these countries to potentially include countries such as Iraq, Saudi Arabia, the Gulf States, and additional North African countries, we currently focus on these countries alone for practical reasons. When considering feasible cooperation in natural gas and power infrastructure, proximity is a major factor, as distance translates into increased cost and energy losses. Therefore, it is reasonable to expect cooperation between these countries to take place before cooperation with the more distant ones. Additionally, cooperation between Israel, Palestine, and the adjacent countries will probably serve as a cornerstone and important precedent to future cooperation involving the more distant countries.

The present study is structured as follows: in Section 2, we analyze the current demand and supply of energy in the region, the resulting economic effect, and consequently the potential for the implementation of positive change. Subsequently we present specific energy profiles for each of the relevant countries. Section 3 includes summarized analyses of each country's energy profile. In Section 4, we propose specific energy cooperation project initiatives. In Section 5, we briefly enumerate some of the key conditions for and barriers to cooperation. Finally, in Section 6, we present our conclusions.

2. Current Status

In this section, we present the current energy demand and supply figures for Egypt, Israel, Jordan, Lebanon, Palestine, and Syria. Subsequently, we provide an overview of each country's energy profile, focusing particularly on natural gas and power.

2.1 Primary Energy

2.1.1 Energy Production, Consumption, Surplus, and Shortage

The following three tables[1] present the production, consumption, and surplus/shortage of primary energy resources in Egypt, Israel, Jordan, Lebanon, Palestine, and Syria for 2009[2]. For most of the countries, consumption is greater than production, i.e., energy resources – mainly fossil fuels – are being imported. In fact, all the countries are short of oil, none of them have domestic coal resources, and only some of them have sufficient natural gas.

Table 1 \\ Primary Energy Production (2009)

Country	Crude Oil (Thousands Barrel per day)	Natural Gas (Billion Cubic Feet)	Coal (Thousand Metric Tons)
Egypt	678	2,214	29
Israel	4	55	0
Jordan	0	9	0
Lebanon	0	0	0
Palestine	0	0	0
Syria	400	219	0

1 Source: Energy Information Administration, International Energy Annual 2006, http://www.eia.doe.gov/

2 We assume that 2009 figures may be regarded as sufficiently representative.

Table 2 \\ Primary Energy Consumption (2009)

Country	Crude Oil (Thousands Barrel per day)	Natural Gas (Billion Cubic Feet)	Coal (Thousand Metric Tons)
Egypt	716	1,567	1,536
Israel	235	115	15,361
Jordan	96	109	0
Lebanon	98	0	132
Palestine	24	0	0
Syria	283	251	4

Table 3: \\ Surplus or shortage for each country (2009)

Country	Crude Oil (Thousands Barrel per day)	Natural Gas (Billion Cubic Feet)	Coal (Thousand Metric Tons)
Egypt	(38)	647	(1,507)
Israel	(231)	(60)	(15,361)
Jordan	(96)	(101)	0
Lebanon	(98)	0	(132)
Palestine	(24)	0	0
Syria	117	(32)	(4)

2.1.2 Economic Effect

Based on the above surplus and shortage figures, we may analyze the resulting economic effect for each of the countries. For such a purpose, we have straightforwardly assumed that energy surplus represents export-derived revenues for the country, while a shortage implies costs incurred due to import. Our analysis is indicative only, and does not include a case-by-case cost-benefit evaluation of import vs. domestic production. Although in particular cases import may be advantageous to domestic production, our underlying assumption is that local production is economically preferable when compared to import. Beyond the economic advantages of a positive export-import balance, the benefits of energy security are evident. Lastly, it must be noted that throughout this study, we also assume that the farther the origin of the imported fuel, the costlier it is for the importing country.

For our analysis, we have employed indicative energy commodity price references, which represent no price dynamics over time or price trends whatsoever. For this reason, the economic effect figures should be regarded as representing an order of magnitude of the benefits and/or the costs in a qualitative manner. We have assumed an oil price of US$ 76.5 per barrel[3]; a natural gas[4] price of US$ 5 per MCF[5] (or per MMBTU), and a coal price of US$ 62.5 per ton[6].

Table 4 \\ Economic Effect of the Energy Balance (US$ Million)

Country	Economic Effect of Oil	Economic Effect of Natural Gas	Economic Effect of Coal	Total Economic Effect
Egypt	(1,052.63)	3,234.85	(94.18)	2088.04
Israel	(6,449.29)	(300)	(960.04)	(7709.33)
Jordan	(2,678.11)	(503.24)	0	(3181.35)
Lebanon	(2,736.41)	0	(8.27)	(2,744.68)
Palestine	(670.14)	0	0	(670.14)
Syria	3,263. 41	(160.68)	(0.28)	3,102.45
Total	**(10,323.17)**	**2,270.93**	**(1,062.77)**	**(9,115.01)**

As may be observed in the table above, Egypt and Syria are the only countries in which the net effect from energy production and consumption is positive. Both of these countries have proven oil and gas reserves, as shall be discussed below. The economic effect on Israel is the most significant in absolute terms, followed by Jordan, Lebanon, and Palestine. Israel's relatively high economic effect results from the country's high consumption per capita and

3 Based on the statistics of the Energy Information Administration (Weekly All Countries Spot Price FOB), the average price of production for the year 2010 until June 4, 2010

4 http://oilprice.com/Energy/Gas-Prices/Gas-Producers-Go-to-the-Dark-Side.html

5 MCF for 1,000 cubic feet (M denotes mil, thousand)

6 http://www.investis.com/bp_acc_ia/stat_review_06/htdocs/reports/report_22.html

considerable dependence on imports. The relation between GDP per capita and energy consumption is discussed in subsection 2.1.4 below.

Notwithstanding Egypt and Syria's net positive effect, the region's aggregate economic effect is negative, and amounts to more than US$ 9 billion per year. The largest negative economic effect is attributed to petroleum and petroleum products, which are by and large imported from out of the region. These products are mainly used as transportation fuels in all of the above countries, as well as in the power and industrial sectors in countries where there is limited or no access to natural gas.

It is important to note that in the case of natural gas, the region's total economic effect is positive. This does not include the expected production and supply from recently discovered gas reserves in Israeli waters. As these reserves gradually become operational, the positive economic effect for the region will grow.

In addition, given that natural gas has a typically lower price per caloric unit when compared to liquid petroleum fuels, the replacement of the liquid fuels currently employed in the power and industrial sectors by natural gas available in the region will further reduce the negative economic effect. Such fuel replacement will also generate positive indirect economic effects, such as environmental and public health benefits.

2.1.3 Proven Reserves

The following table presents proven oil and gas reserve figures in the aforementioned countries. None of the countries have coal reserves. As shown in the table, Israel and Egypt have significant proven gas reserves; Palestine and Syria have gas as well, although in lower quantities; and lastly, Syria and Egypt have proven oil reserves too.

Table 5 \\ Proven Oil and Natural Gas Reserves, 2010

Country	Oil (trillion Barrels)	Natural Gas (BCM)
Egypt	3.7	1,671*
Israel	0	700
Jordan	0	0
Lebanon	0	0
Palestine	0	40
Syria	2.5	255

*As of January of 2011, proven natural gas reserves have been estimated at 2186 BCM
Source: EIA data

2.1.4 The Energy-GDP per Capita Relation

The following table shows the real GDP per capita in the six countries during 2008 (in constant 2005 US$ values), the total demand for energy (in quadrillion Btu), and the energy consumption per capita. As expected, the higher the GDP per capita, the greater the energy consumption per capita. Our energy forecast is based on this direct/positive correlation between energy and GDP per capita.

Table 6 \\ Population, Real GDP per Capita and Energy per Capita

Country	Population (millions)	Real GDP (million 2005 $)	Real GDP per Capita (2005 $)	Energy per Capita (billion BTU)
Egypt	77.27	145,591.92	1,785.81	41.02
Israel	7.11	161,040.45	22,033.77	120.86
Jordan	6.13	14,523.64	2,498.91	49.75
Lebanon	3.97	24,572.75	5,859.36	51.52
Palestine	*4.05	*4,559.50	*1,387.20	14.41
Syria	21.33	27,369.93	1,329.85	39.21

Source: EIA data and *PCBS

Palestine's low energy consumption per capita represents its unique high growth potential.

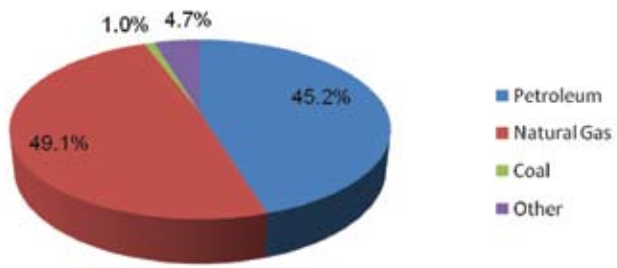
2.2 Country Energy Profiles

In this subsection, we have included an energy profile for each country. For this purpose, we encountered some difficulty when trying to obtain official, compatible, and up-to-date energy data. As a result, in some cases we have been obliged to employ data from various sources, which in some cases refer to different years. This limitation has been contemplated in our analysis, and has been somewhat balanced by our acquaintance with the regional energy market.

2.2.1 Egypt

Egypt is a significant oil and gas producer, with proven reserves of 3.7 billion barrels of oil (about 0.3% of world reserves), and approximately 1700 BCM of natural gas (roughly 1% of total proven reserves of natural gas in the world).[7] Egypt's energy requirements are fulfilled mainly by natural gas and petroleum products. The country's main energy consuming sectors are transportation (28%), industry (34%), and residential (20%).

Figure 1 \\ Egypt Primary Energy Consumption by Source - 2008



Source: EIA statistics and authors' calculations

7 By 2005

Egypt's Natural Gas Sector

Egypt is the largest producer, consumer, and exporter of natural gas in the region (among the six adjacent countries being considered). The country's total proven reserves are geographically distributed as follows: the Mediterranean Sea region holds 76%, followed by the Western Desert with 11%, the Gulf of Suez and the Sinai with 7%, and the Nile Delta with 6%.

During 2009, Egypt's total natural gas production reached 62.6 BCM, while domestic consumption reached 44.5 BCM.

Egypt began exporting natural gas in the mid 2000s, with the completion of the first phase of the Arab Gas Pipeline in 2004, and the inauguration of the Damietta Liquefied Natural Gas (LNG) project in 2005. In 2008, a third export venue was opened, as the East Mediterranean Gas (EMG) pipeline project was completed, connecting the Egyptian gas transportation system branch in Al Arish with the Israeli system in Ashkelon.

During 2009, total gas exports amounted to 18.4 BCM, out of which approximately 70% was exported as LNG, and the remaining 30% via pipeline. Egyptian gas exported via pipeline was supplied mainly to Jordan, Israel, and Syria, while limited quantities were also delivered to Lebanon:

Table 7 \\ Gas Exported via Pipeline

Destination Market	Estimated Quantity* (BCM/Year)	Pipeline
Jordan	3.42	Arab Gas Pipeline
Israel	1.90	EMG Pipeline
Syria	0.14	Arab Gas Pipeline
Lebanon	Limited quantities	Arab Gas Pipeline

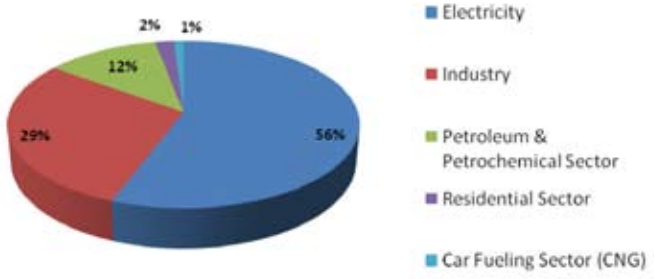
*Estimated figures.

Egypt has two export LNG facilities: the Segas-LNG plant located in Damietta, and the Egypt-LNG facility in Idku. The combined LNG production/export capacity is close to 17 BCM per year. During 2009, LNG exports totaled approximately 12.75 BCM. The largest market for Egyptian LNG during

2009 was the United States, which imported around 4.5 BCM, representing about 35% percent of the country's LNG exports. Other major destinations for Egyptian LNG included Spain with 32%, France with 13%, and smaller volume destinations such as Canada, Mexico, Asia, and other European countries.

During 2009, the electricity sector accounted for the largest share of domestic natural gas consumption, followed by the industrial sector

Figure 2 \\ Natural Gas Consumption by Sector (2009)

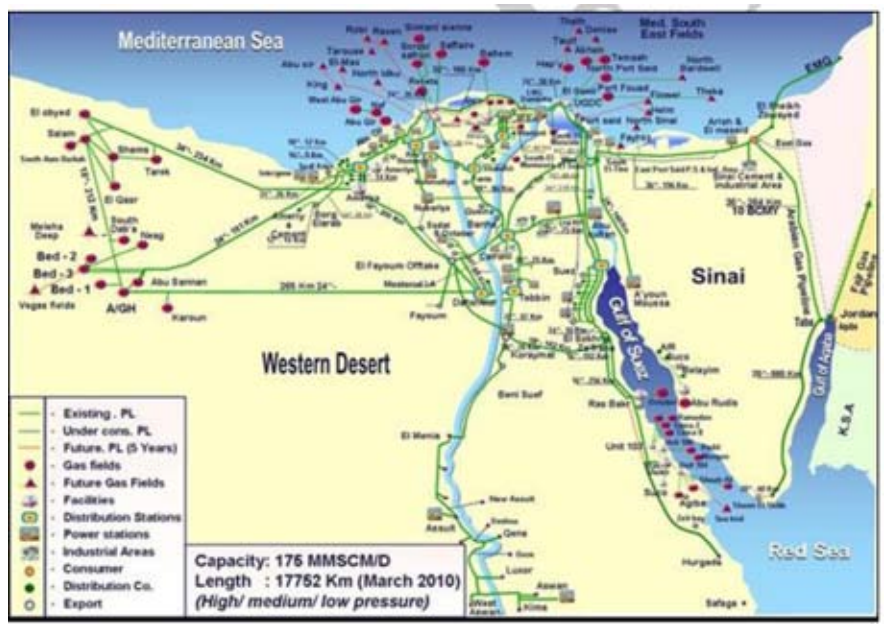


The Government of Egypt aims to expand the utilization of natural gas and displace imported liquid fuels such as diesel and liquefied petroleum gas (LPG) in the industrial, residential, and transportation sectors. As of 2009, the number of registered natural gas consumers nationwide was more than 3.3 million. Furthermore, Egypt is the only market in the region that has supported and adopted the use of compressed natural gas (CNG) in vehicles. As of 2009, there were more than 110,000 natural gas vehicles in the country.

The Egyptian government has an ongoing policy to allocate one third of proven natural gas reserves for domestic market requirements, one third for future generations, and the remaining third for exports. Given the increasing domestic demand, there has been growing popular pressure in recent years against LNG and gas export contracts, particularly, but not limited to, the export of gas to Israel.

Egypt boasts the most developed natural gas market and infrastructure in the region. The following figure displays the Egyptian national gas transmission system, gas production sites, regional distribution systems, and export pipelines:

Figure 3 \\ Gas Distribution Systems



Egypt's Power Sector

Egypt's power sector is organized under the Egyptian Electricity Holding Company (EEHC), which comprises 16 affiliated companies: six production companies, nine distribution companies, and the Egyptian Electricity Transmission Company. The country has several privately-owned power plants which are either independent power projects (IPPs) or financed under Build, Own, Operate, and Transfer (BOOT) schemes.

Egypt's power sector figures are displayed in the table below:

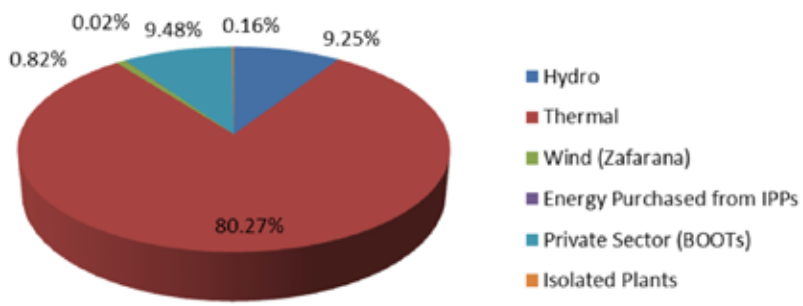
Table 8 \\ Egypt's Electricity Sector – Key Figures

	2009/2010*
Peak Load (MW)	22,750
Available Capacity (MW)	24,726
Generated Power (GWh)	139,000
Consumed Power (GWh)	120,180
Exported Power (GWh)	1,118
Imported Power (GWh)	183

*The data refers to Fiscal Year 2009/2010 as reported by EEHC

The following chart shows the country's generated power by Technology[8,9,10]

Figure 4 \\ Power Generation by Technology - 2009/2010



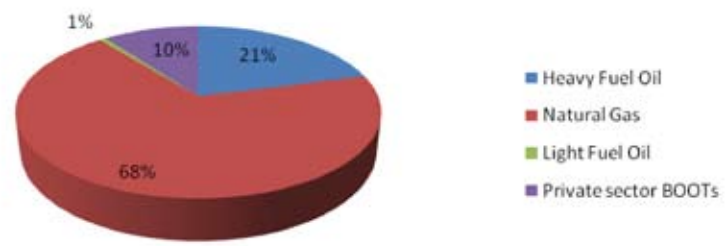
8 Generated wind power refers to wind projects that are connected to the grid only.

9 IPP category refers to power purchased from industrial plants' independent generation facilities, consisting of: Petrochemical (17.5 GWh), Carbon Black (3.8 GWh), and Medallek Ghazl El-mahaala and Talkha Fertilizer (4.7 GWh).

10 There are 33 isolated power plants (mainly diesel and gas turbine units) and a single 5MW wind farm in Hurgeda, installed in remote areas and connected to their distribution networks. There is a total installed capacity of 250 MW of isolated plants.

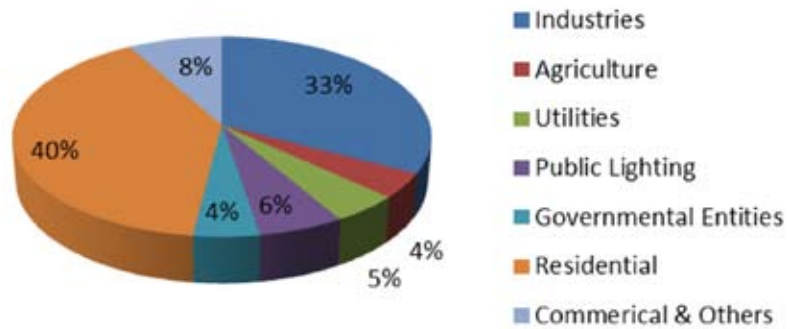
As may be observed in the chart below, most of the thermal power generation capacity is based on natural gas.

Figure 5 \\ Consumption of Fuels in Thermal Power Generation - 2009/2010



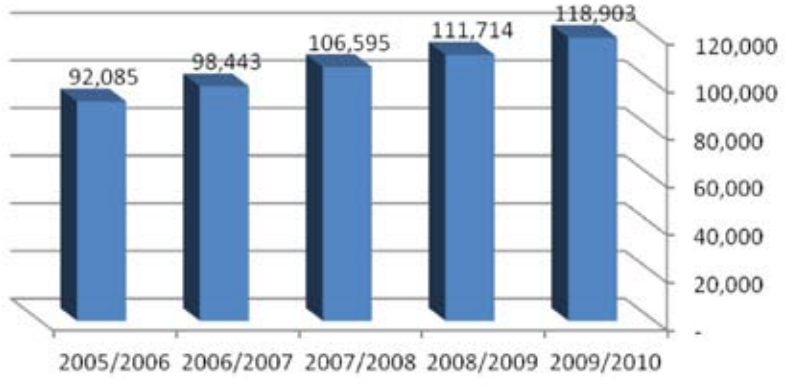
Egypt's power consumption by sector for the fiscal year 2009/2010 is displayed in the following chart.

Figure 6 \\ Power Consumption by Sector - 2009/2010



During the last five years, power consumption in Egypt has grown at an average yearly rate of almost 7%.

Figure 7 \\ Power Consumption 2005-2010 (GWh)



In order to meet the country's growing demand, the Ministry of Electricity and Energy and the EEHC elaborate and implement five-year development plans.

The sixth five-year plan (2007-2012) includes the implementation of 7750 MW of thermal power projects, consisting of 3750 MW of combined cycle units and 4000 MW steam units. Due to the increasing demand and the delay in the completion of two major projects currently being developed as part of this plan, a fast-track program has been implemented adding 1500 MW of generation capacity before the summer of 2011. The fast-track program includes an additional 1000 MW of gas turbines to be commissioned before the end of summer 2012.

The seventh five-year plan (2012-2017) includes the implementation of 12,400 MW of thermal power projects. The plan contemplates private sector participation to include four major conventional power plants with a total capacity of 6150MW, developed on a build, own, and operate (BOO) basis. In addition, EEHC has already issued a BOO invitation to develop a large combined cycle power plant with an installed capacity of 3x750 MW, scheduled to be commissioned in 2013.

As to renewable energy, the Egyptian Government has issued a resolution for an ambitious plan aiming at increasing the contribution of renewable energy to 20% of total generated power by 2020. As hydro power contributes about 8%, the plan contemplates the remaining 12% to be sourced from wind power and other renewable resources. The target is expected to be met by scaling up-wind power capacity to 7200 MW by 2020. Consequently, about 7650 square kilometers of state-owned land has already been allocated for the construction of wind power projects in the Gulf of Suez as well as on the East and West banks of the Nile.

Wind energy development in Egypt will include state-owned projects, independent power producers (IPPs) bids on a BOO basis, and IPPs based on feed-in tariffs.

Egypt's first large-scale solar power plant is currently under construction in Kuraymat. The project consists of a hybrid power plant with a total installed capacity of 140 MW (only 20 MW of which are solar), based on a solar thermal facility integrated into a combined cycle gas-based power plant.

According to the World Nuclear Association (2011), Egypt has plans to build four nuclear power plants, 1200 MW each. The first nuclear power plant is intended to be completed by 2019.

Egypt is strategically located between the Middle East, Africa, and Southern Europe, which may be accessed through its North African neighbors. As a result, the Egyptian grid has direct interconnection with Libya and Jordan, both of which are in operation. In addition, Egypt has also exchanged electricity with Syria and Lebanon. The following table displays Egypt's interconnections and electricity exchange figures for fiscal year 2009/2010:

Table 9 \\ Interconnections and Electric Power Exchange

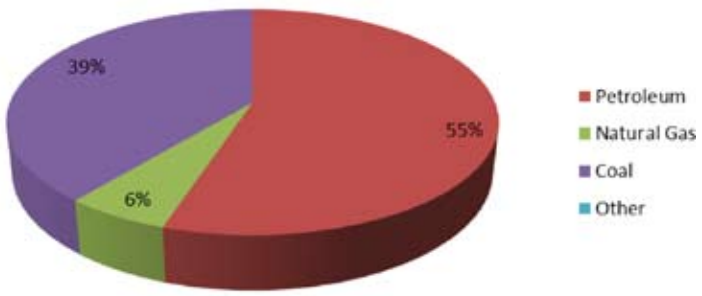
Description	Libya	Jordan	Syria	Lebanon
Interconnection voltage K.V	220	400	400	400
Sold / Exported Energy (GWh)	116	318	63	621
Purchased / Imported Energy(GWh)	120	44	19	-

2.2.2 Israel

Israel relies heavily on imports for its energy needs. Its natural resources mainly consist of its recently discovered natural gas reserves, estimated at no less than 700 BCM. The country imports all the coal and practically all the oil it consumes, while natural gas is both domestically produced and imported from Egypt.

The following chart shows Israel's primary energy demand in 2008.

Figure 8 \\ Israel Primary Energy Consumption by Source - 2008



Source: EIA statistics and authors' calculations

According to this chart, coal constitutes about 39%, all of which is employed for power generation purposes. As of 2008, natural gas constituted only 6% of primary energy, although its demand and consumption have more than quadrupled since then, replacing petroleum products and reaching similar consumption levels to those of coal in absolute terms. Natural gas is currently used mainly for power generation; nevertheless, its industrial use is gradually increasing. It must be noted that the lion's share of the petroleum and petroleum products consumption in the chart above represents petroleum products such as gasoline and diesel, used as transportation fuels.

The main sectors consuming energy are transportation (29%), industry (10%), residential (21.5%), and services (8%).

Historically, the implementation and use of renewable energy in Israel has been limited to the use of solar-based water heating systems for residential purposes. About 75% of the households in the country employ solar water heaters. More recently though, the Government of Israel issued a policy supporting the development of renewable sourced electricity – mainly solar power. Such a policy is detailed in the following subsections.

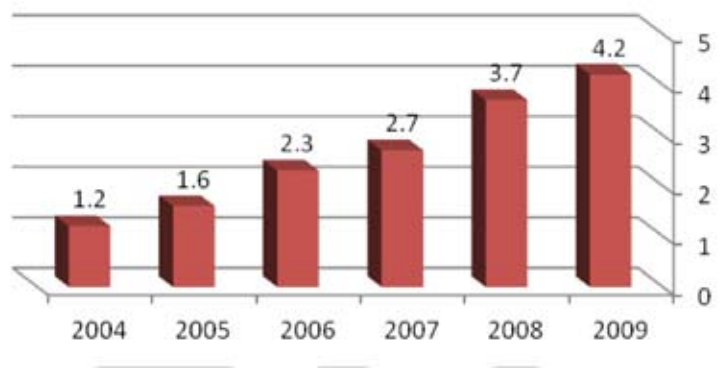
Israel's Natural Gas Sector

Israel's gas market is still in its early stages. The country first received natural gas on a utility scale basis in 2004. Israel currently relies on two gas sources. The first is an offshore field (Mary B) located within Israeli waters. The second is the East Mediterranean Gas (EMG) pipeline linking northern Sinai with the southern Israeli Mediterranean coast, and supplying Egyptian gas to the Israeli market.

Gas delivery from Mary B commenced in 2004, while supply from Egypt came on-stream in 2008. Israel's most important gas consumer is the Israel Electric Corporation (IEC), the national state-owned power utility. Some of Israel's largest industrial consumers, including the oil refineries and the main petrochemical and chemical facilities, also already have access to natural gas.

The following chart shows Israel's gas consumption growth up to 2009:

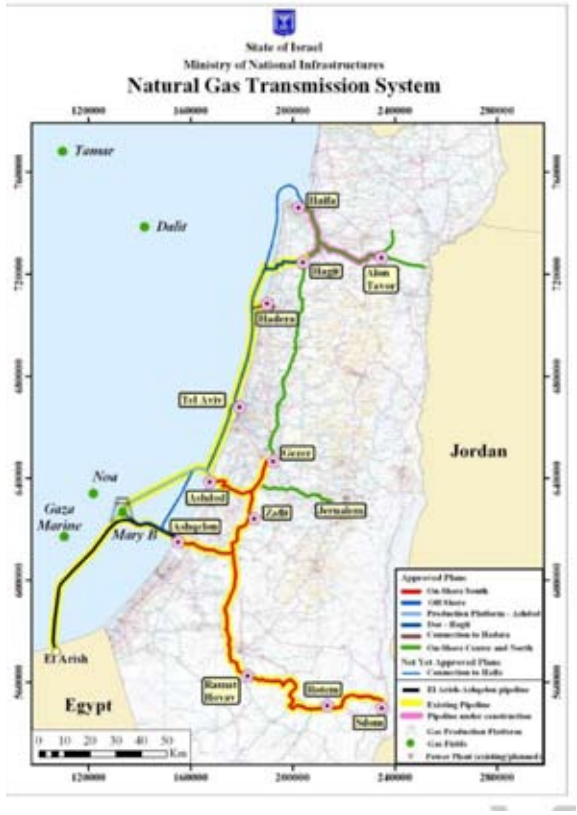
Figure 9 \\ Israel's Gas Consumption (BCM/Year)



Source: Natural Gas Authority, Ministry of National Infrastructure, Israel

Israel's national gas transportation system has been under continuous development during the last decade, and further expansion is still expected. Most of IEC's power station sites and some of the largest industries have already been connected to the system. The following chart displays Israel's national gas transportation system, including the connection to the Mary B field and the pipeline coming from Egypt.

Figure 9 \\ Israel's Gas Transmition System



Source: Natural Gas Authority, Ministry of National Infrastructure, Israel

Within the next five years, Israel's regional gas distribution systems are expected to be developed. The distribution systems are set to supply natural gas to medium and small industries, as well as to commercial consumers.

This will enable further substitution of liquid fuels, such as LPG and diesel. Two out of the 5-6 planned regional distribution systems have already been awarded under long-term BOT tenders, and the first industrial consumers are expected to be connected by 2012.

In addition to the Mary B field, during the past two years, significant quantities of natural gas have been discovered in Israeli waters. So far, the two main discoveries, Tamar and Leviathan, represent accumulated proven reserves of more than 700 BCM. In addition, there are promising prospects for further discoveries of at least 150 BCM.

As of now, Israel does not export natural gas; nevertheless, in view of the recent discoveries it is more than reasonable to expect that it will do so in the future.

During 2011, following the recent Egyptian revolution, the supply of natural gas from Egypt to Israel has been repeatedly interrupted, due to several terrorist attacks inflicted on the Egyptian pipeline. Unfortunately, the future of the Egyptian gas supply to Israel is presently somewhat uncertain.

Although from an energy security standpoint the more suppliers the better, once the newly discovered Israeli gas reserves come online, at any time between 2013 and 2015, Israeli gas shall be sufficient to fully satisfy the country's demand.

Israel's Power Sector

Israel's key player in the electricity sector is the Israel Electric Corporation (IEC), the state-held integrated electric utility which generates, transmits, and distributes practically all the electricity in the State of Israel.

As of December 2009, Israel's key electricity sector figures were as follows:

Table 10 \\ Israel's Electricity Sector – Key Figures

	2009
Peak Load (MW)	10,280
Available Capacity (MW)	11,824
Generated Power (GWh)	53,267
Consumed Power (GWh)	48,947
Exported Power (GWh)*	3,783
Imported Power (GWh)	0

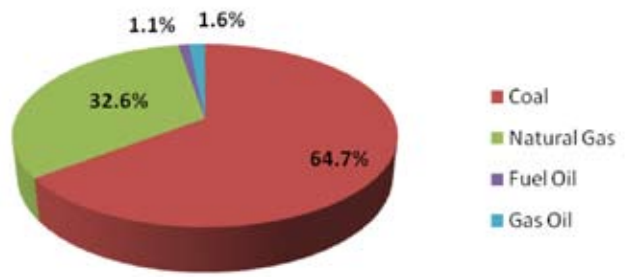
* East Jerusalem and the Palestinian Authority

Currently, Israel does not import electricity.

During the ten years from 1999 through 2009, the aggregate demand for electricity in the country grew by more than 42%, at an average annual growth rate of 3.7%. During 2009, demand decreased by 2.4%, due to the global economic crisis, although by 2010 it recovered, showing positive growth once more.

As may be observed in the following chart, during 2009, Israel's power was generated predominantly by coal and natural gas:

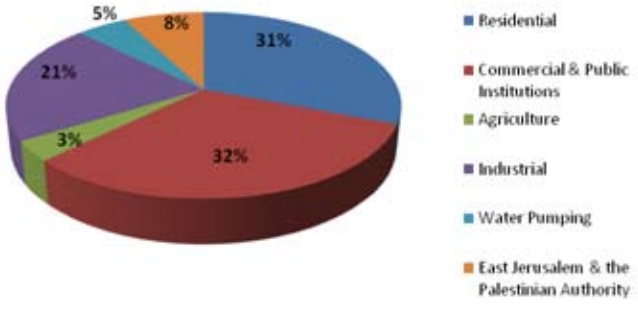
Figure 10 \\ Power Generation by Fuel (2009)



The reported share of natural gas during 2010 reached more than 40% of the country's power generation, and is expected to increase to no less than 50% in the coming years.

The following chart displays the consumption of electric power during 2009. The chart includes the power supplied to East Jerusalem and the Palestinian Authority.

Figure 11 \\ Power Consumption per Sector (2009)



Both the Ministry of National Infrastructure (MNI) and IEC expect electricity demand growth to remain at relatively high rates. According to MNI forecasts, total electricity demand will double by 2025.

To meet the increased electricity demand, and due to a limited capacity reserve, IEC's investment program contemplates the completion and commissioning of additional generation capacity, including no less than five new combined cycle generating units with an aggregate capacity of 1,847 MW by 2012. In addition, more than 1,000 MW of private (IPP) gas-based power plants are expected to come online around 2015. Lastly, IEC had plans to develop 1,200 MW of coal-based power plants to be commissioned in two phases (600 MW each) in 2015 and 2016. This project faces strong public opposition from environmental groups and local municipalities. Recently, MNI announced that any new coal-fired units will allow for bi-fuel operation, and will be able to run on natural gas. In addition, IEC has announced that it plans to convert a large portion of its existing coal-based capacity to natural gas by 2014-2015. In sum, power generation in Israel is expected to rely increasingly on natural gas.

Although the contribution of renewable sourced electricity is still negligible, during the past two-three years, the Israeli Government has strongly promoted its development. The government issued preferential feed-in electricity tariffs, as well as capacity quotas for small, medium, and large solar photovoltaic (PV), as well as for large solar thermal power generation. During the last two years, hundreds of small rooftop PV projects (up to 50 kW of installed capacity per facility), equivalent to tens of MW, have been installed in Israel. In parallel, more than 200 MW of licenses have been issued for medium-sized solar PV plants (between 50 kW and 5 MW of capacity per facility), and are expected to be installed within the next two years.

Beyond the above feed-in tariffs, the government also issued international tenders for the development, construction, and operation of two solar thermal power plants of up to 125 MW each, and one 15 MW solar PV plant. The three projects are anticipated to be awarded by the end of 2012.

The development of other large-scale solar plants in Israel has been hindered due to limited land availability.

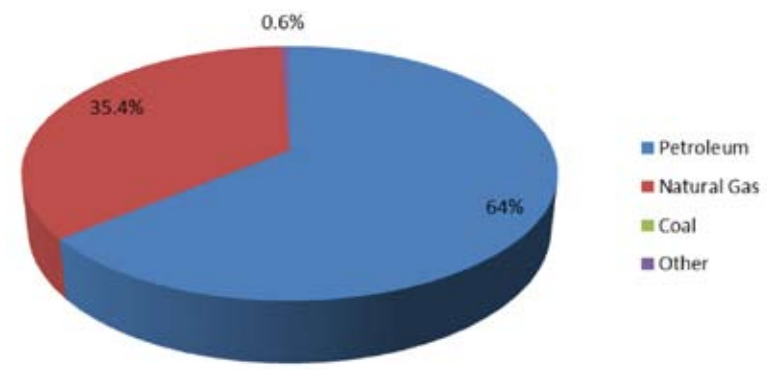
It is important to mention that two of the most important solar thermal technology companies in the world are based in Israel. The first is Solel (formerly Luz), which was recently acquired by Siemens. Solel has successfully developed the largest solar thermal power complex to date, consisting of 350 MW in the Mohave Desert of California. The second company is BrightSource Energy, an American-Israeli company, which is reported to be one of the most promising companies in the field. BrightSource Energy is currently developing hundreds of MW in the US, backed by up to US$ 1.4 billion of loan guarantees granted by the US Department of Energy.

2.2.3 Jordan

Similar to Israel and Palestine, the Jordanian energy sector depends heavily on imports.

Jordan's energy sector has radically changed in recent years. While petroleum and petroleum products remain the main fuels in use, the demand for natural gas has increased significantly, as power generation has almost completely shifted towards natural gas imported from Egypt. The following chart displays the consumption of primary energy during 2008.

Figure 12 \\ Jordan Primary Energy Consumption by Source - 2008



Source: EIA statistics and authors' calculations

In Jordan, transportation is the most energy-demanding sector (39%), followed by the residential (24%) and industrial (22%) sectors. The services and agriculture sectors consume 7% and 2%, respectively.

Jordan's Natural Gas Sector

To date, Egypt is the sole supplier of natural gas to Jordan. Egyptian gas is supplied to Jordan through the Arab Gas Pipeline, inaugurated in the second half of 2003.

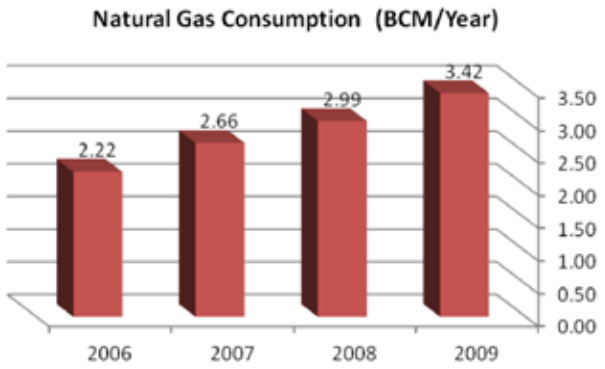
The first phase of the Arab Gas Pipeline, completed in 2003, runs from El Arish in Egypt to Aqaba in Jordan. The second phase of the pipeline, linking Aqaba in the south of Jordan with Rehab in the north (30 km from the Syrian border), was completed in April 2007. In 2008, the third phase of the pipeline, consisting of the remaining 30 km segment from Rehab in Jordan to the Syrian border, was completed.

The following figure outlines the Arab Gas Pipeline route:

Figure 13 \\ Arab Gas Pipeline

Jordan's gas consumption[11] for the period 2006-2009 is displayed in the following chart.

Figure 14 \\ Natural Gas Consumption (BCM/Year)



As detailed in the following subsection, Jordan's power sector heavily relies on natural gas. Depending on one type of fuel, supplied by a single supplier, through a single pipeline, implies an exceptionally high economic and strategic risk for the country. This was evidenced during the recent pipeline explosions in Egypt, when gas supply to Jordan was severely interrupted. Security of supply and energy diversity is discussed in the following subsections.

Jordan's Power Sector

Jordan's electricity sector consists of a central transmission network company, the National Electric Power Company (NEPCO), and regional generation and distribution companies that sell and/or buy electricity, respectively.

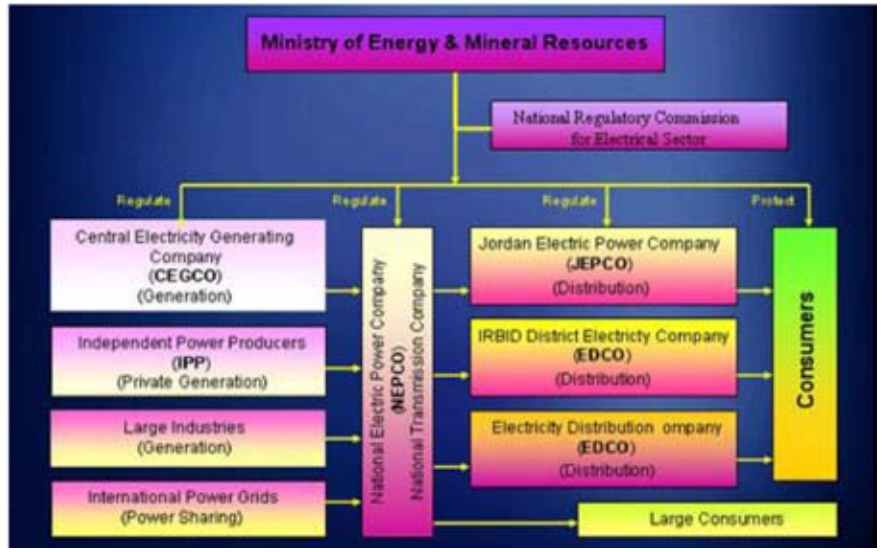
NEPCO is responsible for the planning, construction, operation, and maintenance, as well as management, of the nation's transmission network. NEPCO purchases and sells power to and from the various sources; it is directly responsible for the import and export of electricity, and for the

11 The consumption figures as reported by the National Electric Power Company (NEPCO) refer to natural gas consumed by the power sector. These are representative of the total consumption, as consumption by other sectors is negligible.

interconnections to neighboring countries. The company is fully owned by the Jordanian Government.

The following chart displays the structure of the electricity market in Jordan.

Figure 15 \\ Electricity Market Structure in Jordan



In addition to NEPCO, the main players in Jordan's power sector are:

- The **Central Electric Power Generation Company (CEGCO)**: Jordan's main power generation company, producing over 80% of total generated electricity. The company has been partially privatized.
- The **Samra Electric Power Generation Company (SEPGCO)**: commenced production in September 2005. The government established this company to develop and commission a 300 MW combined cycle unit. During 2006, SEPGCO produced almost 15% of the total generated electricity.
- The remaining locally generated electricity is produced by King Talal Dam (0.1%), Jordan Biogas Co. (0.1%), and large industrial companies (4.3%).

- The **Jordan Electric Power Company (JEPCO)**: responsible for the distribution of electricity in the central region, covering about 66% of the country's consumers. The company serves more than 600,000 consumers through five main districts, four of which cover the Amman, Salt, and Madaba areas, while the fifth covers the area of Zerqa. JEPCO is publicly traded.
- The **Irbid District Electricity Company (IDECO)**: operating under a concession issued in 1961, which granted the exclusive right to generate, transmit, distribute, and supply electricity in the northern region of the country. IDECO'S concession covers Irbid, Jarash, Ajloun, and parts of the Balqa District. As a result of the General Law of Electricity, IDECO's activities have been limited to transmission and distribution. By the end of 1997, all generation activity stopped. Subsequently IDECO began purchasing its needs from NEPCO's national network. IDECO is publicly traded, although until the recent announcement of its privatization, its major shareholders were NEPCO (55%) and several municipalities (26%).
- The **Electricity Distribution Company (EDCO)**: operates as the sole electricity distribution company in the Jordan Valley, as well as the eastern and southern regions of the country.

Jordan's key figures for the electricity sector are summarized in the following table:

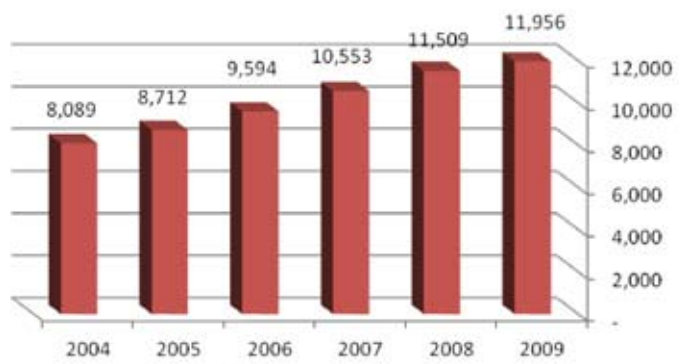
Table 11 \\ Jordan's Electricity Sector – Key Figures

	2009
Peak Load (MW)	2,320
Available Capacity (MW)	2,749
Generated Power (GWh)	14,272
Consumed Power (GWh)	11,956
Exported Power (GWh)	139
Imported Power (GWh)	383

The above imported and exported electric power figures refer to electricity traded with Syria and Egypt.

Jordan's power consumption figures in the period 2004-2009 are shown in the following chart

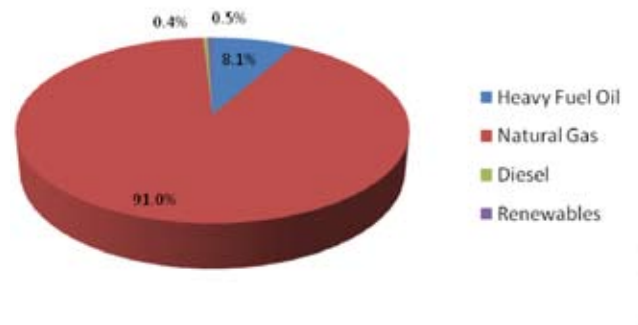
Figure 16 \\ Electric Power Consumption (GWh)



Between 2004 and 2009, Jordan's power consumption grew by almost 50%, equivalent to a compound annual growth rate of more than 8%.

As shown in the following chart, Jordan's power generation relies heavily on natural gas.

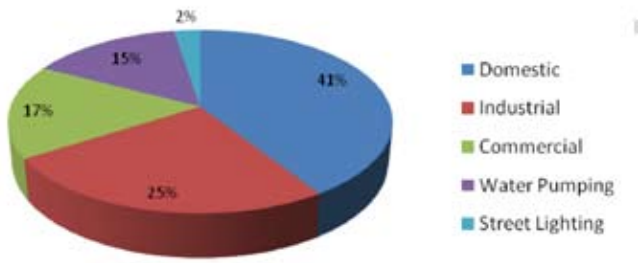
Figure 17 \\ Electric Power Consumption by Type of Fuel (2009)



As already mentioned, having more than 90% of power production based on natural gas, supplied by a single source, and through a single pipeline is far from desirable.

The following chart displays Jordan's electric power consumption by sector.

Figure 18 \\ Electric Power Consumption by Sector



According to NEPCO's forecasts, electric power demand will continue growing at an estimated average annual growth rate of no less than 6%. This will require an ongoing capacity build-up of 300 MW per year. NEPCO's expansion plans include the completion of more than 1200 MW of conventional power plants between 2011 and 2014.

Jordan's renewable energy policy contemplates the implementation of solar and wind power generation. The country's wind power potential is estimated at more than 1,000 MW. The Ministry of Energy and Mineral Resources has already issued two international tenders for wind power projects. The first, located at Al-Kamshsh, north of Amman, was awarded on March of 2009. The Al-Kamshash project consists of 30-40 MW, and is currently under development. The second project, to be located at Fujeij, 200 km south of Amman, has yet to be awarded. The Fujeij project will consist of 80-100 MW of installed capacity.

While the Ministry has achieved some progress with wind power, the same may not be said about solar power. Although Jordan has excellent conditions for utility scale solar power, the Government encountered difficulties when attempting to promote significant solar power projects. This is the product of

the still high cost of solar power (when compared to wind and conventional power), which requires substantial subsidies that are not readily available in most countries.

Lastly, Jordan has plans to develop a series of nuclear power plants, the first of which is planned to be in operation by 2020. The country's Atomic Energy Commission has already received proposals for the construction and operation of its first 1000 MW nuclear power plant. As the project requires some level of international consensus and support, and will obviously have regional strategic and environmental consequences, the outcome of Jordan's plans remains to be seen. It should be mentioned that in 2009, the Ministry of Energy announced that it estimates Jordan's conventional uranium reserves at 140,000 tons. This, along with the country's need for secure and locally available energy resources, has been the main driver for Jordan's interest in nuclear power generation.

Jordan's electricity grid is interconnected with both the Syrian and the Egyptian grids as part of the Eight Countries Electric Interconnection Project. This project aims to connect the electric networks of Egypt, Iraq, Jordan, Lebanon, Libya, Palestine, Syria, and Turkey. As of 2009, the interconnection between Egypt, Jordan, Libya, and Syria had been completed. During 2009, Jordan imported 363 GWh from Egypt and 20 GWh from Syria; while it exported 9 GWh to Egypt and 69 GWh to Syria. In total, during 2009, imported power represented about 3.2% of the country's total consumption, while total exported power represented less than 0.7%. During that same year, 139 GWh and 527 GWh were transmitted from the Egyptian network to the Syrian and Lebanese networks, respectively; while 5.9 GWh were transmitted from Syria to the Egyptian transmission network – all through the Jordanian network.

2.2.4 Lebanon

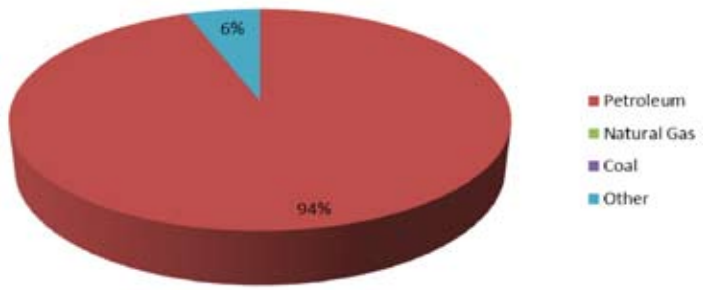
Lebanon imports all of its primary energy.[12] Moreover, Lebanon relies heavily on petroleum products that constitute about 94% of its total primary energy

12 Unlike other countries, Lebanon imports refined, not crude, oil. This reflects the lack of capital investment in the energy sector in Lebanon.

consumption. The balance is derived from hydroelectricity and solar energy – used for water heating in the residential sector. The Lebanese Government has decided increasingly to introduce natural gas to the power sector and industry; nevertheless, the shift to natural gas has been implemented rather slowly.

As in other countries, transportation is the most energy-demanding sector (36%), followed by the industrial and residential sectors at 28% and 25%, respectively.

Figure 19 \\ Lebanon's Primary Energy Consumption by Source 2008



Lebanon generates about 12% of its electricity through hydroelectric power stations. However, the relative share of hydroelectricity declines as local consumption and demand increase.

Lebanon's Natural Gas Sector

To date, Lebanon has no proven gas reserves. Nevertheless, following the recent gas discoveries in adjacent Israeli waters, the Ministry of Energy and Water announced that the country will invite international oil and gas companies to bid on exploration licenses by the end of 2011.

Currently, Lebanon's only access to natural gas is through the Arab Gas Pipeline, to which it was connected in 2009. Limited supply of gas from Egypt was reported during 2009. According to press releases, during 2010, Lebanon was receiving up to 25 million cubic meters per month (equivalent to about 0.3 BCM/year). Reportedly, gas supply was halted in November 2010 due to unpaid payments to Egypt. Apparently, this was a result of a political

deadlock between the Ministry of Finance and the Ministry of Energy, which are headed by representatives of opposing parties. This, along with the 2011 pipeline explosions in Egypt, has stalled gas supply to Lebanon. Consequently, the Government's target to increase the use of natural gas has barely been achieved thus far.

Lebanon's Power Sector

Lebanon's main player in the power sector is Electricité du Liban (EDL), the country's state-owned public utility, operating under the Ministry of Energy and Water and the Ministry of Finance. EDL is responsible for the majority of power generation, transmission, and distribution. The utility generates over 90% of Lebanon's electricity under regular operation.

There are five distribution companies in Lebanon, four of which were granted as concessions to the private sector, while one is public.

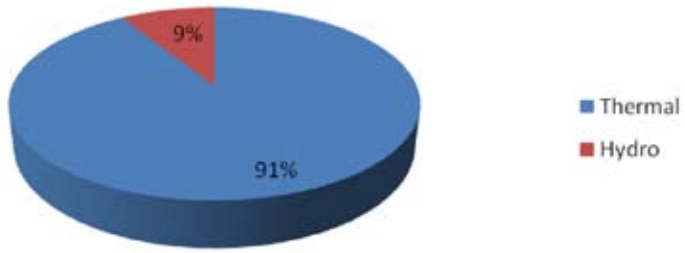
Lebanon's key figures for the electricity sector are summarized in the following table:

Table 12 \\ Lebanon's Electricity Sector – Key Figure

	2008
Peak Load (MW)	-
Available Capacity (MW)	2,480
Generated Power (GWh)	10,010
Consumed Power (GWh)	8,890
Exported Power (GWh)	-
Imported Power (GWh)	621

As of 2007, Lebanon's power generation capacity consists of seven thermal power plants with an estimated aggregate installed capacity of 2,259 MW, and three hydroelectric power plants with an installed capacity of 221 MW. The following chart displays Lebanon installed capacity by type of energy source.

Figure 20 \\ Lebanon's Installed Power Generation Capacity



As Lebanon has limited access to natural gas, the figures in the chart above imply that virtually all of Lebanon's power generation is based on imported liquid petroleum fuels. As a result, fuel costs represent up to 85% of EDL's operating costs.[13] This is clearly a significant economic and environmental burden on the country.

The Syrian-Lebanese interconnection was completed in 2009. Since then, Lebanon has been importing part of its electricity needs from Egypt through the Jordanian and Syrian networks.

According to IMF figures, the Government of Lebanon spends as much as US$ 1.5 billion a year subsidizing EDL (2008-2009). Furthermore, EDL's losses represent the third largest government expenditure item. During the last decade, Lebanon's investment in the power sector has been extremely scarce, and among the lowest in the region. The country's infrastructure deficit, along with EDL's reported structural and operational inefficiencies, has resulted in prevalent power blackouts.

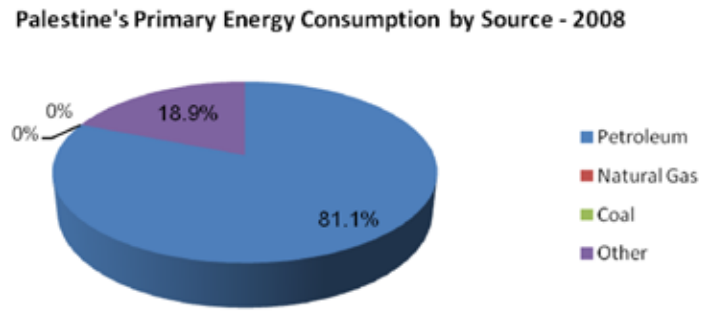
In view of poor reliability, the use of back-up generation systems is extremely high in Lebanon. As per World Bank reports, while in other countries back-up systems are employed approximately 5-10% of the year and only during an emergency, in Lebanon up to 33% of consumed electricity is produced by self-generators using small and inefficient power generation units or back-up systems. This, evidently, further increases the cost of electricity to consumers, and severely affects the industry.

13 Lebanon Electricity Sector - Main Findings from the World Bank's Public Expenditure Review 2008

2.2.5 **Palestine**

Currently the Palestinian economy imports all of its energy. According to the following chart, petroleum is the main energy resource, while solar energy is used for water heating purposes.

Figure 21 \\ Palestine's Primary Energy Consumption by Source 2008



Source: EIA statistics and authors' calculations

As of 2010, approximately 65% of households in the Palestinian Territories use solar water heaters, while 19% of households rely on electricity, and 14% of the households employ LPG as their main fuel for water heating.

Industry is the highest consuming sector when it comes to petroleum products (53%), followed by internal services (24%), and transportation and communications (13.2%). Industry consumes about 10% of the total energy consumption in Palestine.

Solar and wind energy have recently been introduced to Palestine, and are operating at various sites, such as the Tubas Industrial Region.

Palestine's Gas Sector

Despite its proximity to Egypt and Israel, to date Palestine has no access to natural gas. Palestine has proven natural gas reserves in its territorial waters of the Gaza Strip, amounting to about 40 BCM, which have not been developed due to market and political factors.

Palestine's Power Sector

The institutional set-up of the West Bank and Gaza electricity sector is somewhat fragmented. Four free-standing utilities are responsible for electricity distribution in Gaza and the southern and central West Bank, while electricity distribution is a municipal responsibility in the northern West Bank. The Jerusalem District Electricity Company (JDECO) services East Jerusalem and the central West Bank; the Hebron Electricity Power Company (HEPCO) covers the Hebron area; and the Southern Electricity Company (SELCO) covers the remaining southern West Bank. The Northern Electric Distribution Company (NEDCO) is being established to serve the northern West Bank. The three existing utilities together cover approximately 60% of the population in the West Bank, while the remaining population in the West Bank is supplied by municipalities. The Gaza Electricity Distribution Company (GEDCO) is the sole provider of electricity services in Gaza.

The patterns of electricity supply and consumption in the Gaza region are different from those in the West Bank, mostly due to the higher standard of living in the West Bank.

The following table displays Palestine's key electricity figures:

Table 13 \\ Palestine's Electricity Sector – Key Figures

	2009
Peak Load (MW)	270
Available Capacity (MW)	140
Generated Power (GWh)	349
Consumed Power (GWh)	1083
Exported Power (GWh)	-
Imported Power (GWh)	1285

Both the West Bank and Gaza acquire most of their electricity from IEC. The Gaza Strip receives a small portion of its electricity from its Gaza Power Plant (GPP) and from Egypt. GPP is a gas oil (diesel)-based power plant, located within Gaza, with a generating capacity of 140MW. GPP is the only

major power-generating facility in the West Bank and Gaza. The Gaza Strip has also received up to 17MW from Egypt. GEDCO distributes electricity within Gaza. JDECO historically generated its own electricity, but in the 1980s stopped doing so due to political reasons. It does, however, have the capability to generate power, as new generator units purchased in the early 1980s but never utilized are still being stored in the JDECO power station.

The Gaza power plant is dependent upon its fuel from Israel, and is operating at less than half of its capacity.

Consumption of electricity – as measured by purchases of bulk power from IEC – increased at an average annual rate of 6.4% between 1999 and 2009, and at an even higher rate of almost 8% from 2005 to 2009.

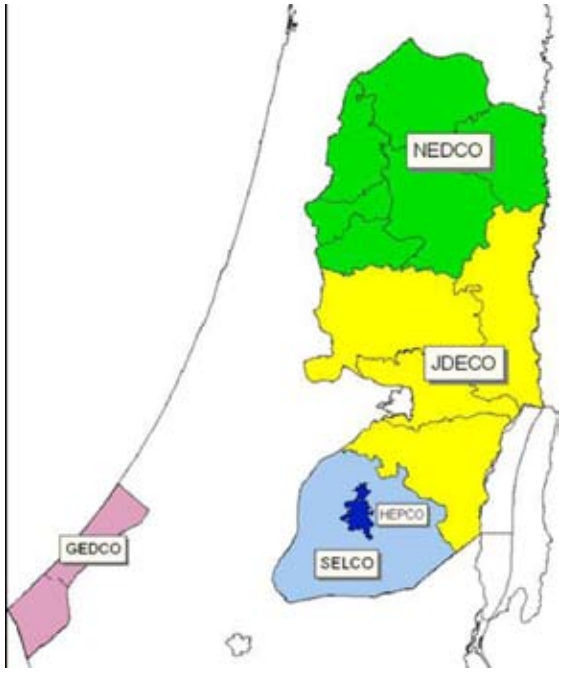
Out of the total electricity supplied to the West Bank, 30% is delivered directly by IEC in bulk to 215 towns and villages, while the remaining 70% is delivered indirectly by IEC through JDECO, which then distributes electricity in East Jerusalem and supplies it in bulk to 165 towns and villages in the West Bank.

In mid-2007, the Palestinian Authority and Jordan, via JDECO, agreed to connect their respective power grids at Jericho through a 33kV line via King Abdallah Bridge. Accordingly, Jordan's National Electricity Power Company (NEPCO) commenced supplying electricity to the city of Jericho on February 2008. JDECO manages the power on the Palestinian side.

The Gaza Strip's total supply of power (purchased from IEC and GPP) increased by 80% between 1999 and 2005 at an average annual rate of about 10%. Most of this growth took place from 2003 onwards, and it coincided with the advent of power from GPP. This indicates that substantial un-served demand for electricity existed in Gaza, which would explain why power consumption increased so rapidly while Gaza's GDP grew at 3.7% per year.

The following map shows the regional division between the Palestinian power distribution companies.

Figure 22 \\ Palestinian power distribution companies



Due to increasing demand, Palestine has plans to revamp and upgrade its electrical transmission network from the existing maximum capacity of 33 KV to 161 KV. This will be carried out as part of the Palestinian National Development Plan[14], ensuring that all the citizens of Palestine enjoy an adequate and uninterrupted energy supply. In addition, new transmission lines will be established to connect marginalized communities.

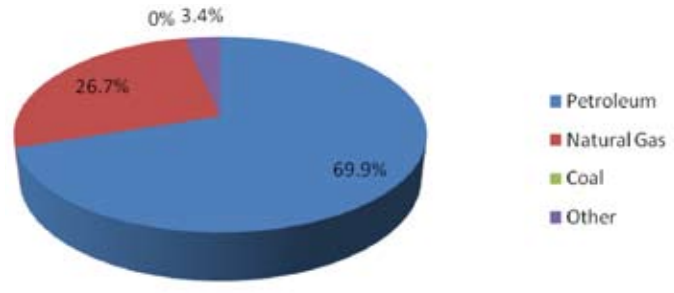
We assume that following a Peace Agreement between Palestine and Israel, there will be significant economic growth and infrastructure build up. As a result, we expect energy demand to increase by 20%.

14 Palestinian National Development Plan (NDP) 2011-2013 (pp. 52-104) and the Palestinian Reform and Development Plan (PRDP) 2008-2010

2.2.6 Syria

Syria is a net exporter of petroleum and a natural gas producer. Its proven reserves are estimated at 2.5 trillion barrels of oil and 255 BCM of natural gas. While much of its oil is exported to Europe, Syria's natural gas is used mainly for re-injection in enhanced oil recovery, and for domestic power generation. A large increase in electricity demand in particular and in energy demand in general may convert Syria into a net oil importer within less than a decade. In contrast, natural gas production in Syria has increased in the past few years, and may offset the increasing demand for petroleum. The following chart illustrates the relative demand for primary energy in 2008:.

Figure 23 \\ Syria's Primary Energy Consumption by Source 2008



Source: EIA statistics and authors' calculations

The main energy-demanding sectors are the transportation sector (37%), the industrial sector (18%), and the residential sector (15%).

Syria's Natural Gas Sector

As of the end of 2009, Syria's proven natural gas reserves were estimated at 255 BCM, about half of which is associated gas15. Non-associated gas reserves are mainly located in the east and center of the country. During

15 Associated gas is natural gas found in association with oil, either dissolved in the oil or as a cap of free gas above the oil. Namely, it is found in crude oil wells as oppose to reservoirs that contain only natural gas.

2008, roughly 35% of Syrian gas production was re-injected into oil fields for enhanced oil recovery purposes, about 2% was flared or vented, and the balance was dispatched to power generation facilities and major industrial consumers.

As of 2008, over half of Syria's power-generating facilities were still fueled by liquid petroleum products, much of which is imported due to an inadequate local refining capacity. As a result, Syria plans to convert its petroleum product-based power generation facilities and heavy industries to natural gas by 2014.

During 2008, Syria produced about 5.9 BCM and consumed approximately 6.04 BCM of natural gas. Syria's natural gas production had been declining from 2004 to 2008, but it is now poised to increase rapidly as a series of new projects come on stream. At the end of 2010, the Government of Syria reported that it had almost doubled its 2008 production level, reaching more than 11.5 BCM per year.

Syria is a natural gas importer since mid-2008, when it imported an estimated 0.14 BCM from Egypt by way of the Arab Gas Pipeline. In 2008, Syria completed the fourth phase of the Arab Gas Pipeline, running from the Jordan-Syria border to Homs.

Syria's long-term aim is to become a transit state for Egyptian, Iraqi, Iranian, and even potentially Azerbaijani gas, which would gain valuable transit revenues as well as increase the availability of natural gas imports to Syria.

According to a 2009 agreement with Turkey, Syria was to import up to 1 BCM of gas per year from Turkey starting in 2011 with the opening of the Syria-Turkey section of the Arab Gas Pipeline.

Syria's Power Sector

Syria's Ministry of Electricity is responsible for the country's power sector. The Ministry operates through two companies, the Public Establishment for Electrical Generation and Transfer (PEEGT), which is responsible for the generation and transmission of electricity, and the Public Establishment of Distribution and Exploitation of Electrical Energy (PEDEEE), responsible for sales and distribution.

The following table displays Syria's key electricity figures:

Table 14: Syria's Electricity Sector – Key Figures

	2008
Peak Load (MW)	
Available Capacity (MW)	7,870
Generated Power (GWh)	38,710
Consumed Power (GWh)	28,990
Exported Power (GWh)	39*
Imported Power (GWh)	132*

*Import and export figures are for 2009 and refer to quantities exchanged only within the countries of the region being analyzed.

As of 2007, most of Syria's power generation was based on thermal power plants (burning natural gas, diesel and/or fuel oil), accounting for some 81.6% of total power generation, while 18.4% was based on hydropower. Out of the total generated power, 88% was produced by PEEGT, 9% by power plants operated by the Ministry of Agriculture, and about 3% by the Ministry of Petroleum and Mineral Resources.

Syria's annual power demand growth rate has remained at 6-7% since 2000.

Syria's transmission system is interconnected to the Lebanese, Jordanian, Turkish, and Iraqi networks. During 2009, within the relevant region, Syria imported 63 GWh from Egypt and 69 GWh from Jordan; it exported 19 GWh to Egypt and 20Gwh to Jordan; and it transferred 631 GWh of Egyptian power to Lebanon.

3. Regional Summary Analysis

The following tables present a summary analysis, highlighting the main features of each country's energy sector (power and natural gas):

Country	Main Features	Current Energy Cooperation	Analysis
Egypt	1. Abundant gas reserves (largest in the region) 2. Substantial domestic gas demand 3. Most developed gas sector 4. Available land 5. High solar radiation 6. Considerable wind potential 7. Rapidly growing power demand	1. Arab Gas Pipeline (Jordan, Syria, and Lebanon) 2. EMG (Israel) 3. Operating electric Interconnection with Libya, Jordan, Syria, and Lebanon	Egypt is a regional energy power, and has taken important steps towards regional energy cooperation, particularly with Jordan. There is certainly room for increased activity with Israel, Palestine, Syria, and Lebanon.
Israel	1. Important gas reserves 2. About to become a gas exporter 3. Rapidly growing domestic gas demand 4. Limited land availability 5. Limited power generation capacity reserves 6. Advanced solar thermal technology	1. EMG pipeline 2. Electric interconnection with Palestine only	Israel would substantially benefit from electric interconnections, gas export to neighboring countries, and cross-border renewable energy projects due to its limited land availability.
Jordan	1. Imports all of its fuels 2. Very limited fuel diversification 3. High dependence on a single fuel, a single supply source (supplier) and a single pipeline 4. Land availability 5. High solar radiation 6. Uranium reserves 7. Rapidly growing power demand	1. Arab Gas Pipeline 2. Electric interconnection with Egypt and Syria 3. Small-scale local electric connection with Palestine	Jordan's energy sector calls for extensive measures towards fuel and source diversification. This may be achieved by importing natural gas from Israel, increasing the share of renewable energy, and becoming a nuclear power generation hub for the region.
Lebanon	1. Imports all of its fuels 2. Limited or no use of natural gas 3. Highest share of liquid petroleum fuels in the region 4. Low reliability and inefficient power supply 5. Rapidly growing power demand 6. Potential for gas reserves	1. Arab Gas Pipeline 2. Electric interconnection with Syria	Lebanon's energy sector requires comprehensive reforms, including major infrastructure build up, extensive introduction of natural gas, and fuel and source diversification. Additional electric interconnections may facilitate the process, increasing supply reliability; having Israel as a second gas supplier (in addition to Egypt) may generate considerable benefits as well.

Country	Main Features	Current Energy Cooperation	Analysis
Palestine	1. Proven (unexploited) gas reserves – sufficient for at least two to three decades of domestic demand 2. Potential for additional gas reserves 3. Gaza Power Plant is underutilized 4. Currently imports all of its fuels 5. Imports most of its power from Israel 6. Limited available land 7. Rapidly growing power demand, forecasted to grow at even a higher rate 8. Power generation in East Jerusalem stopped in 1980s	1. Electric interconnection with Israel 2. Small-scale local electric connection to Jordan	Palestine's energy sector is currently fully dependent on Israel. The utilization of the Gaza Power Plant should be increased. Full-scale electric interconnection with Egypt and Jordan will increase energy security. Palestine may also profit from access to Egyptian and/or Israeli gas while Palestinian reserves are being developed. Having dedicated power-generation capacity and cross border renewable energy projects with Jordan and/or Egypt will be of great benefit as well.
Syria	1. Proven gas reserves – sufficient for at least three decades of domestic demand 2. The only net exporter of energy in the region 3. Strategically located between the Middle East and Turkey 4. Available land 5. Potential for wind power 6. Rapidly growing power demand	1. Arab Gas Pipeline 2. Electric interconnection with Jordan, Lebanon, Turkey, and Iraq	Syria boasts sufficient energy resources for its current domestic demand and is well positioned to become a transit state, especially for natural gas supplied from Iran, Iraq, and Egypt, to Lebanon and Turkey.

The following may be observed and stated on a regional level:

- Overall, the region faces high-power demand growth, resulting in considerable investment to be assumed and/or financed by local governments. Namely, in the next five years, Egypt, Israel, and Jordan alone will require an additional aggregate power generation capacity of no less than 9,000 MW. This is equivalent to a total investment of no less than US$ 10 billion.
- The region holds significant potential for renewable energy – mainly solar and wind power – and most of the countries have issued a specific renewable energy policy and have defined the subject as a national energy priority. Some of these countries have already made steps towards the implementation of their renewable energy policy.

Growing capacity needs and implementation of renewable energy on a national level increase the benefits of energy cooperation, and may easily translate into substantial cost savings and reduced investment requirements, amounting to no less than US$ hundreds of millions per year.

4. Proposed Energy Cooperation Project Initiatives

Based on the analysis above, the following specific energy cooperation projects are proposed:

1. Connecting Palestine to the Israeli Gas Transportation System

Direct Involvement	Palestine and Israel
Location	Palestine and Israel
Project Concept	Once the Palestinian offshore Gaza gas reserves are developed and gas becomes available, it would be more than reasonable to connect the Palestinian Gas System with the Israeli National Gas Transportation System.
Benefits	Expedition of the gas supply to the West Bank through the existing system
	Increased supply reliability and energy security, as the Israeli system may be used as back-up for the Palestinian market

2. Export and Supply of Israeli and Palestinian Gas to Jordan

Direct Involvement	Jordan, Palestine, and Israel
Location	Jordan, Palestine, and Israel
Project Concept	Development of a pipeline connecting between the two existing national gas systems, enabling an Israeli and Palestinian gas supply to Jordan.
Benefits	Jordan will have access to an additional gas source supplied by a separate pipeline. This will significantly increase the security of supply for the entire country.
	Israel and Palestine will be able to export some of their gas to a nearby market. This export venue is far less challenging and capital intensive than any alternative export option, i.e. LNG or an offshore pipeline to a more distant market.
	Due to the proximity between the gas source and the destination market, this project will probably be superior to any other alternative for both countries – LNG export for Israel and Palestine and LNG import for Jordan – and may well translate into gas at competitive prices for Jordan.

3. Palestinian Gas-Fired Power Generation Complex

Direct Involvement	Palestine and Egypt
Location	Northern Sinai, Egypt
Project Concept	A dedicated gas-fired power generation complex to be developed in stages. The project will consist of several combined cycle power plants to be gradually commissioned as Palestinian demand grows. Egyptian land in northern Sinai to be made available and allocated for the projects.
Benefits	Palestine will have dedicated wholly owned gas-based power generation capacity. This will increase energy security.
	Due to extensive land availability, planning and design will contemplate future growth, and due to economies of scale, cost of generation will be relatively lower than if it were to be developed in Palestine.
	Northern Sinai (Egypt) will enjoy foreign investment and the creation of local employment.
	As the Palestinian generation capacity becomes operational, it will replace Israeli power generation capacity; therefore, Israel's capacity reserve will increase without additional investment.

4. Joint Liquefied Natural Gas (LNG) Liquefaction Terminals

Direct Involvement	Israel and Egypt
Location	Red Sea Coast or Northern Sinai Mediterranean Coast, Egypt
Project Concept	A joint LNG liquefaction terminal for the export of Israeli and Egyptian gas, to be located in the Red Sea and serve as the gateway for the growing Asian LNG market, and/or a terminal located in the northern Sinai Mediterranean coast to serve the European and North American markets.
Benefits	Reduced capital investment due to economies of scale
	Land availability – Israel has no available coastal land for the development and construction of an LNG terminal and otherwise would not be able to develop an LNG terminal for the Asian markets (for the European market, Cyprus may be an option).
	Sinai (Egypt) will enjoy foreign investment and the creation of local employment.

5. Joint Wind Power Projects

Direct Involvement	Palestine, Israel, Egypt and/or Jordan, Syria, and Lebanon
Location	Sinai (Egypt) and/or Southern Jordan, Syria, or Lebanon
Project Concept	Distributed joint large-scale wind power projects
Benefits	Increased share of emission-free renewable energy in the region
	Increased energy source diversification in the involved countries
	A more feasible wind power production – since renewable power generation is inherently intermittent, serving several markets with different daily demand load curves may allow the optimization of the power plant's production dispatch.
	Israel and Palestine may enjoy available land and wind resources in the neighboring countries.

6. Joint Solar Thermal Projects in Egypt and Jordan

Direct Involvement	Palestine, Israel, Egypt, and/or Jordan
Location	Sinai (Egypt) and/or Southern Jordan
Project Concept	A large-scale solar thermal power complex of up to 800-1000 MW to be developed in 100-200 MW stages, and to be located in Jordan and/or in Egypt. Generated power to serve the Palestinian, Israeli, Jordanian and/or Egyptian markets.
Benefits	Increased share of emission-free renewable energy in the region
	Increased energy source diversification in the involved countries
	Israel may benefit from the export of advanced solar thermal technologies
	A more feasible solar thermal power plant – since renewable power generation such as wind or solar is inherently intermittent, serving several markets with different daily demand load curves may allow the optimization of the power plant's production dispatch.
	Some of the countries may benefit from differential electricity tariffs, placing renewable energy within the reach of countries that otherwise may not be able to subsidize renewable energy. For example, Israel has issued fairly high feed in tariffs for solar thermal energy, while in Palestine, Jordan, and Egypt, there are no feed in tariffs in place. Assuming the countries pay differential tariffs, allocating a greater share of the production to the higher tariff market may allow for the indirect subsidization of the lower tariff market.
	Jordan and/or Egypt will benefit from technology transfer and may become solar power hubs.
	Jordan and/or Egypt will benefit from foreign investment and the creation of local employment.

7. Nuclear Power Plants in Jordan and/or in Egypt

Direct Involvement	Egypt and/or Jordan
Location	Egypt and/or Jordan
Project Concept	A large-scale nuclear power plant of 1000-1200 MW to be developed in Jordan and/or Egypt
Benefits	Increased share of emission-free renewable energy in the region
	Increased energy source diversification in the involved countries
	Provision of low-cost base load electricity to the region

In addition to the above-mentioned benefits, it is important to note that regional cooperation in general, and cross-border energy projects in particular, are usually eligible to generous multilateral and development financing, under preferential terms, including but not limited to soft loans, grace periods, longer tenures, and significant grants which would not be available in standard energy projects. This, in large-scale infrastructure projects such as the proposed energy projects, may have paramount financial implications. As such, projects are usually financed under long-term loans, and reduced financing costs (interest during construction and during the life of the project) may very well turn a project that would otherwise be unfeasible into a profitable venture, which may be attractive even to the private sector.

5. Key Aspects in Cooperation between Middle Eastern Countries

The following items should be contemplated and addressed in advance, to the extent possible, when promoting energy cooperation projects:

a. **Financing**

Acknowledge and define available financing alternatives, including but not limited to multilateral and development financing, export credit financing, and commercial loans. In addition, consider and define project development and execution frameworks such as government to government, Private Public Partnerships, and BOO and BOT schemes.

b. **Technical Standards**

Select and agree upon compatible and/or consistent technical standards with regards to design, construction, operation, and maintenance of the projects based on internationally accepted standards in the power and oil and gas sectors.

c. **Environmental and Health and Safety Issues**

Define health and safety and environmental regulations or standards applicable to the specific cooperation project or to the cooperation framework as a whole. Establish a cooperation framework to allow for mitigating risk and environmental impact, considering each country's rights in accordance with its own national laws, safety measures, and environmental requirements.

d. **Statutory Procedures**

Facilitate clear and straightforward permitting and licensing procedures for regional cooperation projects, addressing right of way, land use, planning, development, and construction issues, among others. Include effective and contractual arrangements for the supply, transportation, and distribution of natural gas and electricity, adhering to the open-access principle in accordance with the relevant internationally accepted practice.

e. **Taxation**

Define and agree upon tax regimes such as preferred tax, tax exemption, or any other tax facilities applicable to corporate taxes, export and import duties, and transit fees for cooperation ventures.

f. **Jurisdiction**

Determine jurisdiction and responsibility over the energy supply (pipelines, grids).

6. Conclusions

The value and contribution of energy cooperation projects has been extensively demonstrated and confirmed in other parts of the world, as well as in our region. Jordan's replacement of liquid fuels made possible through the import of Egyptian natural gas, Israel's access to more than one gas supplier, and Lebanon's interconnection to Syria are lucid examples of the significance and implication of regional energy cooperation.

The culmination of the Arab Peace Initiative will allow for the broad implementation of energy cooperation projects between Palestine, Israel, and the adjacent countries.

The economic benefits resulting from such energy cooperation could add up to more than US$ 1.0 billion per year for the region, and could obviously enable further economic growth while gradually building regional stability and prosperity.

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Appendix

Calculating the demand for Energy

In the appendix, we derive the results of our model for the demand for energy as described in subsection 3.2. The following table shows the demand for gasoline and electricity in the six countries in the period 1995-2007:

Table A1 \\ Road Sector Gasoline Consumption, 1995-2007 (kt of oil equivalent)

Year	Egypt	Israel	Jordan	Lebanon	Syria
1995	2060	1970	488	1327	1063
1996	2163	2029	516	1379	1101
1997	2117	2005	533	1310	1142
1998	2205	2002	531	1412	1176
1999	2300	2206	551	1344	1316
2000	2357	2085	605	1264	1294
2001	2386	1954	640	1179	1339
2002	2430	2007	656	1180	1386
2003	2521	2005	669	1260	1477
2004	2705	2042	670	1263	1375
2005	2952	2070	707	1273	1407
2006	3286	2143	733	1225	1403
2007	3845	2256	925	957	1508

Source: World Bank data

Since there is no available data on Palestine, we use the following table that shows the oil consumption in Palestine in the period 1997-2009:

Table A2 \\ Oil Consumption in Palestine, 1997-2008 (thousand barrels per day):

Year	Total Consumption
1997	3.13
1998	5.22
1999	5.70
2000	7.08
2001	10.19
2002	8.92
2003	9.71
2004	15.94
2005	19.98
2006	21.62
2007	22.11
2008	23.00

Source: Energy Information Administration data

The following table presents the electricity consumption for the same years:

Table A3 \\ The Demand for Electricity (million KWh)

Year	Israel	Jordan	Lebanon	Palestine	Syria	Egypt
1998	32.72	6.05	7.59	1.68	13.81	55.44
1999	33.68	6.52	7.53	1.52	14.34	60.27
2000	37.03	6.55	7.41	2.26	16.13	60.75
2001	38.03	6.50	7.36	2.11	17.75	67.90
2002	39.24	6.97	8.49	2.44	19.57	72.47
2003	40.88	7.36	8.93	2.61	20.91	78.58
2004	40.90	8.12	8.29	2.94	22.77	82.85
2005	42.09	8.94	8.44	3.30	24.74	89.42
2006	43.55	9.43	8.16	3.40	26.42	96.20
2007	46.29	10.41	8.42	3.55	27.35	104.09
2008	47.16	11.30	8.89	3.57	28.99	109.09

Source: Energy Information Administration data

From this data, we calculate an average growth rate for the demand for gasoline and electricity, and a weighted average growth rate of the demand for energy. The weight for gasoline is given according to the size of the transportation sector in each country as described in subsection 2.3.

Given the growth rate and the demand in recent years (the data in Btu is available at the Energy Information Administration website), we derive the medium scenario forecast for each year, and sum the amount of energy demand in all years.

For the Low Growth Scenario, we use growth rates that are about 20%-60% for each country, whereas for the High Growth Scenario we use a growth rate of about 6-8% annually. The only exception is the case of Palestine, in which the growth rate for the High Scenario is 10% for the reasons described in subsection 3.1.

Regional Cooperation in Environment

Ruslana Rachel Palatnik & Mohammed S. Al Hmaidi

Contents

Executive Summary

This report provides a call for regional environmental cooperation effort for the possibility of tackling the increasing and alarming degradations within the MENA region. Experience and knowledge as well as collected literature were used in the preparation process. The report was put in two parts: current state of environment and policies in practice; and the second part covered the possible cooperation strategy.

It should be noted that among the number of official and non-official peace building efforts in the Middle East, this report is linked to the Arab Peace Initiative, and it should add to all other previous and similar efforts in this area.

The report aimed to answer a number of questions including: Why is environmental cooperation essential for region well being and the regional sustainable growth? What resources are needed to achieve the required cooperation? and What are the potential areas for economically efficient multilateral environmental cooperation?

Among the prevailing environmental threats in the region, the report has concentrated on water resources and quality, waste management, climate change, air pollution and degradation of arable land. Although these are only examples of the regional threats, the authors believe that these are also main areas for potential cooperation.

The key factor in looking forward for a possible positive adoption of this call for cooperation is the significant progress in environmental management planning and implementation by the MENA countries; nearly all countries of the MENA region have adopted a national environmental strategy (NES) for the purpose of moving towards sustainable development. In addition, there has been a trend to coordinate environmental policies among Arab countries within the framework of the Council for Arab Ministers Responsible for the Environment (CAMRE), and to coordinate policies with UNEP. At the same time it should be noted that MENA countries have also signed and

ratified over 64 international and regional governmental conventions and agreements on the protection of the environment.

As previous efforts have not shown much progress on the regional level, the current report has covered the technical cooperation possibilities and identified the systemic issues that require determined policy efforts to break the deadlock with clear strategic and market considerations. The report has tried to illustrate the economic and financial opportunities to be gained by cooperation and good environmental practices.

The proposed institutional framework for cooperation was based on a number of elements including education, governance, laws and regulations, accountability and flow of information networks.

The report has made a number of recommendations in practical cooperation programs in several areas, and has suggested a number of actions at both the national as well as the regional level.

Given all above, the report conclusion stressed on the fact that, when socio-economic awareness in Israel and the Arab world is growing, regional environmental cooperation between Israel and its neighboring countries can produce sustainable economic benefits for all. This is a strong message that can encourage ordinary people to pursue peace.

List of Abbreviations

BAU	Business As Usual
CCS	Carbon Capture and Storage
CDM	Clean Development Mechanism
CH4	Methane
CO	Carbon Oxides
CO2	Carbon Dioxide
CO2Eq	CO2 Equivalent
EKC	Environmental Kuznetz Curve
FDI	Foreign Direct Investment
GHG	Greenhouse Gases
GNI	Gross National Income
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
JI	Joint Implementation
KP	Kyoto Protocol
MENA	Middle Eastern and North African countries
N20	Nitrogen Dioxide
NEAP	National Environmental Action Plan
NES	National Environmental Strategy
NOx	Nitrogen Oxides
RAED	Arab Network for Environment and Development
SLR	Sea Level Rise
SO2	Sulfur Dioxide
IEA	International Energy Agency

1. Introduction

The MENA[1] region is a meeting point of many escalating environmental threats. Long-term environmental degradation has occurred over decades spanning several conflicts. In an already densely populated area, there are additional problems of scarcity of water resources and land, rapid population growth, climate change, desertification, degradation of costal environment and land, natural hazards, and air pollution. Even though many world regions face similar threats, the issue becomes more acute in MENA due to a generally weak emergency response, the absence of international cooperation, and a lack of contingency plans. In addition, most of these issues are transnational by nature, and cannot be addressed efficiently by the effort of a single country. Environmental challenges in the Arab region have been described by a number of reports, and analyzed by regional and international experts. Some recommendations, actions, and decisions were taken in a number of regional meetings, but the relationship between the Arab Peace Initiative and environmental cooperation has been barely considered.

Unquestionably, sustainable economic development can be seen as a common goal of all parties in the region. Sustainable development has been defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs"[2]. Similarly, it is a fundamental and overarching objective of the European Union, enshrined in its treaty. By linking economic development, protection of the environment, and social justice, sustainable economic development aims at the continuous improvement of the quality of life and well-being for present and future generations, and therefore concerns all citizens in the EU, as well as in the whole world.

1 Middle Eastern and North African countries

2 Report of the World Commission on Environment and Development to the General Assembly of the United Nations, Our Common Future, 1987

This report profiles regional environmental challenges, and views the possibilities of joint efforts and actions as part of the Arab Peace Initiative. It calls for the use of available financial and expertise capabilities towards an improved quality of life based on sustainable economic development. Finally, it outlines areas of possible cooperation among the countries in the region as part of the Arab Peace Initiative recommendations, as well as possibilities of their implementation.

It should be noted that this is not a descriptive report of the Arab environment, but a call to unify efforts to tackle environmental problems.

The aim of this study was to outline the state of the environment and identify major areas for possible environmental cooperation. It was based on a review of available, relevant studies, as well as interviews with officials and experts. The analysis was conducted by reviewing the relevant scientific and non-scientific literature, and focuses on a variety of theoretical and practice-oriented arguments. It proposes recommendations for "win-win" cooperation actions to solve environmental problems in MENA.

The paper outlines briefly the environmental state of affairs in the MENA region, highlighting the most vulnerable areas where regional cooperation is required. Among environmental problems tackled in this report are climate change, air quality, waste management, contamination of land and water, and the impact of population on the environment. Water issues are touched upon only briefly, as they are subject of a separate report. The current report mainly outlines ways to prevent water pollution.

Why is environmental cooperation essential for regional sustainable growth?

- All the countries in the region are facing, to some degree, similar environmental problems, e.g,. climate change, waste management, water scarcity, acid smoke, and acid rain
- Many environmental challenges in MENA are of a trans-boundary nature
- One country's long term planning may have some effect on the others, e.g., water and air pollution

- The significance and sensitivity of water and land require coordinated policies
- Regional cooperation allows environmental targets to be reached at lower economic costs to all parties.

Figure 1 \\ Potential Areas for Regional Cooperation

Basic principles on which to build environmental cooperation are: cost-effectiveness, equity, joint implementation, and comprehensiveness.

General Policy Recommendations:

- Strengthen the government's monitoring, inspection, and enforcement capabilities in order to curtail the illegal introduction of alien species and trade in endangered species, hazardous waste, and ozone-depleting substances
- Continue to explore avenues of cooperation with neighbors on pressing marine pollution and trans-boundary water and waste management problems, particularly at sub-national level and through non-governmental channels, as well as through accession to relevant international agreements.

- Strengthen and broaden biodiversity conservation in and around nature reserves, e.g., by establishing buffer zones, ecological corridors, and biosphere reserves
- Accelerate measures that would help to discontinue direct discharges of sewage sludge to the Mediterranean Sea

2. Current Situation and Threats

MENA countries have undergone tremendous changes in the last century. The population has risen from below 50 million to over 350 million today. During the same period, the environment has deteriorated and natural resources have dwindled, due to development patterns that were largely unsustainable.

The outline of current environmental hazards in MENA opens naturally with water stress. Undoubtedly, water scarcity is the most acute environmental hazard in the region. Due to its importance, the Aix group is working on a special report to be devoted solely to this issue in order to be able to cope in detail with this problem and to structure specific recommendations. The current paper on environmental cooperation cannot ignore this subject completely, but states key factors concisely.

This section continues with other critical environmental issues, such as climate change and its various impacts, air quality, degradation of arable land, waste management, and the impact of population on the environment.

2.1 Water Resources & Quality

The Arab region is by far the driest and most water-scarce region in the world. The region has 5% of the world's population but only 1% of fresh water resources[3]. Assuming BAU (business as usual) economic and political development in the region, some predict that water scarcity will eventually raise the cost of water above the price of oil.

Water scarcity in the MENA region is caused by both limited quantity and poor quality. We inspect both of these factors separately.

3 http://www.wgpas-undp.org/

2.1.1 Resource Scarcity

The MENA region is located in the Great Desert belt, extending across northern Africa across the Red Sea until the Arabian Desert. This area is characterized by its dry climate. The issue of water scarcity is the most serious threat to Arab security, as virtually all Arab countries are well below the "water poverty line" (in which per capita water availability is below 1000 cubic meters/year). The International Bank has classified 22 countries as below the water poverty line, 15 of which are Arab. Per capita water cubic meters/year in Qatar, Kuwait, Libya, and Bahrain is 91 95, 111, and 112 respectively. In the cases of Saudi Arabia, Jordan, Yemen, Tunisia, Algeria, and Oman, the figures are 241, 318, 340, 434, 517, and 874 respectively. If this is the case today, one can only imagine the water famines the Arabs will have to confront within ten years with the present levels of population increase.

With the majority of the region's water resources being shared by more than one country, the allocation and management of trans-boundary water resources assumes great importance.

UNDP (2007/2008, p. 95) noted that "nine out of fourteen countries in the region already have average per capita water availability below the water scarcity threshold"[4]. Gaza, in particular, is one of the most water-stressed places in the world, with about 320 cubic meters annually per person (UNDP 2006, p. 135).

The availability of water resources is affected by growing water demands as well as the deterioration of surface and groundwater quality. In order to meet their water deficit, MENA countries are managing their existing water resources more efficiently by increasing their supply of freshwater through the development of conventional and non-conventional water resources. As the report on water cooperation[5] suggests, improved efficiency and multinational management of the demand and supply of water have a high potential for regional progress in reducing the regional water shortage.

4 Less than 1,000 m3 per capita is considered water stressed (Falkenmark, 1986).

5 Forthcoming, AIX group

Ragab and Prudhomme (2000) calculated a high water exploitation index, estimated as a percentage of renewable annual water resources. For example, this was 83% for Tunisia, 92% for Egypt, 140% for Israel, 169% for Gaza and 644% for Libya.

Regionally, ever-increasing demand for fresh water by the riparian parties (those that possess land adjacent to a water source) has been responsible for water quantity and quality problems, and for the exacerbation of disputes over water rights and responsibilities. However, increased effluent reuse and seawater desalination has eased some of the pressures on water supply.

Climate change is projected to intensify the shortage of natural waters. This aspect is discussed in more detail in sub-section 1.2.2. below.

2.1.2 Water pollution

All MENA countries are coastal. They view the Atlantic Ocean (Mauritania and Morocco), the Mediterranean (North African countries, Israel, Palestine, Syria, and Lebanon), the Red Sea (Egypt, Israel, Jordan, Saudi Arabia, and Yemen), the Indian Ocean (Somalia, Djibouti, and the Comoro Islands), and the Arabian Gulf (Iraq, and the Gulf Cooperation Council States). The geographical location has facilitated regional maritime transportation across the region, but also generated maritime pollution. In addition, origins of the main rivers extending through the Arab world – the Nile, Tigris, and the Euphrates – are located outside the Arab world, which is the source of major conflicts between upstream and downstream countries.

Major factors deteriorating domestic water quality are[6]:

- Increased discharge of untreated and minimally treated domestic water, industrial wastewater, and saline drainage water
- Discharge from agro-food and textile processing plants, run-off of agricultural fertilizers, pesticides, and salts from irrigation drainage systems into surface waters
- Discharge of hazardous and toxic industrial effluent
- Over-exploitation of groundwater, resulting in leakage between aquifers and salt water intrusion in coastal areas
- Conflicts and wars, leading to physical damage to water and sanitation infrastructure, and water treatment plants
- Oil infiltration, due to sabotage of oil fields and pipelines causing groundwater pollution and affecting the marine environment

Coastal zones in the Arab world are under stress as a result of demographic shifts from rural to urban areas, land-filling, and the dumping of untreated waste. The marine environment is increasingly threatened by land-based sources of pollution, and by the heavy ship traffic in the region. Out of the world's exported oil, 60% is transported through the Straits of Hormuz. The charged water could cause irreversible damage to marine ecosystems.

The lack of sanitation services, poor management of sewage and solid waste, overzealous application of fertilizers and pesticides along with over-extraction of water contribute to the polluting of the springs, streams, and aquifers of Israel and Palestine. This chronic pollution has led to the decommissioning of many wells, taking its toll on the limited water resources in both parties. The environmental damage serves to exacerbate existing gaps between water supply and demands.

Israel's limited water resources are under severe pressure due to its geo-climatic location, rapidly expanding population, growing economy, and water pollution loads. Responding to these threats and opportunities, Israel has introduced some ambitious water policies, and has been at the forefront of developing

6 www.escwa.un.org

efficient water technologies (OECD, 2011). Water consumption exceeds the natural rate of replenishment, while the intensity of freshwater use is extremely high by OECD standards. Groundwater is being used unsustainably, and a potentially serious pollution problem (including salinity and nitrates) is developing, particularly in the Coastal Aquifer. Climate change is further intensifying pressures on water resources.

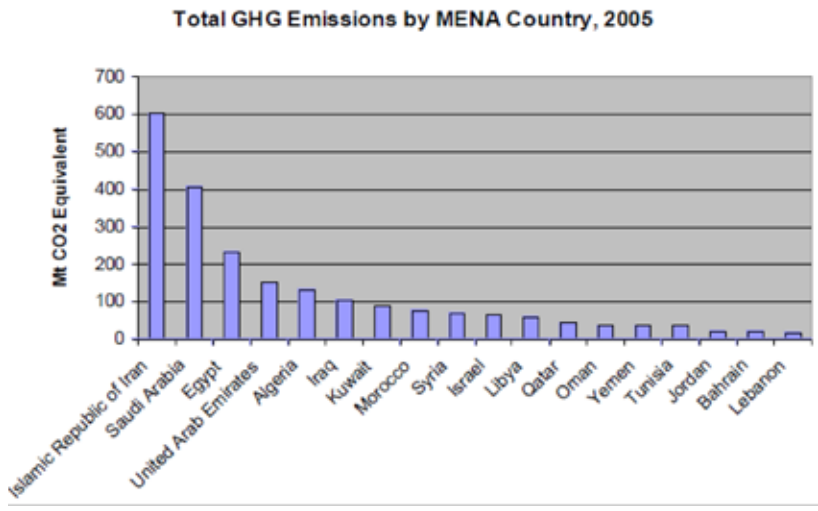
2.2 Causes and Impacts of Climate Change

The composition of the global atmosphere is being altered by an estimated six billion tons of carbon emitted into the atmosphere each year in the form of carbon dioxide (CO_2) from burning fossil fuels, and the one to two billion tons emitted from land-use changes. This atmospheric carbon, together with other anthropogenically emitted gases (CH_4, N_2O, CFCs, etc.) constitute greenhouse gases (GHGs), gases that act as "greenhouse glass," preventing the infrared radiation emitted from the sun-warmed earth to escape into space. Climatic changes during the last century – such as an increased global mean temperature of 0.8°C, increased climatic variability and uncertainty, and increased frequency of extreme climatic events (droughts, floods, storms, etc.) – are attributed to human interference with atmospheric processes through the emission of these gases.

Climate change is generally considered as the main threat to maintaining progress in human development. The threat comes from the increasingly evident non-sustainability of production and consumption patterns (Human Development Report, 2010). Current production models rely heavily on fossil fuels. We now know that this is unsustainable because the resources are finite, and their impacts dangerous. The close link between economic growth and GHG emissions needs to be severed for human development to become truly sustainable. Some developed MENA countries (Israel, Saudi Arabia) have begun to alleviate the worst effects by expanding recycling, and investing in public transport and infrastructure. But most developing MENA countries are hampered by the high costs and low availability of clean energy sources.

The MENA region's emissions of GHGs are generally small in absolute terms. According to IEA (International Energy Agency[7]) data, in 2005 the MENA region contributed 6% of the world's energy-related GHG emissions – i.e., 2207.65 Mt of CO2 equivalent. These emissions were concentrated in three countries – the Islamic Republic of Iran (27%), Saudi Arabia (18%), and Egypt (10%) – which together contributed 56 percent of emissions in the region (Figure 2). More than 50% of emissions came from oil combustion; very little came from coal when compared with the rest of the world (IEA/OECD, 2007).

Figure 2 \\ Large Variation in GHG Emissions by Country



Source: IEA/OECD, 2007

However, the amounts of these emissions and the consequent contribution of the region to climate change varies between countries, with the oil-producing countries (Algeria, Egypt, Iraq, Saudi Arabia, and the United Arab Emirates – UAE) shouldering the largest share (74% of the region's total). Moreover, at 88%, the growth of CO2 emissions in the Middle East and North Africa was

7 http://www.iea.org/

the third largest in the world in 1990-2004, and more than three times faster than the world's average; most of that growth came from fuel combustion (Balgis, Osman Elasha, 2010).

2.2.1 Predicted climate-change impacts for the MENA region – general

Although MENA countries do not contribute more than 5% to the causes of global climate change, its effects on the region will be very severe. During the 21st century, serious climate changes are expected all over the world, but specifically in the Mediterranean basin. The climate forecasts in MENA show an average warming of 0.4-0.8°C in a decade per century, depending upon the area and the season. Rainfall is expected to decrease in most areas, but this trend is mostly not distinct. Moreover, there is an expected increase in the frequency of extreme weather events, drought years, floods, and heat waves. The main effect of the anticipated changes is the increased uncertainty and diversion from BAU weather.

The main expected impacts of climate change in the MENA region are:

- Increases in temperature and rises in sea level. IPCC (2008) warns that temperature in MENA has increased 2-3°C in the last century, which is faster than the global average of about 1°C.
- Changes in precipitation and evaporation rates.
- Increases of hydro-meteorological hazards (droughts, floods, etc.). As a result, MENA is expected to have fewer – but more violent – rain events, increased droughts, and decreasing fresh water resources.
- Greater frequency of severe climatic events (heat waves, intensity of storms, and rapid spread of diseases).
- Scarcity of water resources: rainfall in MENA will decrease by up to 40 mm (4 cm) per year (ENN, 2008), leading to shorter growing seasons for farmers.
- Land (soil) degradation and desertification.

- Increased salinity of soils and of surface- and ground-water, resulting in decreases in soil-, water-, and air-quality.
- Depletion of stratospheric ozone.
- Health deterioration.
- Decline in, and even loss of, biodiversity.
- Decline of crop yields and increase in crop failure, leading to food insecurity, higher prices, higher rates of unemployment, loss of income, and political disorder.
- Environmentally-induced migration and displacement, leading to "environmental refugees".

In fact, the region is particularly vulnerable, given the already scarce water resources, high levels of aridity, and the long coastal stretch threatened by the rising sea levels. Natural and physical systems in the Arab world are facing heavy pressures, and these will only be intensified as temperatures in the region get higher and/or precipitation gets lower.

Ziv et al. (2005) points out that there are indications of an aggravation of summer heat conditions over the Mediterranean basin. MENA countries are projected to face an increase of 2-8°C in surface temperature by the end of the 21st century. In addition, this temperature increase will be coupled with a projected decrease in precipitation of up to 20%. There are indications of an aggravation in summer heat conditions over the MENA countries, with an increase in heat waves. The results for the region include shorter winters, dryer and hotter summers, a higher rate of heat waves, increased weather variability, and more frequent occurrences of extreme weather events. Clearly, adaptation and mitigation strategies need to be researched, discussed, and implemented.

The adverse impacts of global climate change represent a massive transfer of environmental harm to vulnerable regions and developing countries that has few historical parallels. Countries and populations that only marginally participated in the long-term accumulation of GHG emissions in the atmosphere will bear the brunt of the costs of water-related adaptation to climate change. Many developing countries already face grave structural

economic problems, governance challenges, and ecosystem threats (Lemos and Agrawal, 2006; Adger et al., 2003).

These changes may have major effects on various sectors, primarily on the water sector, public health, biodiversity, and the urban environment. In addition, this is expected to influence geostrategic outputs as well as the GDP and social welfare in MENA.

2.2.2 Climate change impacts on water

As stated above, in MENA countries, water is a precious natural resource, and its relative scarcity is a major constraint to economic development. This applies throughout the region, which is generally characterized by aridity and water scarcity. Global climate change may further magnify the pressure on the water system in the MENA region through increased temperatures and evaporation rates, as well as lower and more erratic rainfall (UNEP, 2003a). Changes in the nature of the precipitation and a rise in extreme weather events will increase flooding and runoff, and will reduce the enrichment of the refill of underground water reservoirs.

The Intergovernmental Panel on Climate Change (IPCC) report predicts "annual rainfall is likely to decrease in much of Mediterranean Africa and northern Sahara, with the likelihood of a decrease in rainfall increasing as the Mediterranean coast is approached" (IPCC 2007, Chapter 11, p. 866). Several other independent studies have also suggested a major reduction in precipitation, ranging from 10%-30% in MENA by the next century (Conway and Hulme, 1996; Arnell, 1999; Sánchez et al., 2004; Milly et al., 2005; Suppan et al., 2008; Alpert et al., 2008; Evans, 2008a, b, 2009). In particular, these studies predict that by the end of the 21st century, the Mediterranean region might experience a substantial increase and northward extension of arid regime lands, which would affect the coastal regions of MENA and extend to Mediterranean islands, southeastern Europe (particularly Spain), and the Turkish peninsula (Gao and Giorgi, 2008; Evans, 2008a, b, 2009). During the last five years, there has been a significant reduction in the amount of precipitation in MENA, which is already the most water-stressed region in the world.

The Levant (Syria, Lebanon, Palestine, and Israel) will be one of the regions in the Middle East most affected by changes in precipitation. Most climatic models predict a decrease in precipitation combined with a surface temperature increase in the Eastern Mediterranean (Alpert et al., 2008), which will result in decreased water availability and enhanced water deficit in the Lower Jordan River basin (Israel, Palestine, and Jordan; GLOWA, 2009). High resolution climatic models conducted in the Middle East predict an increase in mean annual temperature of up to 4.5°C that coincides with a 25% decrease in mean annual precipitation towards the end of the 21st century (Suppan et al., 2008). These and other models also predict changes in spatial precipitation distribution, in which precipitation in the northern section of the Levant will experience greater reductions than in other parts of the region (Suppan et al., 2008; Steinberger and Gazit-Yaari, 1996). Consequently, precipitation is predicted to decrease by 25% in the Upper Jordan River catchment and aquifer recharge zones in northern Israel, Lebanon, and Syria (Suppan et al., 2008).

In Jordan, the average annual water yield (i.e., aquifer replenishment) is expected to decrease by a staggering 45-60%, due to combination of a 2°C increase in temperature along with a 10% reduction in precipitation (Oroud, 2008). Thus, the present water deficit in Jordan is expected to intensify further. According to the 2007-2008 Human Development Report (p.95), similar deficits are forecast for Syria, where a 50% decline in renewable water availability is expected by 2025, compared to 1997 levels.

Kitoh et al. (2008) present the first full projections of rainfall and stream-flow in the "Fertile Crescent" of the Middle East by employing an innovative super-high-resolution (20-km) global climate model, which accurately reproduces the precipitation and stream-flow of the present-day Fertile Crescent:

- It was projected that by the end of this century, the Fertile Crescent would lose its current shape and could disappear altogether.
- The annual discharge of the Euphrates River will decrease significantly by the end of this century (29-73%), as will the stream-flow in the Jordan River. Thus countermeasures for water shortages will become much more difficult.

- Kunstmann et al. (2007) used joint regional climate-hydrology simulations to investigate the impact of climate change on water availability in the Middle East and the upper Jordan. The results indicate:
- Mean annual temperature increases of up to 4.5°C, and 25% decreases in mean annual precipitation in the mountainous part of the upper Jordan catchment
- A23% decrease in total runoff at the outlet of the catchment, accompanied by a significant decrease of groundwater recharge

2.2.3 Extreme events

Climate change is also expected to increase the frequency and intensity of extreme climatic conditions and related disasters, exposing more people to risk situations, and leading to more severe events such as droughts, floods, hurricanes, and dust storms (IPCC, 2007). This situation could potentially aggravate the region's vulnerability to natural disasters, which include, in addition to drought and food shortage, floods, dust storms, and pest infestations. Increasing occurrences of El Niño, which is the warming of sea surface temperature (SST), presents a climate phenomenon that changes the regular wind pattern. This could be accompanied by changes in the seasonal distribution and predictability of rainfall over the African Sahel, more intense rainfall events and associated flash flood risks, changes in the distribution and occurrence of pests and diseases such as locusts, malaria, and dengue, and possible changes in the occurrence of dust storms.

In addition, under a projected increase of temperatures, soil erosion is expected to increase. Loose soil is easily movable by wind storms, which are also expected to increase in terms of frequency and intensity. The fine particles of dirt kicked up during wind storms contribute to air pollution and negative health impacts. Increased movement of sand dunes is also expected to impact scarce water resources in the region. Dust storms are prevalent features of the Saharan and Sahelian environments. The Sahara Desert is considered the largest source of airborne dust minerals in the region. Some places in the MENA region (Khamasin in Egypt, Haboob in Sudan) witness

exceptionally huge dust storms that can sometimes turn day into night by completely concealing the sunlight.

Table 1 presents the likelihood of various types of extreme events and their impacts on the MENA region:

Table 1 \\ Trends in Extreme Weather and Climate Events

Extreme Weather Events and Trend	Likelihood	Major Projected Impacts
Frequency of heat waves and hot extremes increases over most land areas	Very likely	Wildfires. Increased water demand. Water quality problems.
Heavy precipitation events increase over most areas	Very likely	Damage to crops. Soil erosion. Flash floods. Landslides. Subsidence. Mudslides.
Area affected by droughts increases	Likely	Land degradation. Wildfires. Losses in agriculture (crops and livestock).
Intense tropical cyclone activity increases	Likely	Disruption by floods and extreme winds. Damage to coast and coral riffs.
Extreme high sea level	Likely	Increase of losses due to severe floods and sea surge. Increased costs of coastal protection and land-use relocation.
Changes in wind, precipitation and temperature patterns	Likely	Increase of losses due to extreme weather events.

Source: IPCC Report 2007.

2.2.4 Sea level rise

Sea Level Rise (SLR) is a direct result of the ice melt, resulted from the increasing amounts of the GHG emitted globally in the atmosphere. SLR in the Mediterranean basin is one of the most troubling impacts related to future climate change. Numerous estimates show that the sea level has risen in the past century by 10-25 cm, which is considerable when compared with the rate of sea level rise over the past few thousand years.

Two primary mechanisms that induce land loss due to SLR are: erosion and inundation. SLR increases the risks of:

- Seawater intrusion into fresh groundwater
- Storm floods
- Encroachment of tidal waters into estuaries and river systems
- Destruction of coastal ecosystems and coastal biodiversity

The SLR, which is expected to increase due to global warming, will enhance erosion along the Gaza Strip's beaches, and will also cause sea-water intrusion into the Gaza Coastal Aquifer System, added to the already existing intrusion.

The Gaza Strip will be seriously affected if severe floods occur. The coastal structures could be damaged through floods or erosion, causing a huge loss in valuable lands and buildings and, in turn, forcing inhabitants of these areas to migrate.

Calculated Sea-Level Rise (SLR) for the Gaza Strip region during 1915-2100 based on the El Raey's empirical equation (El Raey, 2007) for the Port Said area in Egypt is presented in Table 2:

Table 2 \\ SLR for Egypt and the Gaza Strip Region during 1915-2100

1915 (cm)	1925 (cm)	1950 (cm)	1975 (cm)	2000 (cm)	2010 (cm)	2025 (cm)	2050 (cm)	2075 (cm)	2100 (cm)
0.4	2.8	8.5	14.3	20.1	22.4	25.9	31.7	37.5	43.2

Table 2 shows that over the 185-year period (1915-2100), the sea level at the Gaza Strip rose and is projected to rise to a total of approximately 43 cm, which can be translated into about 0.23 cm/yr (2.3 mm/yr). Table 2 also shows that for the last century, the sea level rose about 20 cm, and it will also rise another 23 cm by the end of this century (i.e., by the year 2100). The calculated values in the Table 2 agree well with the findings of the UNEP for the global SLR, as the sea level rose 2 cm in the 1700s, 6 cm in the 1800s, and 19 cm in the 1900s (UNEP 2009; IRIN 2009a).

Scenarios of the United Nations Environment Programme (UNEP) and other organizations indicated that a 50-cm rise in sea level, for example, could displace, by the year 2050, some 2-4 million Egyptians living close to the Mediterranean shorelines (FoEME, 2007). El Raey (2007; 2010) estimates that 2-6 million Egyptians will be forced to abandon their homelands; and 4,500

square kilometers of the Egyptian Delta's farmland will be flooded, along with an economic loss of about USD 2.0-4.4 billion over the next century.

2.2.5 Indirect effects of climate change on health

The effect of climate change on existing environmental and public health problems is difficult to discern. The challenge is to identify the "additional" risk factor, i.e., the increase in health problems that can be attributed to climate change. This requires advanced and far-reaching research agendas and tools. Not much is known about "traditional" risk factors and causes of many public health problems in the MENA countries, let alone the additional effect of climate change.

The effect of climate on the mechanism of chronic diseases is not fully understood, but it is known that extreme weather conditions (heat, cold, humidity) increase the frequency of appearance of cardiovascular and respiratory diseases. Climate change also affects the availability, presence, and behavior of different vector-borne infectious diseases. These changes are shown by a seasonal pattern displayed by many of these diseases. While some of the factors responsible for this seasonality are known, a major part of the phenomenon has yet to be explained.

Studies link climate change to a wider spread of allergenic manifestations and the increase of reported asthma cases in affected areas. Increases in CO_2 concentrations and in temperatures are associated with an increase in ragweed pollen production and the prolongation of the ragweed pollen season. Dust from Africa has been transported across the Atlantic as far as the Caribbean, where a dramatic increase in asthma cases has been reported as a result. It was reported that numerous species of bacteria and fungi well known to cause allergic reactions, pulmonary infections, and skin infections have survived the transatlantic transport.

Other climate factors, such as ultra-violet radiation (there is a correlation between climate change and temperature rise and reduction of the ozone layer in the atmosphere), affects the appearance of other diseases, such as cancer and cataracts.

All these expected health outcomes of climate change might force immigration and migration of human and animal populations (amongst them, animals that can be transmitters of disease vectors) to other parts of the world. This process might also lead to a change in the geographical distribution of diseases.

2.3 Biodiversity

The unique MENA biodiversity is at serious risk from increased human activities. The main issues are the degradation and/or destruction of habits and the loss of species. This is mainly the result of population growth, agricultural and urban expansion into ecologically important areas, poverty and the unsustainable use of biota, and industrial pollution. Climate change is projected to threaten MENA biodiversity even further.

Biodiversity in the region is subject to serious pressures from several sources: habitat fragmentation, the introduction of invasive species, over-exploitation of natural resources, and pollution. Demographic changes, economic development, and climate change are the main causes of these pressures. In response, some MENA countries have made progress in reducing pressures on aquatic ecosystems from river pollution, and in enhancing habitat protection through an impressive afforestation program (OECD, 2011). On the other hand, the condition of coral reef habitats has deteriorated, and the size of coastal ecosystems has decreased. The number of threatened mammal species is relatively high compared to that in other OECD countries, while the status of other species is more favorable.

Climate change might lead to serious changes in the interaction between species and their geographical distribution, while affecting biodiversity and system services. It is important to note that even though the biota in our area is already accustomed to uncertain climate conditions, further reduction in precipitation and its regularity can lead to critical changes in their ecosystems and their functionality, mostly in the arid desert area.

In fresh water systems, the major and immediate threats are caused by human activities. Climate change will increase the pressure on these systems, thereby increasing the severity of the deterioration.

Models predicting climate change effects on the range of species and their distribution forecast that as a result of a temperature rise, the distribution areas of these species will change, and they will move to areas where the temperature range is similar to those that they exist in today. One of the consequences of this change in the distribution range of species might be the increase in diseases spread by arthropods.

Populations located at transition areas between Mediterranean climates and desert climates are characterized by a high genetic diversity. These areas are therefore of great importance in maintaining biodiversity in the era of climate change. The difference in the genetic composition between populations from habitats with varied environmental conditions can be used as a species protector under stressed conditions. A minor effect on primary productivity in grasslands might be assumed.

In marine systems, studies emphasize the major effects of invasive species in the Mediterranean Sea, a phenomenon that will probably accelerate with warming sea water.

Another significant effect is the destruction of its surrounding coastal tables. The main threat to the systems in the Red Sea is coral bleaching, which is the basis of the ecosystem of the reef.

2.4 Air Pollution

The issue of air quality conditions in MENA countries has been addressed similarly to that of atmospheric pollution, through consideration of energy production and consumption patterns. The main sources of air pollution in the region are energy and industrial production, and vehicular emissions. The last factor accounts for almost 90% of air pollution in urban centers, mainly due to poor maintenance, aged cars, low-quality fuel, and poor traffic management. Stationary sources, such as outdated power generation stations, are also a major source of air pollution (UNEP, 2003b).

As industrialization becomes more widespread in MENA countries, the emission of sulfur dioxide (SO_2) and nitrogen oxides (NO_x) has increased steadily in many living areas. In fact, studies indicate that if current industrialization

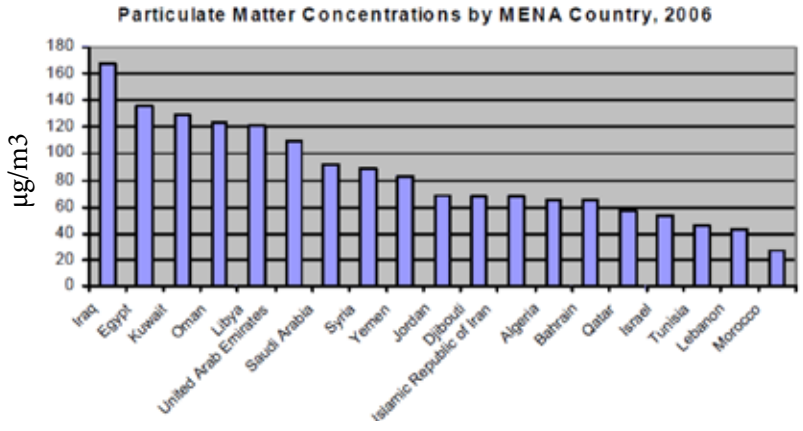
levels remain the same, an enormous increase in emissions will occur, resulting in serious environmental degradation.

Per capita carbon oxide (CO) emissions have risen steadily in most countries of the region in the last three decades. Regionally, the Gulf countries emit about 50% of the total of all Arab countries; in addition, the countries in this Arab sub-region are the only ones with CO_2 emissions levels above the world average. To give a few examples, in 2003, emissions in UAE, Qatar, Bahrain, and Kuwait were respectively 13, 9, 8, and 7 times higher than the world average. Countries such as Libya, Oman, and Saudi Arabia also have per capita emissions higher than the world average, while those of the rest of the Arab countries are approximately equal or below.

Urban air pollution is emerging as a serious threat facing most of the cities in the region. Cities are experiencing air pollution, with gases, particulate matter (PM), and lead at levels often exceeding global standards.

The MENA region has high levels of local airborne pollution (particulates) and CO_2 emissions far above levels found in OECD and other middle-income countries (ESMAP, 2009). Within the MENA region (Figure 3), Iraq has the highest PM concentration (167µg/m3), followed by Egypt, Kuwait, Oman, Libya, UAE, and Saudi Arabia, all of which have levels above the region's average.

Figure 3 \\ Above World Average Particulate Matter Concentrations in MENA, 2006

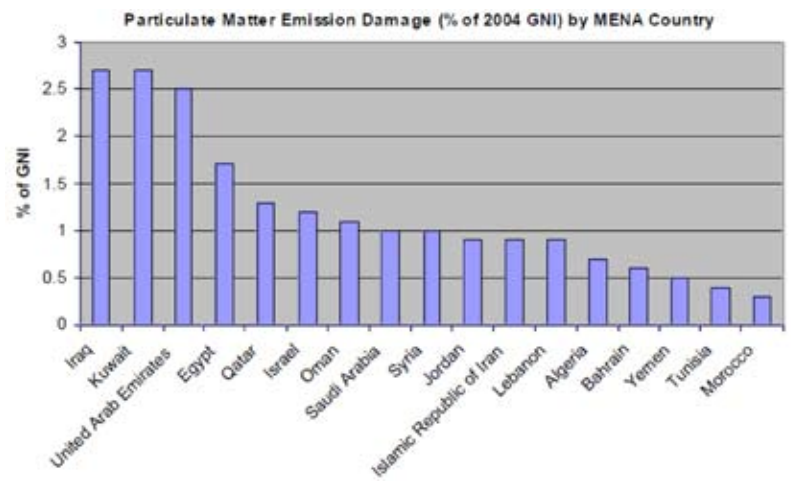


Source: World Bank (2006)

The cost of such elevated levels of pollution is very high: close to one percent of the regional gross national income (GNI) for particulate matter. Improved energy efficiency could substantially reduce pollution as well as the costs of pollution to the regional economy.

Within MENA, Iraq and Kuwait have the highest costs incurred by PM emissions—2.7% of GNI (Figure 4), more than five times the world average. With the exception of Yemen, Tunisia, and Morocco, most MENA countries have PM-emission damage costs that are higher than the world average. It is estimated that urban air pollution in eight MENA countries studied[8] causes 40,440 premature deaths per year. Among these eight countries, Egypt suffers the highest damage costs due to air pollution (2.1% of GDP), accounting for 44% of the total cost of environmental degradation in the country. Air pollution is the leading factor impacting health and quality of life in Egypt.

Figure 4 \\ High Cost of PM Emissions in Iraq and Kuwait, Followed by the UAE, 2004



Source: IEA (2007)

8 Algeria, Egypt, Iran, Jordan, Lebanon, Morocco, Syria, and Tunisia

On the national scale, the inefficiency of energy utilization and economic losses, as well as energy over-consumption, cause exacerbation of air pollution. In addition, lack of environmental regulation does not create an incentive for companies to recognize the responsibility for pollution they emit or develop capabilities to control pollution. It is expected that in the next 15 years, Arab countries will start to face serious problems of air and water pollution as a result of increased dioxide emission, urbanization, population growth, and economic development.

2.5 Degradation of Arable Land

Out of the total area of MENA, 14.5% is usable for agriculture, with 4.2% currently in use. This includes areas that use rain-fed irrigation for cereals, irrigated areas, and natural grazing lands.

Almost 89% of Arab land receives annual rainfall of less than 100mm. Most of this area is desert or desertified sand, suitable only for grazing. Most of the Arab lands are threatened by desertification due to anthropogenic activities, including overgrazing. Overgrazing is responsible for almost a quarter of the desertification that is taking place. Almost one fifth of the total area is threatened by desertification due to forest/shrub clearing operations, compared to 2% and 1% of the total area lost annually due to salination and urban expansion respectively (UNEP, 2003). There have been various regional initiatives to combat desertification, such as the Sub-Regional Action Program (SRAP) for West Asia and the Arab Maghreb Union.

In some cases, such as most of the Arabian Gulf states, the desert represents almost 98% of the total area. In Egypt, despite the Nile River, desert represents almost 94% of the country's total area.

Violent conflicts in the region are inflicting serious damage to land resources as well as marine and costal environments due to displaced populations, massive oil spills, and the improper disposal of mountains of waste and debris.

Due to poor farming technologies, agriculture remains the major consumer of water sources in most Arab countries. A low level of efficiency is noted in the utilization of water in all relevant sectors. This has generated a range of problems, such as water logging, salinity, low productivity, and soil infertility,

as well as the deterioration of the quality of ground water. Additional water governance remains fragmented among various institutions, which generates problems of the rationalization of water use. The problem is further aggravated by the high rate of population increase, the geographical location of Arab countries in the Great Desert belt, and the lack of national programs to rationalize water consumption.

Alcamo et al. (2005) estimated that by 2050, the global demand for ecosystem services will substantially increase cereal consumption by a factor of 1.5-1.7; fish consumption (up to the 2020s) by a factor of 1.3-1.4; water withdrawals by a factor of 1.3-2.0, and biofuel production by a factor of 5.111.3. They also point out that the risk of lower water availability, especially in the Middle East, could slow down food production.

Alcamo et al. also show that certain hot-spot regions may experience especially rapid changes in ecosystem services: these include the central part of Africa, southern Asia, and the Middle East.

In the Israeli-Palestinian conflict, the environment is often injured in the name of security (Twite, 2003). The building of the settlements and the separation wall has destroyed thousands of agricultural lands, and made it impossible for many Palestinians to reach their farms.

In addition, as MENA countries experience the effects of climate change and increased water scarcity, there is increasing pressure to allocate water away from agriculture to industrial and municipal uses, as well as to increase water efficiency within the agricultural sector (Shetty, 2006). Some countries, such as Israel, Tunisia, Morocco, and Jordan, have begun addressing the issue of water reallocation, whereas others, notably the Gulf countries, have not (Adams et al., 1999).

2.6 Waste Management

Some six million tons of waste are generated in Israel each year, of which 4.2 million tons are produced in households and the rest in industry. Each person in Israel produces an average of 590 kg of waste per year. Due to population

growth (over 2% annually) and rising standards of living, municipal waste has been increasing in the order of 5% annually.

Average per capita waste generation rate in Jordan is 0.9 kg/day, generating up to 4600 ton/day = 1,679,000 ton/year countrywide. There exists a partial separation of useful materials (in landfills and outside), as well as minor rates of recycling and the export of separated materials. Separated organic waste is treated to generate biogas and electricity in a reactor (Russaifa landfill).

In the Palestinian Authority, local surveys and estimates indicate that household waste accounts for 45-50% of the total solid waste, with the construction and industrial sectors together constituting 20-25 %, and remaining types (commercial, institutional) 25-30% (Al-Hmaidi, 2002).

Hazardous material is to some extent present in all these waste types, although such material is only a significant component of industrial and hospital waste. There is virtually no separation of hazardous waste, except for some limited treatment of infectious waste, for example in Jericho (Ariha), Nablus, Gaza City and Khan Yunis, and disposal of old medicines (Gaza City). Hazardous waste is mixed with municipal solid waste during both collection and disposal. There are few available data on quantities of hazardous waste.

Levels of solid waste generation are as follows: in refugee camps: 0.5-0.8 kg per capita per day; in rural areas: 0.4-0.6 kg; in towns/villages and rural areas: 0.6-0.8 kg; and in cities: approximately 0.9-1.2 kg. It is difficult to obtain adequate population data for calculating overall levels of solid waste generation. Nevertheless, it is estimated that total annual solid waste generation in Gaza exceeds 300,000 tons, while that for the West Bank altogether is likely to approach 500,000 tons (Al-Hmaidi, M., 2002).

Demographic and economic trends have resulted in an increase of about 15% in municipal waste generation in Israel over the last decade, but the growth was relatively decoupled from the growth of GDP and private final consumption. Despite new policy initiatives in the second half of the 2000s, municipal waste generation per capita in 2009 was among the highest in OECD countries.

2.7 Population Effect on the Environment

Population plays the core role in affecting the environment. The impact of population growth can be moderated if environmental awareness is high. However, studies show that environmental education and awareness in Arab countries is very low (Springuel, 2006).

MENA countries are known to have high fertility rates, e.g., 5.5 in Saudi Arabia, 7.7 in Yemen, 7.1 in Uganda, and as high as 7.8 in Niger. The fertility rate in Israel is much lower – 2.9 births per woman; however it is the highest rate among OECD countries (Human Development Report, 2010). Even in areas where fertility rates have declined to near replacement levels (2.1 children per couple), the population continues to grow due to "population momentum," which occurs when a high proportion of the population is young.[9]

The projected population growth for the Narrow Middle East countries (Egypt, Syria, Jordan, Israel, West Bank and Gaza, Lebanon) for the period 2000-2050 is presented in Table 3 below:

Table 3 \\ Projected Population Growth in Narrow Middle East Countries, 2000-2050

Country	Population in 2000 (million)	Projected Population in 2050 (million)	Projected Population Difference 2000-2050 (million)	Projected Population Difference (%)
Egypt	67.9	113.8	45.9	68
Syria	16.2	36.4	20.2	125
Jordan	4.9	11.7	6.8	139
Israel	6.0	10.0	4.0	67
PT (Palestine)	3.2	11.8	8.6	269
Lebanon	3.5	5.0	1.5	43

Source: UN 2001, 2005; Brauch 2002, 2007; Salem 2010

9 http://www.rand.org/pubs/research_briefs/RB5045/index1.html

Population effect on the environment can be studied in two dimensions:

a. Demographic effect

b. Mediating factors

2.7.1 Demographic effect

The threat of population growth to the environment can be divided into population size, and distribution and composition. These aspects can sum the overall effect of population, yet they do not count for the type of education this population obtains, or for environmental policies in place.

- Population size – obviously, as the population grows the demand for living resources, such as arable land, potable water, forests, and fisheries, increases. With faster consumption of natural resources, waste levels also accelerate dangerously. In addition, decreasing farmland may reduce the food production, and the population's share of natural resources declines. The danger is particularly acute for natural water resources. There are even some that claim that water will one day be more expensive than oil in the Arab countries. Moreover, the general trend of urbanization in MENA countries frequently outpaces the development of infrastructure and environmental regulations, often resulting in high levels of pollution.
- Distribution and composition – the relationship between population and the environment is not simple, because the composition of the population might reverse the effect. Population subgroups behave differently: if the majority of the population is relatively young; urbanization increases as younger populations tend to move to the cities in a search for better-paid opportunities. This is actually the case in many Arab countries.

However, the increase of income does not have a totally negative impact on the environment. It opens opportunities to implement cleaner technologies. As incomes grow, some forms of pollution are found first to worsen and then to improve. The world's poorest and richest countries have relatively clean environments, while middle-income countries are the most polluted.

Because of its resemblance to the pattern of inequality and income described by Simon Kuznets (1955), this pattern of pollution and income has been labeled an "environmental Kuznets curve" (EKC).

One of real challenges of regional cooperation should be assisting developing MENA countries to make a cleaner transition towards economic development without caving in environmental collapse.

2.7.2 Mediating factors

Technology, culture, and government policies on the environment can change the effect of population growth from negative to positive, and vise versa. Most of the technologies that affected the environment directly were related to energy generation and consumption. In recent decades, the Arab states were of the major sources providing energy materials, and have consumed dramatically higher rates of oil, natural gas, and coal. As most of the countries are still in the stage of economic development, they rely more on resource-intensive and highly polluting production processes.

National policies can ameliorate environmental decline, for example by setting emissions standards. Unfortunately, the Arab countries are barely establishing policies to "put the wastes into the waste basket," which is a disaster to the environment. In addition, the Arab mentality in general is not responsive to following laws and regulations. Even if a government passed a set of policies, regulations, and strategic plans to enhance the environment and decrease pollution, it would not easily be implemented because of a general lack of concern for the environment and a cultural unwillingness to follow rules.

Nevertheless, there is an increasing awareness in the Arab world at the governmental and non-governmental levels of the acuteness of the environmental problems that the Arabs are facing. Most Arab countries have consequently established national institutions (ministries or public corporations) related to the environment, issued national strategies for the protection of the environment, developed NGOs to support the work of the governmental institutions, published various journals on the topic, and established academic institutions to major in the study of environmental issues.

Environmental problems in the Arab world, however, still pose a major security threat. Environmental problems have begun to impact upon the

health of present generation, and threaten future ones. This is an outcome of the prevalent paradigm in the Arab world that environmental issues are residual, resulting in limited financial allocations to solve them. It is a result of inefficient government bureaucracies, inadequate legislation, and most importantly of the tendency to view environmental issues as purely technical, that do not pose immediate security threats.

3. MENA Environmental Policies and cooperation Programs

The region has made significant progress in environmental management planning and implementation. Nearly all countries of the MENA region have adopted a National Environmental Strategy (NES) for the purpose of moving towards sustainable development. At least eight countries have approved a National Environmental Action Plan (NEAP) for the purpose of transforming strategies into actions.

NES and NEAP preparation prompted most countries to assess environmental policies at the national and local levels, as well as to set time-bound goals and targets for achieving progress. The majority of the region's environmentally related institutions experienced changes in structure and mandate during the 1990s, indicating greater awareness and a rethinking of environmental concepts. Environmental legislation in the region was also strengthened, and the number of member states ratifying regional and multilateral environmental agreements increased.

Geopolitics continues to constrain Israel's ability to participate with its immediate neighbors, as well as with some other countries, in collaborative work on environmental issues (OECD, 2011). This affects its ability to participate fully in international organizations and regional groups, and to propose and pursue regional and trans-boundary initiatives. Nonetheless, during the past decade Israel has become a member of, and has actively participated in, the UNEP Governing Council and the UN Commission on Sustainable Development. As a new OECD member, it has moved rapidly to adjust its policies and procedures to conform to OECD legal instruments and

policies. It has also increased its environmental cooperation with the European Union and in the Mediterranean region, notably by actively participating in the Mediterranean Action Plan and by joining the Mediterranean Climate Change Initiative.

3.1 Climate Change Policy and Government Decisions

In line with local environmental policies, various actions have been taken in recent years to improve environmental quality and promote sustainable development. Some contribute directly towards the mitigation of GHG emissions or towards adaptation to climate change. Others contribute indirectly to the achievement of these goals. In this context, and as an example, five landmarks in Israel's environmental policy during the past decade are noteworthy:

- Setting a target for assimilation of renewable energy in Israel
- Paving the path towards sustainable development policy
- Setting responsibilities and obligations for the reduction of air pollution
- Preparing a climate change plan for Israel
- Setting a target for a 20% reduction in GHG emissions by 2020, compared to a BAU scenario

3.2 Environmental Cooperation Programs in Place

There has been a trend to coordinate environmental policies among Arab countries within the framework of the Council for Arab Ministers Responsible for the Environment (CAMRE), and to coordinate policies with UNEP. However, the Arab environmental paradigm is characterized by its emphasis on the managerial-technical character of environmental issues. It tends to depoliticize these issues, and deal with them outside the main thrust of its national security strategy. Perhaps the only exception is the Arab approach to the environmental issues in the Middle Eastern framework. The Arabs also tend to view environmental issues as residual issues compared with

those related to statehood, sovereignty, and territory. This results in limited resource allocations to environmental issues and the tendency to rely on foreign support.

The political character of environmental issues in the Arab world was reflected in the deliberations of the Middle Eastern Working Group on the Environment, which was formed within the multilateral track of the Madrid Peace Conference of October 1991. The Group was chaired by Japan, and held a number of sessions. Its deliberations witnessed major disagreements on the relationship between environmental and political issues, as well as on the strategies to be pursued vis-à-vis environmental hazards. The Israelis suggested that priority be given to environmental questions, and that a regional framework for cooperation in the form of joint teams be established to deal with environmental issues. It also suggested giving priority to the issues of air pollution, climate change, and pollution of the Mediterranean. The Egyptians and the Palestinians, supported by the Jordanians, advocated linking the progress of regional cooperation on the question of the environment to the settlement of the Arab-Israeli conflict, arguing that cooperation on the environment should a part of overall regional cooperation. It also suggested engaging UNEP in regional projects. They gave priority to issues such as desertification, marine environment, air pollution, and natural disasters, and demanded that the point of entry in establishing a regional system for cooperation was to determine the parties that caused the environmental damage and to hold them responsible for it. This is because Israel, it was claimed, has caused tremendous damage to the Palestinian environment by building settlements on agricultural lands and removing trees. They also wanted to ban anti-environment military activities, and to commit all the regional powers to get rid of radioactive materials within their territories in an indirect reference to the Israeli nuclear program (Goma'a, 1994).

The Israelis and the Egyptians agreed on one point: the need to engage outside powers in building a regional system for cooperation in the field of the environment. However, whereas the Israelis preferred engagement by Japan, the US, and the European Union, the Egyptians and other involved Arab Parties also wanted the UN to be involved. Moreover, whereas the Egyptians preferred to begin by dealing with grand issues such as nuclear and chemical

weapons and their impact on the environment, the Israelis preferred to deal with purely technical issues. The Egyptians clearly advocated the politicization of the environmental issues not because they adhere to a politicization paradigm, but mainly because they wanted to use the card of environmental cooperation to accelerate the peace process. The Arab teams wished to safeguard against creating a precedent of regional cooperation and normalization without progress on the political issues. Further, despite its technical character, the Israeli approach had major political objectives, that is, to establish an Arab-Israeli regime for cooperation, one with political implications.

With the collapse of the peace process in 1996, the meetings of the Environment Working Group were suspended. The Israeli-Palestinian technical expert team continued working until 1999 before it collapsed, too. Although some achievements were made by the team, the politicization of environmental issues was a barrier against further achievements. Understandably, such a collapse led to the further worsening of the regional environment, especially in the West Bank and Gaza, especially after the second Intifada of September 2000. Recently, a joint Jordanian-Israeli research center was established under American sponsorship to study the ecosystem of the Dead Sea area. It remains to be seen if this experience will survive the political upheavals of the Middle East.

MENA countries have also signed and ratified over 64 international and regional governmental conventions and agreements on the protection of the environment. Among the most important are: the three Rio conventions focusing on sustainable development; the United Nations Convention to Combat Desertification; the Convention on Biological Diversity; the UN Framework Convention on Climate Change; and the Montreal Ozone Convention. Implementation of some of these conventions has been rather modest for many MENA countries, due to lack of adequate resources. The Montreal Ozone Convention has achieved the most successful level of implementation in the Arab world.

At the Arab regional level, there has been a concerted effort within the framework of the League of Arab States (LAS) to coordinate Arab environmental strategies. The League established a Department of Environment and Sustainable Development responsible for coordinating Arab environmental

projects. The Council for Arab Ministers Responsible for the Environment (CAMRE) was also established in 1989. CAMRE meets annually to review common environmental issues. It elects an Executive Bureau of seven members for a term of two years, as well as a chairman. In September 2002, CAMRE presented an assessment report on the progress made towards achieving sustainable development at the World Summit on Sustainable Development (WESS) in Johannesburg. It also launched the Arab Initiative on Sustainable Development, to be implemented in the region in cooperation with UN agencies such as UNEP. In its December 2003 session held in Benghazi, Libya, it adopted "The Arab Environmental Work Program of CAMRE for 2004 and 2005." The Program deals with issues such as desertification and increasing green land, industry and the environment, education and environmental mass communication, capacity-building in the area of environmental legislation, monitoring international environmental treaties, and completing statistical databases on the environment.

At the level of NGOs, the Arab Network for Environment and Development (RAED) was formed in 1990. It comprises NGOs in Arab countries majoring in environmental issues. In 1995, RAED was granted observer status at CAMRE, and it participates in its meetings and secretariat. It also sponsors various activities at the Arab, Mediterranean, and regional levels for the protection of the environment.

Since 1992, countries of the Arab region have accumulated better knowledge and understanding about economic, environmental, and social challenges, as well as trends affecting sustainable development. This progress is thanks to the development of improved monitoring and information networks, as well as the steadily decreasing costs of modern information technologies and decision-making tools. Improved regional capacity for analytical and empirical modeling and assessment has also contributed to more informed policy formulation and better information resources.

These strategies have been helpful in creating a public awareness of the environmental hazards in the Arab world, and in delaying their functional consequences.

Several MENA countries have tried to invoke the “polluter pays principle,” by levying environmental taxes to discourage the unsustainable use of materials and energy resources by industry and individuals (e.g., air pollution taxes). The use of market-based instruments, where feasible, is also more pronounced in NEAPs prepared over the past few years. Subsidies are also gradually being reduced in favor of tariffs, as encouraged by international trade regimes.

While the harmonization and approximation of environmental standards and policies at the regional level remains limited, there has been a significant increase in awareness among governments and the private sector regarding its benefits. Problems persist, however, because of differing perspectives among Arab member states regarding the laxity or rigidity of their environmental regimes. Some countries still fear that a strengthening of environmental laws and enforcement will dissuade entrepreneurs from investing in their country in favor or other countries in the region that require less stringent environmental performance.

3.3 Environmental Information Networks in MENA

Positive efforts have been made by the League of Arab States, assisted by regional United Nations organizations, to identify, harmonize, test, and utilize sustainable development indicators and indices for monitoring and reporting on sustainable development. For example, the Blue Plan of MAP/UNEP has been conducting an "Environmental Performance Indicator" (EPI) project and an "Indicators for Sustainable Development" (ISD) project, whereby 130 indicators were identified for the Mediterranean region. It has also developed “topical” indicators to illustrate specific themes such as water, tourism, and wooded lands and soils, which are being applied in selected Economic and Social Commission for Western Asia (ESCWA) member countries in the Mediterranean basin.

Several countries in the region have also established national environmental information systems and networks. Some are comprehensive information systems, while others are environmental information systems. At the national level, Lebanon established a National Environment and Development Observatory.

At the regional level, eleven founding members from regional and international organizations established the Arab Region Environmental Information Network (AREIN). The intention is to expand the network to include national networks and information systems into one regional integrated network. There are also some efforts to establish sub-regional networks, such as one for the GCC countries. To be effective, more effort is needed to improve networking and regular updating of environmental information at the local, national, and regional levels.

3.4 Regional Funding Schemes

Despite efforts to address sustainable development challenges at the policy level, no progress can be achieved without sufficient funds. Apart from national ministries and agencies designed to solicit financial support for sustainable development programs, regional and international institutions have continued to provide important levels of funding for sustainable development initiatives in the MENA region. Aid provided by bilateral donors has also been significant, although its level has decreased in recent years.

Several regional development funds and institutions provide significant financial assistance to support the implementation of NEAPs in Arab member states. These include:

- The Arab Fund for Economic and Social Development (AFESD) – which offers financial and technical assistance to Arab states. Environment-related projects address issues as varied as water gathering and distribution, solid waste management, biological pest control, etc.
- The Kuwaiti Fund for Development (KFD) – which provides loans and grants to all parts of the world. Yemen has been a significant recipient of KFD assistance, mostly for agricultural development projects.
- The Islamic Development Bank (IDB) – which was established by the Conference of Finance Ministers of Muslim Countries to provide loans and technical assistance and training to member countries, and encourage private business development and trade.

Saudi Arabia and Kuwait are also substantial aid donors, supporting many development projects in MENA countries through bilateral assistance. These include projects to rehabilitate and improve the efficiency of water, electricity, and transportation networks. Kuwait annually contributes 5% of its national GDP to foreign aid, placing it among the top donor countries in the world. The MENA region also continues to receive important financial and technical assistance for sustainable development from the bilateral aid institutions of industrialized countries, notably the European Union, the US, and Japan. International financial institutions (e.g., the World Bank, the European Investment Bank) and grant mechanisms (e.g., METAP, SMAP, GEF) also provide important technical and financial assistance to various countries in the region in support of sustainable development. Nevertheless, international donors have fallen short of the expectations raised at the Earth Summit.

Unfortunately, financing for sustainable development remains limited, mostly because debt continues to sap the energies of the region. Furthermore, while a variety of financial instruments and institutions for sustainable development have been strengthened over recent years, the coordination and monitoring of programs to achieve environmentally friendly development financing needs to be improved. The volume of development assistance has declined, and several developed countries, for various reasons, have failed to live up to their commitments to assist less-developed countries, including those in the MENA region. Accordingly, despite the continued channeling of funds from international, regional, and bilateral donors, levels remain well short of what is needed.

The financial challenge limiting progress towards sustainable development not only involves increasing the net supply of available funds, but also improving the quality of assistance provided by donor agencies to recipient countries. On the demand side, the main problems that have limited the effectiveness of sustainable development funding obtained by recipient countries in the ESCWA region include:

- Inadequate national priority setting and needs assessment prior to program planning
- Poor coordination and communication between national institutions

- Insufficient time and technical capacity among public sector personnel to manage donor programs
- Limited awareness of or harmonization between closely related programs
- Fragmented and inconsistent donor-driven approaches to program planning and support
- Weak, demand-driven approaches and limited national ownership over program implementation
- Cursory oversight, examination, and cataloguing of program programs, successes, and lessons learned

On the supply side, the main institutional challenges to effective financing for sustainable development are:

- Differences in geographic coverage by donor agencies and regional institutions
- Differences in institutional mandates and priorities as defined by the donor agencies
- Differences in approval procedures and project timelines of donor institutions
- Differences in counterparts and focal points working with various donor agencies
- Conflicts of interest between grants and loans provided by donor institutions
- Poor communication and coordination between donor institutions operating at the international, regional, national, and local levels

These challenges have led to the duplication of programs and projects within countries and in the region, the misdirection of training programs and technical assistance, and the waste of limited financial resources available for sustainable development.

4. Areas for Environmental Cooperation

Cooperation under the Peace Initiative can fuel efficient tackling of environmental problems through international trade opportunities and technology transfer.

The basic principles on which to build environmental cooperation are: cost-effectiveness, equity, joint implementation, and comprehensiveness.

4.1 Trade Liberalization and Regionalization

While national environmental management in MENA has improved, efforts at integrated sustainable development have slowly stagnated. For a long time, regional economic cooperation in trade and the environment have been odd bedfellows. Environmentalists claimed that the interests of the trade community would trump environmentalist concerns: first, globalization-induced trade increase can magnify cross-border pollution; and second, improvements in technology make it increasingly easier to intensify the exploitation of natural resources, potentially exacerbating the depletion of natural capital.

On the demand side, while trade liberalization allows developing country exporters to penetrate new markets more easily, they are often only able to do so if they comply with higher environmental norms and quality standards. These higher standards are not only being required by governments through minimum health and safety regulations on imported products, but are also being sought by private sector importers and individual consumers who increasingly prefer products that comply with stronger product standards and environmentally-friendly process guidelines. On the supply side, there is concern that in face of trade liberalization, countries will maintain weak environmental regimes or engage in “race to the bottom” tactics in order to attract more foreign investment than competitor countries – albeit of the less environmentally friendly kind. Concerted efforts to level the playing

field in the Arab region and share the benefits of trade liberalization and globalization are required in order to avoid environmental dumping in less developed areas[10].

Almost all the evidence on the environmental effects of trade has focused on local pollutants. The early evidence (e.g. Grossman and Krueger (1993)), identifies three effects through which trade liberalization may affect the environment:

- Scale: increased economic activity from trade liberalization leads ceteris paribus to increased emissions
- Composition: trade liberalization may lead to changed specialization patterns across countries and sectors with different emission intensities, which can trigger changes in emissions
- Technique: through increased income and technology transfer, trade can lead to cleaner production technologies

It is important, however, to know the origin of the comparative advantage in polluting industries (classical factor endowments, energy subsidies, or a lax environmental policy), and whether those industries may migrate to "pollution havens" with less stringent environmental policies.

In an open-economy model incorporating trade and environmental policies, comparative advantage in polluting industries is shaped by two opposing effects:

- Pollution Haven: loose environmental regulation in low-income countries gives them a comparative advantage in emission-intensive industries
- Factor Endowment: capital abundance in high-income countries gives them a comparative advantage in emission-intensive sectors since they happen also to be capital-intensive

Recognizing the importance of these issues, a regional cooperation plan should explicitly recognize that environmental concerns would be fully taken

10 The so-called "pollution haven" phenomenon

into account to address the fears that the gains from growth and economic cooperation could be undermined by their environmental side effects.

In addition to socio-economic and environmental challenges, most Arab countries suffer from inadequate technical, human, and financial resources, as well as limited institutional capacity. These obstacles, along with changing political and economic dynamics, prevent the region from actively engaging in sustainable development planning, implementation, and follow-up. International trade standards (promoted by foreign governments and multinational corporations) can influence environmental performance and promote voluntary compliance with stronger environmental standards than required (or enforced) by national governments. Furthermore, as trade barriers and subsidies are removed, environment and health standards are being reinforced both domestically and abroad. Neither agriculture nor industry is prepared to cope with these implications and the cost of modernization. As such, more needs to be done to assist private enterprises to realize the benefits and opportunities that new markets, more investments, and increased access to modern technologies and production methods might bring.

Part of the process of becoming integrated in the regional and global economy involves increasing understanding of trade, environment, and investment relationships. Studies conducted in Arab member countries show that environmental compliance costs are not as expensive as might be thought. Indeed, a 20% increase in the cost of water or energy inputs for most major export industries in the Arab region will generally not adversely affect output by more than 2%. However, while the cost of complying with stronger environmental standards may be bearable for most large-scale export-oriented firms in the region, the cost of adjustment may be higher for SMEs due to economies of scale and the scope of initial investments required. Accordingly, greater efforts are needed to help SMEs meet the challenges of trade liberalization and globalization by increasing their competitiveness. This will help SMEs maintain employment levels, compete domestically, and expand into export markets.

Discussions supporting regulatory harmonization in the region extend to many sectors related to trade, environment, and sustainable development. Harmonizing testing and certification requirements for imported goods may

involve harmonizing laboratory accreditation requirements, environment and health standards, and customs procedures. Efforts to unify and technologically modernize regional customs procedures often yield efficiency gains and generate environmental benefits. For example, by simplifying customs procedures or allowing for testing and certification of imported goods in home markets, atmospheric emissions could be reduced. This is possible by shortening the length of time needed to refrigerate perishable goods at borders that await import approval, and saving on energy costs expended on the transport and re-transport of goods rejected for import.

4.2 Technology Transfer

Due to the lack of raw materials and long-lasting water scarcity, Israeli industry has concentrated on manufacturing products with a high added value. Most of the country's resources have been devoted to building up its industrial exports, which grew from $13 million in 1950 to $40.6 billion in 2008. Major industries include pharmaceuticals, electronics, agro-technology, telecommunications, fine chemicals, and computers.

Lack of water resources is the most severe constraint on agriculture in Israel. To meet the challenge, Israel has developed innovative methods, including highly mechanized, high-input methods and water-saving irrigation systems which have enabled it to become a leader in high-yielding agriculture. Today, agriculture accounts for nearly 60% of the water used, but approximately half of this water constitutes effluents and marginal water.

Although the challenges are formidable, Israel has amassed wide experience in developing cutting-edge technologies and effective management systems in fields such as water management, recycling and reuse of treated wastewater, seawater desalination, desert agriculture, and afforestation, which may assist neighboring and other countries.

Despite the global transformation, industry in most MENA countries is still resource-based, and has been unable to move towards more knowledge-based production of higher value added goods.

Foreign direct investment (FDI) not only provides funds for economic and industrial development, but also generates technological spillover effects from investors acquainted with new technologies. However, although the potential exists, such spillovers have yet to be largely realized in Arab member states. For example, Qatar is preparing to become a world leader in clean fuels, particularly in gas-to-liquid technologies, and will likely become the recipient of new FDI inflows and matching technical know-how. Equivalent technology transfer successes are not as likely without regional cooperation in the agro-food and garment sectors in MENA countries. Accordingly, more preparation and targeting are needed to encourage more environmentally friendly foreign investment into the region.

There is little evidence of the effects of liberalization of environmental goods and services (EGS). Using a partial equilibrium simulation model applying import elasticities to trade data for the eighteen most important developing country emitters of GHGs, the World Bank (2008) assessed the effect of trade liberalization (tariff and tariff NTB elimination) for the following four technologies: clean coal technologies, wind energy, solar photovoltaic systems, and energy-efficient lighting. Eliminating trade barriers would increase import volumes by up to 13%. More generally, Dechezleprêtre et al. (2009) used patent data from 66 countries for the period 1990-2003 and investigated driving forces of transfer of climate change mitigation technologies. Their regression results show that restrictions to international trade influence negatively the diffusion of patented knowledge.

4.3 Cooperative Water Management

The growing gap between the supply and needs of MENA countries makes additional conventional and non-conventional water resources essential. The availability of low-cost desalination changes the “zero-sum game” dynamics that characterized discussions in the past. The 1995 agreement on water between Israel and the Palestinians was made before desalination became a central part of Israeli water supply strategy. But the change constitutes an historic opportunity. Effluent reuse, water conservation, and efficiency measures are already part of present accepted practices and must be expanded.

Water quality issues are likely to be less divisive as the sides seek a final accord. Accordingly, joint management frameworks constitute a "win-win" dynamic, and offer an opportunity to enhance the sustainable development and protection of water resources on both sides of the border. Of paramount interest for both parties is the matter of sewage and infrastructure (Tal and Abed-Rabbo, 2008). Wastewater treatment is an essential element in alleviating pollution to Palestinian water resources, improving their quality of life, and expanding the available water for irrigation and stream restoration. But sewage treatment is not only a technical/engineering challenge; it also needs to be addressed in a holistic manner that takes into consideration institutionalization of wastewater treatment, technologies, and system maintenance, as well as reuse strategies for agriculture along with promulgation and implementation of regulations.

Ragab and Prudhomme (2000) claim that, given the climate change predictions, in order to meet the water demands of the 21st century, more dams and water infrastructures will have to be built in MENA countries and, by rethinking water use with the aim of making it more productive, a new paradigm will have to be adopted. They argue that two approaches will be necessary:

- Increasing the efficiency with which current needs are met and increasing the efficiency with which water is allocated among different uses
- Giving non-conventional sources of water supply, such as reclaimed or recycled water and desalinated brackish water or seawater, a more important role

Bou-Zeid and El-Fadel (2002) state that conservation measures, as well as institutional reforms and capacity building, are also needed. The indirect impact of climate change on hydraulic structures may affect potential increases in precipitation intensities and modifications in river flow patterns.

Similar hydrologic impacts might have different socioeconomic consequences depending on region-specific characteristics. In the context of the Middle East, different configurations of water resources systems might affect the magnitude of potential adverse effects, such as a reduction in gross domestic

product, future population redistribution, workforce shifts to alternative economic sectors, and so forth.

There is a strong need to adopt integrated water resource plans domestically. For example, fears that upstream riparian countries might impose a price for water flowing to downstream countries limit the ability of governments to impose fees for domestic water services so as to avoid the claim of a double-standard. Lack of coordination with neighboring countries also limits the ability to develop shared river basin management plans and eco-zone strategies, which are useful instruments for promoting sustainable use of regional resources. It is thus important for international and regional organizations to facilitate intraregional and interregional cooperation with up-stream riparian states to as to achieve a more efficient and equitable management of shared water resources, river basins, eco-zones, and watersheds.

Countries of the region should be encouraged to adopt integrated water resource management, including demand management approaches. This requires coordination and cooperation between departments/agencies dealing with water issues. Countries are also encouraged to develop renewable and non-conventional resources, including harvesting of rain and fog water, exploring and developing deep groundwater, water recycling, and water desalination.

Countries need to optimize and rationalize the use of water resources by reallocating water to higher value uses, growing water-efficient crops, addressing the real value of water in all sectors by applying cost recovery of investment in water projects, and increasing the efficiency of irrigation through technical improvements. The use of expert farm management is also important to maximize land productivity and efficiency in the use of irrigation water.

Stakeholders should be encouraged to participate in water management through public awareness campaigns, participatory programs for stakeholders and local communities, and community-based water associations. Rationalizing water consumption should also be encouraged. Concerned authorities, with the help of other stakeholders, are also encouraged to extend efforts to rehabilitate steppe areas, marginal lands, and the areas of irrigated and rain-

fed agriculture, and expand the establishment of protected lands to allow the restoration of natural condition and converse biodiversity.

There is a need to intensify efforts to develop water and land-related technologies, specifically for irrigation and water desalination using solar energy technologies. Pollution control measures, including integrated programs of pest management and control of chemical pollution, should to be established and enforced to protect water resources.

Capacity building and improvement of institutional set-up are needed to manage land and water resources effectively, and protect biodiversity. Integrated social and economic land and water policies conducive to the rational use and development of land and water resources should be developed.

Financing schemes should be developed to secure the funding necessary for the management of water resources and to implement water investment projects, considering cost recovery through services provided and public fees for wastewater treatment.

Of the key proposals for actions emphasized at the international level are respecting the historical rights of riparian countries of shared water resources (rivers basins, aquifers, etc.), cooperation among those countries in management, and protection from pollution of shared resources, including the development of regional strategies, master plans, and mechanisms for joint implementation.

The United Nations and other international organizations are requested to play a catalytic and coordinating role to work out regional agreements and forums on shared water resources, to provide further technical assistance in capacity building, to assist in developing integrated water management policies, and to strengthen water resources institutions.

Resolution of the conflicts on water rights in the Middle East on the basis of the United Nations Resolutions, as well as just and equitable sharing, is essential for sustainable development, peace, and security in the region.

4.4 Water, Land Resources and Food Security

Water scarcity, land degradation, and food security represent major challenges in the Arab region. The three issues are interdependent, and jointly could significantly influence biodiversity, population policies, and security in the area.

Water, land resources, and food security should be addressed within a regional framework through the development of a unified regional strategy and alternative policies aimed at regional integration, especially agricultural production and trade policies. This should include the sustainable use of shared water resources (including aquifers), the activation of agreements between member states of the region concerning the distribution of agricultural products in terms of a "food integration" strategy, and the unification of water legislation and standards.

In order to address the issue of food security, it is necessary to promote regional investment projects that take into consideration the comparative advantages of the countries. The establishment of the Greater MENA Free Trade Area and the removal of tariffs and non-tariff barriers would encourage trade in food and agricultural products in the region. Food security is connected to peace, security, and political stability, which countries of the region should continue to strive to achieve.

These countries are urged to support regional action plans regarding selective agriculture in suitable zones determined by climate and resources (land, water, and labor), and to establish regional mechanisms to conserve and rationalize water consumption.

Academia, research institutions, and regional organizations should accord food and water a top priority in the academic and research scheme, and encourage, for example, cooperation to develop selected seeds that are resistant to drought, salinity in order to nurture their productivity. The countries should support the role of specialized regional centers and organizations in the field of research and development, and direct them to serve integrated development programs, including the utilization of solar energy in the field of water desalinization as an indigenous technology developed by the Arab region.

Regional bio-safety committees, and food safety in general should be ensured in both locally produced and imported food. It is also important to establishment national and regional genetic banks to protect the region's biodiversity and property rights, especially for the wild relatives of food and fodder plants originating in the region.

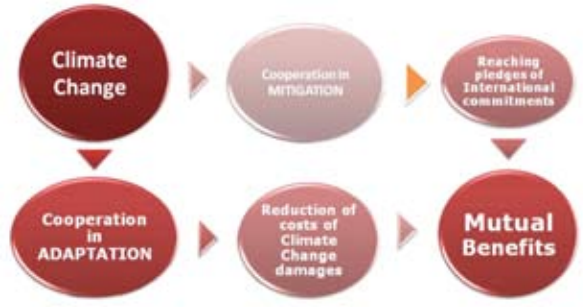
One example for cooperation that may be adapted from European Union is the newly presented proposal by the European Commission aimed at making the Common Agricultural Policy (CAP) a greener policy, which will support the development of a more sustainable agriculture. The proposal is part of a wider legal package that intends to put in place new measures and instruments to achieve a more competitive, equitable, and stable agriculture. In particular, the package proposes to dedicate 30% of direct payments to encourage farmers to introduce low carbon practices and environmentally friendly measures aimed at preserving natural resources. Each holding will receive a payment per hectare for implementing agricultural practices such as crop diversification, maintenance of permanent pasture, preservation of environmental reservoirs and landscapes (at least 7% of farmland), and conversion to organic farming[11].

4.5 Cooperation on Climate Change Aspects

Even the most stringent mitigation efforts cannot avoid further impacts of climate change in the next few decades, which makes adaptation unavoidable. MENA regional cooperation on climate change aspects should therefore evolve in two main directions: cooperation in mitigation efforts, and cooperation in adapting to projected impacts of climate change (Figure 5).

11 All documents on this issue are available at http://ec.europa.eu/agriculture/cap-post-2013/legal-proposals/index_en.htm

Figure 5 \\ Cooperation on Climate Change



The costs of adaptation, mitigation, and climate change damage are all interrelated. For example, when adaptation measures are more extensive, damage, as well as the need for mitigation, decreases. On the other hand, without mitigation, a magnitude of climate change is likely to be reached that will make adaptation impossible for some natural systems; while for most human systems it would involve very high social and economic costs.

For MENA countries, mitigation is a necessity dictated by international commitments. Israel has committed to reduce its GHG emissions by 20% below BAU emission growth in 2020. Other MENA countries are expected to set their emission reduction pledges as per the post-Kyoto Protocol, which is currently being negotiated (see subsection 3.5.1.).

As international efforts to reduce GHG emissions were found to be insufficient in preventing climatic changes, the MENA region should develop adaptation strategies in order to reduce damages outlined in subsection 1.2.

Adaptation and mitigation actions include technological, institutional, and behavioral options; the introduction of economic and policy instruments to encourage the use of these options; and research and development to reduce uncertainty and to enhance the options' effectiveness and efficiency.

4.5.1 Cooperation in climate change mitigation

As a result of the economic costs and risks of extreme weather, climate change could have a severe impact on economic growth and development if no action is taken to reduce emissions. Consequently, climate change affects

companies active in a wide variety of sectors and countries. However, it is not a "purely" environmental issue; it is also closely linked to concerns about energy security due to dependence on fossil fuels and oil in particular, as well as to energy efficiency in relation to economic activity in general (Kolk and Pinkse, 2009).

Market-based mechanisms for emission abatement

Ideally, a worldwide price on GHG emissions (through a tax or emission trading system) should be applied at the social marginal cost of the polluting good. This would allow for internalizing external costs, such as the negative effects of emissions not taken into account by individuals, since property rights are poorly defined when it comes to the world's climate. As long as emitting activities, such as burning coal, oil, and gas, are not subject to a cost internalizing these negative effects in most MENA countries (that are non-signatories of the Kyoto Protocol – KP), energy-intensive industries are implicitly subsidized. This situation is about to be amended under a forthcoming climate change agreement that will succeed KP. Under the currently negotiated post-Kyoto Protocol, all world parties will be expected to commit to a certain level of GHG abatement.

Establishing an effective emission trading regime, along with a tax and technical regulations in certain sectors, will provide MENA countries a cost-efficient way to meet their binding commitments of GHG abatement.

Regional cooperation that promotes international trading in emissions will help high-cost countries achieve their commitment goals at a lower economic burden.

The role model for this type of cooperation should be the world's most significant climate policy, employing a cap-and-trade system to constrain Europe's CO_2 emissions - the European Union Emission Trading Scheme (EU ETS). Under EU ETS, all countries that assume quantified emission limitations may trade these limitations with other countries in the form of emission "permits" on the worldwide market. This trade increases the cost-effectiveness of GHG mitigation by shifting mitigation resources from high- to low-cost countries and regions. The EU ETS now operates in 30 countries (the 27 EU Member States plus Iceland, Liechtenstein, and Norway).

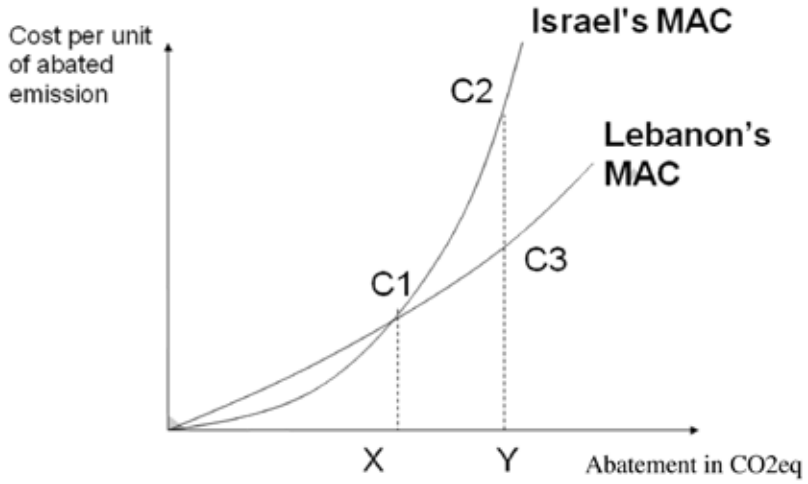
It covers CO_2 emissions from installations such as power stations, combustion plants, oil refineries, and iron and steel works, as well as factories making cement, glass, lime, bricks, ceramics, pulp, paper, and board. The EU plans to link up the ETS with compatible systems around the world to form the backbone of a global carbon market. MENA countries would benefit from creating a compatible system of emission trade aimed at being linked to the European prototype.

For the efficient application of an emission trading scheme, a full international agreement and a well-established trading market are required.

Additional market-based mechanisms for regional cooperation that may be adopted from the KP are Joint Implementation (JI) or Clean Development Mechanism (CDM) projects. In general, these types of projects are designed to allow a country with an emission reduction or limitation commitment to earn Emission Reduction Units (ERUs) from investment in an emission reduction project in another country. Participating parties are thus offered a flexible and cost-efficient way to meet their binding commitments by providing FDI and technology transfer into the host country (Kyoto Protocol, 1998).

The gains from involvement in JI or CDM projects are demonstrated in Figure 6 below. Assuming that two parties, such as Israel and Lebanon, are involved in the project, the different marginal abatement cost curves of two countries are illustrated. Further, assume that Israel is subject to an emission reduction commitment with target Y, and the other party has a much lower obligation under the international treaty. Abating domestically up to Y, Israel will reach the marginal cost of C2. The realization of cost efficiency could be reached if Israel abates domestically up to X along the path where its marginal cost is less than Lebanon's. The remainder of the Israel's target, Y-X, could be attained by abating in Lebanon by investing there in emission reduction or removal projects. The area C1C2C3 indicates the potential for cost savings resulting from cooperation between the two countries.

Figure 6 \\ Illustration of CDM Benefits



CDM is already financing projects in MENA countries that reduce greenhouse gas emissions, for example, in the solid waste sector. A representative illustration is Israeli-French cooperation in the Hiria waste dumping site in Israel. The biogas from the closed waste-disposal site is collected and transferred to industrial boilers in a textile factory three miles away. The credits from methane emission abatement are sold to a French company. In Algeria, two contracts on solid waste management and CDM were signed in October 2007.

Generally, the aim is to achieve a "win-win situation" for participating countries by providing them with the possibility to fulfill part of their international commitments, and to benefit from foreign investment and technology transfer.

Timely investments and technology transfer are necessary for the reduction of energy and carbon intensity in the energy industries of MENA countries. The mechanisms above can fund investments needed for the modernization and upgrade of the energy infrastructure in the region, and reduce environmental pollution. Securing consistent and non-discriminatory treatment of neighbor-country companies is required in order to build up a stable investment

climate that can form a basic framework for turning high energy and carbon inefficiencies into a tremendous business opportunity.

Timely implementation of market-based mechanisms is expected to bring manifold economic and environmental benefits for MENA as well as for foreign investors. The industrial implementation of energy efficiency and carbon mitigating technologies by means of regional cooperation can generally be seen as a driver for economic growth, creating competitive advantages and new jobs, as well as attracting numerous FDIs by investing considerable revenues into the energy sector.

Trade

There are four major areas in which trade can play a role in climate change mitigation: as a purveyor of technological transfer; as a mechanism to separate where abatement takes place from who bears the cost of abatement; as a participation mechanism; and as a way to address the pressures for border adjustments. Political-economic considerations are invoked to predict that a target system with a carbon credit system will be preferable to a carbon tax or portfolio system of treaties.

For regional mitigation efforts, trade could come into play through two additional channels. First, an open trading system with high trade volumes is essential. This is because a considerable amount of technology development and transfer takes place through trade.

Second, it will be necessary to separate where abatement takes place from who bears the costs of abatement. Marginal costs of abatement differ widely with many 'no regrets' energy-saving opportunities in developing MENA countries. Under these circumstances, a carbon credit trading system building on an improved CDM introduced under the KP will be necessary. Implementing the CDM involves not only trade in credits, but also trade via technology transfer.

A review of evidence on the extent of "pollution haven" effects suggests that these should be small under climate mitigation policies, especially if efforts are undertaken to raise the price of energy (e.g. Grether et al., 2010; Grether and de Melo, 2004).

Green technologies

The most mature green technologies are biomass combustion, solar boilers and geothermal technologies, which in specific, beneficial circumstances are already cost-competitive with conventional sources. Wind and solar technologies are seen as emerging technologies that are not yet cost-competitive, due to a lack of market experience. Some renewable technologies that are still in the research and development (R&D) phase – e.g., specific forms of solar power, and advanced bio-energy – completely lack market penetration, and largely depend on public R&D programs for further development.

In addition to technology, the issue of how to develop new markets should be considered. There are various routes, with pros and cons, for a move to a non-fossil fuel-based economy via the development of niche markets that allow companies more opportunity to experiment, or via incremental changes and transition technologies. The car industry can serve to illustrate both. Transition technologies, on the other hand, may become dominant, and then stand in the way of implementation of renewable technologies.

Another example of a technology that allows companies to build on existing technologies by providing an add-on element to current practices is carbon capture and storage (CCS), popular amongst oil, coal, and electricity companies. CCS gives carbon-intensive companies the opportunity to show proactivity on climate change, while concurrently continuing their core business activities. This has also, however, been a source of criticism. Transition technologies also play a role in the oil and gas industry, where gas has been presented as a bridge to a lower carbon economy while alternative energy solutions are being developed.

The power generation industry has a vast grip on infrastructure for the transmission and distribution of electricity. The system for the supply of electricity clearly suffers from a "carbon lock-in," as technological and market systems surrounding electricity favor generation from fossil fuels (Sandén and Azar, (2005), Unruh (2000)), which hinders scaling up the use of renewables for electricity generation.

Technologically speaking, renewables involve intermittent generation instead of the constant generation that characterizes coal- or gas-fired power plants.

This creates a barrier to implementation of renewables, because existing transmission networks cannot handle intermittent sources of electricity very well, as power stations would need more back-up and storage capacity. To reach a mainstream market of electricity-consumers, renewable energy suppliers thus rely on cooperation with incumbent utilities. However, the barrier lies in that adjusting the transmission network to enhance access of renewables is not to the benefit of these utilities. Regional cooperation can boost transformation of the MENA electricity network to ensure the supply of energy needs while increasing the reliance on cleaner energy sources. This aspect of regional cooperation is covered in the "Energy Cooperation" paper of the Aix group.

National monitoring strategies should be established to keep an eye on the amount of carbon dioxide (CO2) produced. Reduction of CO2 emissions through elimination of flares, use of more efficient fuels, and the promotion of efficiency and cleaner production schemes in industry should be promoted. Furthermore, afforestation and sink development should be encouraged.

Countries of the region should coordinate their policies and positions, including with respect to the socio-economic impacts of GHG mitigation on developing countries and oil-producing countries.

There are some obvious research needs. Clearly, many basic physiological and ecological studies of the effects of changes in atmospheric and climatic conditions are necessary. The most pressing need over much of the region is for sound assessment and monitoring programs to establish current baselines and identify rates of change. Some of the required research and information regarding climate change in the Arab region are:

- Predicting climate models on regional scales
- The impacts of climate change on the Arab region in terms of economic, social, and environmental aspects, especially in the area of food and water security
- The role of climate feedback resulting from ecological systems and atmospheric variables, such as clouds, water vapor, carbon soot, etc.

- The quality and coverage of the climate observation networks in the ESCWA region
- Economic evaluation of confronting climate change impacts, and of adopting mitigation measures
- The magnitude of impact and vulnerability in the ESCWA region due to extreme climate events, such as heat waves, dust storms, and thunderstorms
- The impacts of climate change on weather forecasting in the ESCWA region
- The minimization of scientific uncertainties, including all hypotheses pertinent to climate change in the region

4.5.2 Cooperation in adaptation to climatic changes

Adaptation is defined by the IPCC as the "adjustment in natural or human systems to a new or changing environment. Adaptation to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities." In view of the projected impacts of climate change on the MENA region, adaptation is a priority for ensuring the long-term effectiveness of national and regional efforts to eradicate poverty and achieve sustainable development. Adaptation (as opposed to mitigation) is likely to be an important part of the response to climate change, and identifying efficient approaches to adaptation is vital.

The incentives for consumers, firms, and governments to adapt to climate change are strong, because they will bear most of the costs if they do not. The poorest countries are least able to adapt, and it is up to the industrialized countries to help them. The most effective means of providing assistance requires careful study. It may include a portfolio of efforts targeted more toward economic development than to climate adaptation.

International aid should be used to encourage developing MENA economies to become more resilient by reducing their dependence on climate-sensitive sectors such as agriculture and forestry. Applying this strategy could reduce

poverty, while at the same time reducing vulnerability to the consequences of climate change and providing income to adapt. Using aid to encourage development would also partially compensate countries for enduring the climate change they had little part in causing.

The responsibility for adaptation should be divided among various actors. Private adaptation should be the responsibility of the affected parties, while national governments should play a role where adaptation is strictly in the interest of the country. Finally, international agencies have a part to play when adaptation may benefit the world.

Climate change requires that immediate action be taken to strengthen coping capacity, to reduce the vulnerability of sensitive sectors and systems, and to promote the diversification of productive livelihoods in rural areas. A more drastic adjustment is needed in the management of the region's water resources than in any other region, since most water resources are already being exploited for human use, and further stresses are projected under climate change.

A number of adaptation options have been identified under national development, and research measures/plans could be piloted to generate lessons. Priority interventions should cover areas related to good governance, human resources, institutional structures, public finance, and natural resource management. Moreover, development agendas should consider climate change concerns in order to ensure that all interventions lead to improving economic and social welfare. It is equally important to address synergies between climate change adaptation and related development agendas and strategies, as well as energy conservation at different levels and scales.

Regional cooperation among MENA countries in adaptation efforts should be fostered through the adoption of action plans that address climate change issues, as well as through the development of a regional early warning system for weather forecasts, risk assessment, and monitoring of extreme events such as droughts, floods, and a rise in sea level.

The mainstreaming of climate change adaptation strategies within national development plans and efforts needs to be fostered, as does the incorporation of climate-sensitive policy components into sectoral, national, and regional

policy frameworks. Enhanced cooperation, development, and implementation of integrated regional water management between countries sharing the same fresh water sources—both surface and groundwater—could ensure conservation and sustainable utilization, and avoid conflicts.

Major areas for regional cooperation in adaptation to future climatic changes are:

- A regional early warning system for weather forecasts
- Risk assessment and monitoring of extreme events such as droughts, floods, and a rise in sea level
- R&D for agriculture under new weather conditions
- Technology transfer
- Water management
- Cross-border coastal adaptation to sea level rise

4.6 Land Degradation and Desertification

Actions at the national level

Countries of the region should develop programs for the rehabilitation of degraded land, including meadows and forests, and develop national desertification strategies and action plans in order to implement appropriate programs to combat desertification. They also need to allocate more resources, initiate innovative solutions in support of land users in rural communities to deal with new global changes, and overcome the constraints faced by the poor, marginalized, and disadvantaged – in particular women, indigenous people, and small farmers.

In order to understand and combat desertification, countries need to set programs to monitor land resources using modern technologies, such as remote sensing and a geographic information system (GIS). Countries of the region are urged to comply and implement acceded international conventions and MEAs related to land resources, specially the Convention on Combating Desertification, as instruments of sustainable development by integrating

them fully into national and regional socio-economic development planning, in coordination with the relevant regional and international agencies.

Actions at the regional level

There should be regional cooperation in the implementation of the international Convention to Combat Desertification, as well as the harmonization and reconciliation of policies, strategies, and programs for land use, combating desertification, and integrated ecosystem management. It is also important to establish regional programs to monitor desertification based on scientific research and the use of modern technologies.

Actions at the international level

Countries of the region should urge the allocation of financial resources and the establishment of mechanisms to support national and regional programs to combat desertification. They should also call upon the international community to support national and regional programs to combat desertification, and to protect biodiversity and agro-biodiversity.

4.7 Marine and Coastal Zones

Countries of the region should adopt an integrated approach to address coastal and marine resources issues, including the adoption of integrated coastal area management for the sustainable development of the coastal and marine environment, increasing awareness, strengthening cooperation and integration between institutions and with stakeholders, and implementing the United Nations Convention on the Law of the Sea (UNCLOS). Securing financial and technical resources is of paramount importance to implementing the activities of integrated management.

It is essential to develop management plans and mechanisms for sustainable management of living marine resources, including fisheries and aquaculture, at national and regional levels, and to take steps to mitigate pollution from land-based activities, e.g., through the development of waste treatment capabilities and the rehabilitation of damaged habitats.

There is a need to encourage research and development for sustainable development of coastal and marine areas and resources, and to expand monitoring, surveillance, and assessment of coastal and marine resources. It is also important to support national and regional stock assessment studies.

Countries should promote interregional cooperation in the protection of the marine environment, including regional contingency planning, and the minimization of navigational risks. Marine protected areas should be regionally considered and identified for protection.

It is of paramount importance to implement the Global Plan of Action at the regional level with a view to eliminating sewage releases in the coastal and marine environment, and to control other sources of land-based pollution.

4.8 Mountains and Forests

Most of the countries in the region are expected to formulate a strategy or action plans for mountain and forest sustainable management, and to establish a policy of replanting, improving forestry management conditions, integrating trees in urban and tourist developments, and setting up areas to safeguard the integrity of the ecosystems. Formulating strategy or action plans for mountain and forest sustainable management in the ESCWA region requires understanding of their types, complexity, clear delimitation, and distribution.

Essential elements need to be distinguished, including: intrinsic features of the physical environment, climate change, factors of deforestation, skills in forest management, scarcity of forest resources, deep-rooted traditions, human impacts, economic forces, and political events.

Nevertheless, success will not come from compulsory exclusion. There must be alternative sources of income to people relying on natural forests. The major solutions for forest problems in the region include reforestation of the original and more prosperous areas, and afforestation of multipurpose forests, that can be used for grazing, wood production and other traditional

uses. Establishment of multipurpose forests will diversify the outputs, an important asset to avoid the overuse of single-purpose forests.

In order to implement the sustainable development of mountains in the region, it is vital to move mountain issues higher on the regional agenda rather than as a period of isolated events, and to increase regional awareness of the global importance of mountain ecosystems.

At the international level, it is expected to identify best practices in Watershed Management in Mountains, Sustainable Mountain Development Guidelines and to prepare a framework for the proposed Global Plan of Actions for Mountain Ecosystems.

4.9 Biodiversity

Biodiversity conservation and protection efforts should be considered in an integrated approach for habitat diversity, species richness, and genetic materials within species. Conservation programs need to cater for all of these facets. Protection of critical sites and allocating national parks are urgently needed.

There is a need to review and strengthen national strategies (or develop them where lacking) in order to conserve and protect biodiversity, and to create biodiversity information systems, which may enable decision-makers to make better judgments in planning and implementing development projects. Gene banks are also necessary for the protection of endangered species and preserving the property rights of species originating in the countries of the Arab region.

It is anticipated that within the framework of implementing the programs of the Convention on Biological Diversity, knowledge on protective measures for various components of biodiversity will be achieved, and the region will move to a high standard in protecting nature and the sustainable use of its biological resources. Joining the Cartagena Protocol is an essential step in this direction.

Countries of the region should consolidate their collective efforts in the protection and conservation of biodiversity, through joint programs and

exchange of information and experience, and should give attention to trans-boarder conservation, such as the borders between Yemen, Oman, and Saudi Arabia, and between Israel, the Palestinian Authority, and Jordan. Eco-tourism programs could help, when properly managed, for the conservation of biodiversity in the region.

Integrated eco-region management of biodiversity should be adopted. The use of modern information systems including GIS and remote sensing and networks is an asset. The region also needs to establish regional gene banks to serve its needs in protecting/re-introducing lost species.

The international community is encouraged to provide the technical and financial resources that enable the countries of the region to implement the conventions related to biodiversity. The United Nations, in partnership with concerned international institutions, must also establish a code of ethics for the use and dissemination of genetically modified organisms. Support for community-driven conservation schemes should also be made readily available to the region.

4.10 Air quality

There is a need to improve and establish air pollution monitoring and control programs for mobile and stationary emission sources, and to continue the assessment and analysis of ambient air data. To support this, financial resources and securing state-of-the-art air quality measurement equipment and qualified personnel should be made available. These efforts must be complemented by programs for training, capacity building, transfer of cleaner technologies, and R&D related to air pollution and health impacts.

It is necessary to use rigorous urban planning for cities with support systems that are environmentally sound and have low energy consumption. This can enable short distance hauling and distribution with an emphasis on the quality and accessibility of public transportation systems. Cities should also use modern efficient traffic management systems to reduce traffic idle time, which produce peak emissions. Further, air quality regulations and enforcement mechanisms should be established.

Removing subsidies and refining energy efficiency could also contribute to the curbing of carbon dioxide (CO2) emissions, improving fuel consumption, increasing government revenue, and advancing public transport services.

It is also necessary to continue efforts to eliminate leaded gasoline, replace aging vehicles and industrial production facilities, increase availability of cleaner fuel, including Natural Gas (NG) stations, and intensify forestation. All of these will contribute towards improving the air quality in cities of the Arab region.

Joint programs are required to address common priorities of the countries in the region in the domain of air pollution monitoring and control, assessment of health impacts associated with air pollution, and the exchange and dissemination of air pollution information and experience. It is also important to set up regionally compatible air quality standards or guidelines. Countries of the region should provide incentives for the transportation and industrial sectors to tackle air quality problems not only at the national level, but also by developing sub-regional/regional transportation networks and energy efficient systems and grids[12].

The international community is urged to provide technical and financial assistance to address the issue of air pollution. Technology transfer, capacity building guidelines, standards exchange, and information dissemination are among the priority items to be launched.

4.11 Ozone Depleting Substances

Actions at the national level

Countries should continue to phase out the use of ozone depleting substances (ODS), and maintain the implementation of the Montreal Protocol.

Actions at the regional and international levels

12 Chapters of this report on "Cooperation in Transportation" and "Cooperation in Energy" provide several suggestions on this topic.

Some of the required actions on the regional and international scales include:

- Assisting non-parties in the region to ratify the Montreal Protocol and/or its amendments
- Providing the necessary assistance to countries to achieve and sustain compliance
- Assisting countries that have not initiated their country program to do so
- Maximizing the possibility of early phase-out of ODS in the region
- Assisting stakeholders to select proper ODS alternatives, taking into consideration that such alternatives are not affecting the ozone layer in the long term, and are not restricted under the other MEAs (e.g., Kyoto Protocol)

5. Institutional Framework for Environmental Cooperation

In Section Four we discuss institutional framework essential to facilitate the regional environmental cooperation. It includes among others environmental education; stakeholder participation and access to information; environmental monitoring and information networks.

5.1 Cooperation in Environmental Education

Most agree on the key role of knowledge as a source of competitive advantage in the modern global economy. There is a concern that environmental education is not addressing the real environmental issues of interest to the region. A serious effort is needed to incorporate environmental education at the pre-school level, and to create well-designed programs for expanding on the knowledge base secured during earlier years of primary and secondary education. It is also important to incorporate environmental education into the curricula of universities and higher education institutions, which require highly specialized course material.

As many environmental "hot" topics in MENA are trans-boundary by nature, regional cooperation on environmental education will benefit all the parties. A regional environmental education authority that coordinates incorporation of environmental studies and projects of a voluntary nature is needed.

NGOs, community-based organizations, universities, think tanks, and religious institutions can provide valuable technical and financial resources to compliment government spending in support of sustainable development. If properly integrated into the NSDS planning process, local, regional, and global NGOs can solicit funding from charitable groups and public agencies through avenues not accessible by governments. Coordination with and complementing governmental and non-governmental activities in support of sustainable development is thus essential to reduce the financial gap.

In addition, Arab member countries have not adequately responded to the realities that technological change and innovation are having on sustainable development:

- **Innovative research and development (R&D) in environmentally sound technologies.** R&D in the region remains low, although small improvements are increasingly apparent.
- **Clean production technology transfer and development**. Industrialists and manufacturers need research and information on clean production systems and technologies that are reasonably priced in order to improve the efficiency and the environmental performance of their processes. This is a multi-faceted task, which involves access to information, domestic financing, foreign direct investment, and technology transfer so as to build indigenous knowledge and the capacity for clean production practices. However, firms in most MENA countries have limited access to these resources, causing delays in capturing benefits associated with new technologies.

5.2 Governance for Sustainable Development

Over the past ten years, Arab countries have struggled to put into place effective institutions and instruments for managing sustainable development in an integrated manner. As other regions have also discovered, the sustainable

development process is neither smooth nor easy due to the sheer complexity of linking social, economic, and environmental development issues, and the difficulty of institutionalizing consultation between various public and private stakeholder groups.

Criteria for policy instrument selection and evaluation are also not well-developed in the region, with little attention paid to policy prioritization, cost effectiveness, the technical practicality of the instruments proposed, or their social, political or cultural acceptability. NES and NEAP objectives and instruments are also commonly formulated irrespective of other national strategies, with only a couple of countries instituting mechanisms to try to resolve differences between sector strategies and ensure that NEAP initiatives are integrated and implemented by line ministries.

Accordingly, limited foresight, coordination, and complementation of strategies mean that the level of NES and NEAP implementation in the region has been, for the most part, disappointing. Finally, NSDS efforts generally have been piecemeal, and receive little financial support, with ad hoc national sustainable development commissions (NSDCs), if they exist, only being revived to respond to reporting demands for global conferences such as the WSSD. In order to better focus the response to these shortcomings, four main challenges to effective sustainable development governance are detailed below.

International negotiations and institutionalized coordination based on trust and reliable environmental data are necessary to ensure the effective management of shared natural resources. This requires a balance between national and regional goals, and approaches to sustainable development.

5.3 Regional Coordination of Environmental Laws and Regulations

The main challenge facing most decision-makers in the MENA region is policy integration, namely how to effectively formulate, integrate, and implement multi-sectoral, international, sustainable development policies. This requires coordination and consultation between government institutions, as well as complementary and coherent policy instruments being implemented

by different ministries in different countries. Difficulties in this area are exacerbated by the centralized yet compartmentalized nature of governance in Arab member states.

To avoid a situation where industries move to the other side of the border to avoid more stringent environmental standards, environmental laws and regulations should be coordinated, and also regionally synchronized. Environmental laws and standards in the region should also be harmonized to avoid the risk of conflicting practices, as well as to maximize the regional and cross-border effects of environment protection.

For example, national environmental agencies in the region are generally assigned responsibility for sustainable development policy formulation and implementation. This reinforces the sector-based bias regarding sustainable development, and makes social and economic ministries less engaged and committed to articulated sustainable development goals. This practice also reduces the importance of the issue, since environmental institutions in the region are generally neither central to government decision-making nor able to exert influence over ministries. Furthermore, there is limited communication between parliamentarians, the public, and the bodies responsible for implementing and overseeing enacted legislation related to sustainable development, which also explains why policies are not effectively implemented.

While institutional coordination is an important dimension of the problem, the implementation of appropriate and effective policy instruments is another. For example, most Arab member states are seeking to implement recently enacted water and land use legislation, but are doing so with various degrees of success – mostly because of inadequate coordination between ministries and poor enforcement. Moreover, the region remains mired in command-and-control regulatory approaches. While many countries have undertaken regulatory actions to strengthen national policy frameworks since 1992, little attention has been given to alternative regulatory mechanisms offered by the use of economic instruments and voluntary arrangements Finally, sustainable development instruments being used are mostly applied piecemeal from a sector perspective, with little synergy, chronology, or linkage sought between

policies and programs implemented by different ministries so as to maximize their collective impact.

A sincere effort needs to be made in coordinating the national application of economic instruments between sectors so as not to skew market signals or encourage sustainable consumption of some resources (e.g., fresh water) at the expense of others (e.g., energy used for desalination).

Harmonization of environmental standards can level the playing field for investment and economic development in the region. Strengthening monitoring and enforcement is an important component of this effort.

5.4 Linking National and Local Sustainable Development Policies and Programs

While national environmental management and sustainable development processes have improved throughout the region, local initiatives have remained limited. The main reasons for this dichotomy are: the centralized nature of government decision-making and complexity of national bureaucracies; limited or lack of financial autonomy of provinces (governorates) and municipalities from the national purse; limited institutional capacity to serve rural and marginalized communities; the tendency for skilled human resources able to organize sustainable development initiatives to congregate in large urban centers, normally the capital; and the tendency for community groups and NGOs – which normally push for and participate in sustainable development efforts – to be more organized and vocal in capital cities and urban centers.

Limited decentralization of legislative and financial powers is the major obstacle to formulating and financing the implementation of local Agenda 21s (Rio Declaration on Environment and Development) in most Arab member states. Furthermore, while some local communities have developed local Agenda 21s (e.g., Egypt, Jordan, and UAE), their ability to integrate social, economic, and environmental dimensions has been limited, as has their capacity to prioritize key issues for presentation in national forums. Participatory and bottom-up approaches to policy formulation and public consultation are also often discouraged by cumbersome bureaucratic procedures and political-security constraints. This means that national sustainable policies

do not necessarily represent local priorities, and local concerns are rarely or ineffectively articulated in local development policies and plans.

The disconnect between local and national sustainable development planning efforts is echoed in national to regional to global linkages, which should be better organized to reinforce one another. However, linkages between local-national-regional-global sustainable development initiatives need to take into consideration the social, economic, political, and cultural sensitivities specific to each area. This is particularly important for Arab member countries, given the need to encourage and adopt locally grown approaches to sustainable development that are innovative, appropriate, gradual, and applicable to the region.

5.5 Follow-up and Accountability of the Sustainable Development Process

Effective sustainable development governance also requires a system for monitoring progress in achieving stated targets and goals. While many countries of the region are progressing from the planning to implementation stage, few mechanisms have been established to assess the quality or impact of policy and program outputs. Furthermore, oversight arrangements for ensuring the integration of national sustainable development goals into sector-based work programs are rare. Accordingly, public and/or private sector agencies should be assigned a "watchdog" role to monitor and report on the effectiveness of regional cooperation projects in supporting sustainable development. Such a system of accountability could improve institutional performance, as well as inform and empower public stakeholders.

5.6 Environmental Monitoring and Information Networks

The application of economic instruments in the MENA region is severely handicapped by ineffective environmental monitoring systems, incomplete environmental health records, inadequate ecological and health risk assessment, and the lack of environmental accounting and monetary evaluation of health and ecological impacts caused by unsustainable development.

Environmental information is a prerequisite for reliable environmental monitoring, assessment, and reporting. It is the key to identifying environmental concerns, root causes, impacts, trends, and reactions, as well as emerging environmental issues. Adequate information is also essential for formulating effective strategies, policy responses, and action plans to priority environmental and development problems.

Most MENA countries now have programs that operate with supporting laboratories to monitor coastlines, water resources, and air quality. Most countries also have established remote sensing and GIS organizations, centers, or divisions that support environmental monitoring. However, the capacities of these facilities are still limited in terms of their technical expertise, geographic scope, utilization, and financial support.

Furthermore, most countries of the Arab region have not developed methodical approaches or systems for environmental assessment and reporting. The process is also hindered by many other factors, including a lack of institutional frameworks, inadequate capacity, a shortage of experienced personnel, limited financial resources, a lack of or inaccessibility to necessary data, an absence of appropriate indicators, and weak ties with stakeholders in line ministries and community-based groups.

Regular and open exchange of information would enable environmental experts, scientists, authorities, and NGOs to seek timely and cost-effective solutions to environmental problems, and to make reasonable plans for regional environmental management. A better exchange of information is acutely needed.

5.7 Financial Cooperation

Experience shows that the most successful initiatives at the regional level are those that are supported by international donors and/or regional institutions, and that mobilize funds for specific components of a national action plan supported by national stakeholders. The key to the success of the activity is based on whether it is implemented through a consultative process that involves dialogue between relevant ministries, as well as consultation with relevant local stakeholders and experts.

In addition, one of the most important and neglected aspects of financing for sustainable development in the region concerns the lack of effective monitoring of allocated project funds. While individual donor institutions and agencies might require financial monitoring and auditing of grants and loans in a piecemeal fashion, no countries in the region have a comprehensive system for assessing the effectiveness of financial instruments for building national capacity or facilitating progress towards sustainable development. This is because beneficiary countries generally look at financial assistance in a piecemeal fashion, and in terms of quantity, not quality. This thinking, however, is beginning to change among donor institutions in light of increasing fiscal constraints. Accordingly, beneficiary countries of financial assistance in the region should seek to improve both the quality and the effectiveness of each donor dollar, as well as increase the supply of aid contribution in order to more appropriately finance sustainable development.

6. Conclusion

Sustainable development should be a fundamental and overarching objective of MENA economic cooperation, aiming continuously to improve the quality of life and well-being of present and future generations by linking together economic development, protection of the environment, and social justice. The overall aim is to achieve a permanent improvement in the quality of life of citizens in the region through sustainable communities that manage and use resources efficiently, and tap the ecological and social innovation potential of the economy, so as to ensure prosperity, environmental protection, and social cohesion.

This study first outlined major environmental threats for MENA continuous economic development. The main environmental issues addressed were water scarcity, climatic change impacts, local air pollution, waste management, degradation of arable land, and population pressure on the environment.

Existing regional cooperation initiatives are diverse. Unsurprisingly, cooperation among neighboring countries is found mainly between Arab parties, and between Israel and Euro-Mediterranean countries. Cooperation between Israel and its bordering neighbors is very limited.

We identified systemic issues that require determined policy efforts to break the deadlock. These policy initiatives need to take in to account not only technological options, but also competitive, strategic, and market considerations. The key challenge for the coming years is to develop a comprehensive approach that simultaneously addresses regional economic cooperation and environmental crises.

Key areas with high potential for environmental-economic benefits from regional cooperation were laid out. We showed that obvious economic benefits from regional trade liberalization will become sustainable only if accompanied by unified environmental legislation. Similar to the 2001 Doha Ministerial Declaration, where WTO members were asked to negotiate the reduction, or, as appropriate, elimination of tariff and non-tariff barriers (NTBs) on environmental goods and services (EGS), regional cooperation on this issue will create a triple-win situation - for trade, for the environment, and for development. If negotiations are successful, trade would be facilitated through a reduction or elimination of tariffs and NTBs on EGS. The intension is to decrease costs of environmental technologies, increase their use, and stimulate innovation and technology transfer.

There are economic and financial opportunities to be gained by good environmental practices. As the environmental quality diminishes, markets or other institutional arrangements develop that internalize the value of environmental services. The international community provides examples for successful cooperation in environmental management by employing market-based mechanisms. More and more "organic" and "green" attributes of tradable goods help penetrate new markets, increase the value of sales, and create backward incentives through the supply chain for producers using environmental resources to do so in a responsible manner. The Global Environment Facility (GEF) is available to finance projects that contribute positively to global common goals, such as protecting biodiversity or disposing of hazardous wastes. An increase in open markets and openness to direct foreign investment can also be an important conduit for the transfer of more environmentally sound technologies. Helping markets for environmental services mature in MENA or using institutional mechanisms such as GEF to pay for global benefits create incentives for more responsible environmental behavior.

Cooperation that fuels clean-technology transfer not only benefits the developer but also provides developing economies with an opportunity to avoid environmental degradation while pursuing economic growth. Producers of environmental goods and services would have better access to markets in Israel and high-income MENA countries, and it would be easier for developing countries as a whole to obtain high quality environmental goods on world markets. Such access could, for example, increase energy efficiency, and improve water and sanitation in developing MENA countries. Increased trade in these products would lead to overall welfare gains, and would help developing countries reduce emissions through technology transfer.

Lastly, our report stresses that there is a need for a change of the environmental paradigm in MENA in the direction of integrating environment into their overall national security strategy, i.e., "securitizing" their concept of the environment. This will result in more allocations for environmental issues, but it will also require more bureaucratic efficiency. Perhaps they should think of establishing a regional environmental agency to deal with common issues, as is the case in Europe. There is no shortage of suggestions to deal with environmental issues in the Arab world. UNEP, CAMRE and Arab Human Development Report literature is full of proposals on how to deal with environmental issues. The heart of the problem lies in the commitment, the paradigm, and bureaucratic efficiency.

Environmental cooperation in MENA should create positive incentives for good environment practices. Under the given circumstances, we conclude that a new integrated environmental cooperation strategy is strongly needed in order to exploit the existing opportunities, as well as to overcome numerous barriers for accomplishing sustainable economic development in MENA region.

Environmental cooperation under the Arab Peace Initiative can enforce developed MENA countries to support the developing countries' transition to sustainable human development. There is much more at stake than just the environment; there are also many trade-offs related to social equity, development, innovation, and competitiveness.

A wide range of potential paths toward efficient environmental cooperation in MENA include: top-down international agreements involving targets and timetables; harmonized national policies, such as domestic carbon taxes and bottom-up policies; and loosely coordinated national policies, such as the linkage of regional and national cap-and-trade systems through bilateral arrangements. The most promising alternatives can - in principle - achieve reasonable, cost effective environmental performance.

At this time, when socio-economic awareness in Israel and the Arab world is growing, this study outlines specific areas where regional cooperation between Israel and its neighboring countries can produce economic benefits for all. This is a strong message that can encourage ordinary people to pursue peace.

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The ‘September’ Process as a Crossroads

An Opportunity for a Two-State Solution and the Risks of the Status- Quo and Escalation

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Executive Summary

The Two-State Solution: Aix Group's Vision and Basic Principles

The Aix Group is a think tank where Israeli, Palestinian and international professionals and academics identify economic recommendations in order to promote win-win outcomes for Palestinians and Israelis.

The Group believes that there is nothing more important than working with a clear vision. Therefore, in 2003, the Group agreed on two basic principles that remain central to its discussions to this day. The first principle is reverse engineering, wherein the sides first agree on where they want to go, i.e. on the contours of a permanent agreement, and then decide how to reach that end. The second basic principle is the importance of formal symmetry between the two sides in order to devise sustainable solutions. Consequently, the Aix Group's approach is in direct conflict with the gradualism that has characterized the political process since 1993, as well as with unilateralism and with the many attempts to pre-empt the Two-State solution. The prolonged deadlock in negotiations is a direct result of these policies.

The AIX Group believes that the political stalemate is unsustainable, and is detrimental to the prospect of a two-state solution. In this context, the Palestinian UN bid can be considered as driven by the lack of meaningful negotiations and as an opportunity for revival of such negotiations in a way that is in line with the two key principles mentioned above, which constitute the essential conditions of success for the political process.

In our view, the "September" process should be looked upon as a crossroads: an opportunity to break out of the deadlock in the path towards the Two-State solution, or else face the risksof the unsustainable status quo or the deterioration of a renewed conflict.

This paper analyzes three possible scenarios that may arise as a result of the September Process and ensuing developments:

- Getting back on a track of serious negotiations with a clear vision and terms of reference for the permanent status solution.
- Continuation of the status-quo, which would inevitably lead to economic and political deterioration.
- Renewed conflict, expanded blockade, intensified restrictions on access and movement, and reduction of international aid to the Palestinian Authority (PNA).

The "September" Process as an Opportunity to Reach a Viable Palestinian Economy

In recent years, the PNA has advanced remarkably in its state-institution building. As summarized in an April 2011 UN report, "governmental functions are now sufficient for a functioning government of a state". As a very small economy, Palestine can attain sustainable long-term growth only through an export-oriented growth strategy: export of goods, services (e.g. tourism), and "export of workers" to foreign markets that can absorb some of Palestine's excess labor supply.

A new economic regime will free the untapped export potential of Palestine. The free trade agreements that the PNA has signed with main potential international trading partners (EU, EFTA, Turkey, US, Canada, GAFTA) are key to sustainable, export-driven, long-term Palestinian economic growth.

Creating a competitive environment and making use of the unexploited potential of economic development of the Jordan Valley and Gaza would also support this export-oriented growth strategy.

In addition, Palestine would need a large and stable inflow of external aid for the coming decade.

Huge economic potential under a new economic regime

Our Economic Road Map[1] and other detailed analyses point to the huge potential for growth and other economic advantages under a new trade regime and new economic arrangements with Israel that would replace the Status Quo. Our proposed new economic regime envisages replacement of the Quasi-Customs Union trade regime with a Free Trade Area agreement (FTA) between two independent and symmetrical economic entities, Palestine and Israel. The new regime further envisages an FTA enhanced through a wide-ranging "Cooperation Agreement", as detailed below in Chapter One of this paper. Most importantly, movement and access arrangements and security procedures in the new regime would be revised as to enable orderly movement of goods, businesspeople and tourists between Israel, Palestine and third party countries. Enhancing trade and economic cooperation with Israel under such new economic relations is probably the best way for a new strong upsurge of the Palestinian economy. Once the status quo impediments are removed, Israel would present a large, ready market for increased Palestinian exports.

Our in-depth analyses found that a cooperative approach under such a new economic regime would generate enormous advantages for both the Palestinian and Israeli economies. Palestinian GDP would be expected to show strong, continuous real growth over the coming decade. Exports would be the main growth engine; and, at these high rates of economic growth, the Palestinian economy would be able to absorb its 6 - 8 percent a year growth in labor force, and gradually reduce unemployment from the present alarming rate of around 30 percent.

Expanding into Arab and other export markets: a great economic leap forward

A significant part of the projected jump in Palestinian exports under the envisioned new economic regime relates to Palestine expanding into Arab markets, especially the lucrative markets of the Arabian Gulf. In doing so,

1 The AIX Group, Economic Road Map: An Israeli-Palestinian Perspective on Permanent Status, January 2004

Palestine would benefit both from its membership in GAFTA and from its access to advanced Israeli products and technologies. Palestinian exporters would have a unique advantageous position, compared to other Arab exporters, in penetrating and expanding exports to the lucrative markets of the Arabian Gulf. In addition, the main obstacles that have prevented the Palestinians from benefiting from their free trade agreements with other potential trade partners will be eliminated; this will develop the Palestinian exports to these markets in a very short time.

Feasibility analysis: Palestinian economic prospects from long-term and regional perspectives

The high growth prospects of Palestine reflect the exceptionally depressed level of the Palestinian economy at present, and the enormity of unutilized production capabilities. Once the restrictive elements of the status quo are gone, these unutilized production capabilities will be the generators of such high growth rates.

The exceptional growth potential of the depressed Palestinian economy was demonstrated, several times, in periods of relative political stability, and recently again, in Gaza.The economy of Gaza rebounded in immediate response to the partial lifting of the Israeli blockade on Gaza in June 2010. Real GDP in the first quarter of 2011 was 24 percent higher than in the first quarter of 2010, following a 15 percent real growth in 2010 (compared to 2009).

Once the economic impediments of the Status Quo are removed under the new economic regime, **Palestine will be able to develop its economy along the same lines as Jordan has done over the last decade, when Jordan succeeded in tripling its total export revenue** and its income from "export of Jordanian workers" from below $5 billion in 2000 to almost $15 billion in 2010. Furthermore, foreign direct private investments jumped more than fourfold, from an average of slightly above $0.5 billion a year in the first half of the 2000s to an average of about $2.5 billion a year in the second part of that decade.

The starting point of Palestine, in 2011-12, is much lower than that of Jordan in 2000 in all aspects. The volume of Palestinian exports of goods

and services in 2010was below $1 billion, around the same level as it was in 1999. Exports are confined mostly to Israel; exports to non-Israeli markets are negligible. Workers' remittances from Arab markets are very low as well. This very low starting point, combined with Palestine's favorable competitive position under the new envisioned regime, would enable it to achieve higher export increase rates which, in turn, will sustain high economic growth rates.

Nevertheless, considering the very low starting point of the Palestinian economy, even if it achieves these high growth goals, the Palestinian GDP per capita in 2020 will be far below the 2010 level of the Jordanian GDP per capita, and Palestine will still be among the poorest Arab economies.

The Unsustainability of the Status Quo

Structural weaknesses and vulnerabilitiesunder the Status Quo

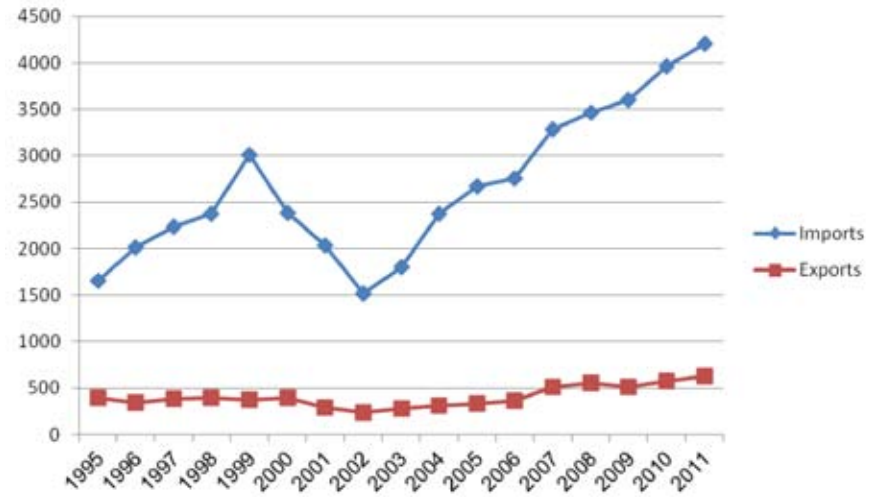
The Palestinian economy is overridden by manifold and complex weaknesses and vulnerabilities that have developed and accumulated over the last four and a half decades, and which are woven into the political Status Quo. These weaknesses include extreme dependencies on Israel and external economic support; under-developed economic infrastructure; constraints related to the economic regime and restrictive arrangements with Israel; and an array of physical constraints, including access and movement restrictions.

These weaknesses, vulnerabilities and inter-connected demographic, labor-market and social challengesare structured into the Status Quo, woven into the political stalemate and reflected in all aspects of Palestinian economic and social life. The following two examples demonstrate the impact of these weaknesses.

The first example relates to external trade. The present trade regime combines with other Israeli restrictions to gravely constrain Palestinian exports. Hence, Palestine has developed a huge structural trade deficit which, in turn, has

greatly increased Palestinian dependency on external sources for financing this gross trade deficit.

Chart 1 \\ Palestinian Exports and Imports of Goods ($ million, current prices)

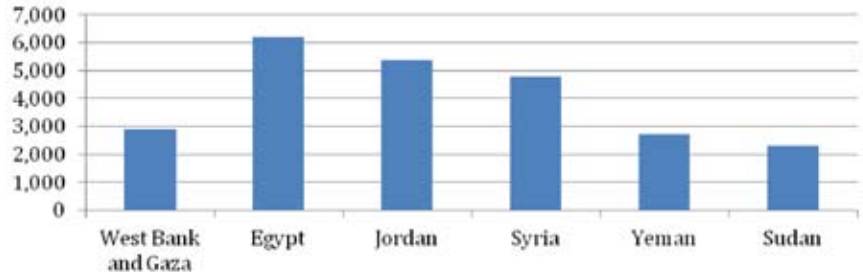


Source: PCBS, Foreign Trade Statistics, 2010, Table 1, p. 33; published January2012; 2011 –preliminary estimates

The second example relates to purchasing power and standard of living. Palestinian economic integration with the Israeli market is reflected in price levels similar or close to those of Israel, while Palestinian wages are much lower than those in Israel.

As a result, the real purchasing power of Palestinian households is much lower than the nominal level shown in national accounts and household income statistics. The impact of this linkage on price levelsis dramatic. **International comparison shows that Palestinian GDP per capita, when adjusted to local purchasing power, is far lower than that of neighboring Arab countries, and is only slightly higher than that of countries as poor as Sudan or Yemen**.

Chart 2 \\ Palestinian GDP per Capita, in Comparison to Selected Arab Countries ($, adjusted to local purchasing power according to the PPP method, 2010 estimates)



Source: CIA World Fact Book; Country Comparison: GDP per capita, as per the Purchasing Power Parity (PPP) method.

The limitations and fragility of recent economic growth under the Status Quo conditions

Given the depth and magnitude of these weaknesses and constraints, economic growth in the West Bank and Gaza (WB&G) in the last two decades has been extremely volatile and erratic. Economic growth was most strongly influenced by Israeli access and movement restrictions.The fragility and unsustainability of Palestinian growth under the Status Quo conditions has been repeatedly stressed by various parties and observers. The World Bank, for example, warned in April 2011 that "growth does not appear sustainable. It reflects recovery from the very low base reached during the second intifada and is primarily donor-driven".

Analyzing the components of the recent economic growth reveals its fragility and limited nature.Private consumption in the West Bank grew by 80 percent between 2005 and 2009, while government consumption grew by 136 percent and investment in buildings (mainly for residential use) increased by 120 percent. On the other hand, non-building investments, reflecting investment in the economy's production capacity, were, in 2008 and 2009, even lower than in 2005. The high growth in consumption and in residential construction was reflected in a huge increase in the West Bank's external trade deficit. The

gap between the West Bank's exports of goods and services and its imports almost doubled between 2005 and 2009, from $1.6 billion in 2005 to $2.8 billion in 2009.

The Role of International Aid

The Status Quo is maintained by very generous international aid. This aid finances the social security net as well as vital government services. Moreover, the Status Quo was able to be maintained in recent years only due to a steep increase in external aid.

Even so, the present pattern, in which the external aid is used almost exclusively to finance recurrent expenses and social security needs, can't be maintained for long.

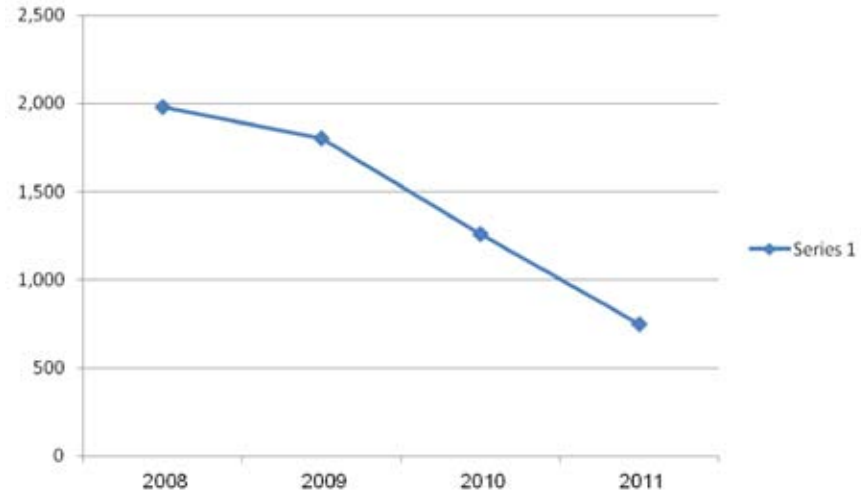
As emphasized in the PNA's plan for 2011 – 2013, the PNA must shift a larger part of these huge inflows of external aid from recurrent expenses to development. Otherwise, the PNA will not be able to achieve sustainable growth and its dependence on external aid will not diminish. This shift is not possible under the Status Quo economic regime, and can be achieved only by replacing the Status Quo with a new economic regime, which, in turn, can be achieved only through renewing the political process.

Negative Indicators in 2011: Economic Slowdown and Growing Risk of an Economic Crisis

More and more economic data indicates that the West Bank's economic recovery from the low economic activity of the intifada is losing steam. GDP growth has been slowing down in the West Bank since mid-2010, while labor market surveys indicate a rise in unemployment.

At the same time, the PNA is faced with a steep decrease in international aid. The monthly average of external aid to the PNA for recurrent budget support and for development combined, fell by more than 60 percent from its peak of $2 billion in 2008 to $750 million in 2011.

Chart 3 \\ External Budget Support to the PNA Budget: 2008 – 2011 (aid for recurrent and development expenses; $ million)



Source: PNA, Ministry of Finance, 2010 Report, preliminary fiscal summary reports for 2011

This sharp decline in external aid, and its instability, poses a serious threat to the fiscal and financial stability of the PNA and, if not solved, may develop into a major crisis.

The Economic Risks in Case of Political Deterioration

Considering the fragility of the Status Quo, the combination of continued political impasse and mounting economic pressures would probably lead to its collapse. This, in turn, would put the stability of the PNA at risk, and may even lead to its disintegration. Political deterioration would probably inflame renewed conflict. Trade and labor flows will significantly decline, and the whole of the Palestinian economy may deteriorate to a Gaza-style situation. As shown above, **international aid is the mainstay which upholds the Status Quo, and its continuous flow is vital for sustaining long-term economic development. International economic support to the PNA is politically-motivated**. The international community has regarded its economic aid as one of the pillars

of the Israeli–Palestinian peace process. However, given the growing internal economic pressures on the main donors, it is highly probable that the steep decrease in the volume of aid in 2010 – 2011 will not be reversed unless the international community feels that the peace process is reviving, and that there are realistic prospects of moving towards a political solution.

Falling external aid and the other structured economic weaknesses of the Status Quo put the economic and social stability of the West Bank at constant risk, as was demonstrated by the fiscal and financial difficulties of 2011. Economic and social risks will increase if the political impasse triggers stricter Israeli restrictions on movement and access or prolonged delays in the transfer of Palestinian tax revenues collected by Israel. In this case, one may expect a much higher risk of social unrest, which may quickly accelerate to violent confrontation with Israeli security forces.

Gaza as a case study: where the economy can go in case of renewed conflict

Our analysis shows that the Status Quo would eventually lead to economic and political deterioration. Such deterioration entails a high risk of intensified conflict, expanded blockade, stricter access and movement restrictions, and in certain circumstances may even result in a reduction in international aid.

In fact, with the exception of a reduction in international aid, this "worst case scenario" took place in Gaza in 2007-2010. Therefore, this paper presents an analysis of that "case study" in order to better understand the possible outcomes and implications should such developments engulf the West Bank as well.

The bottom line of this analysis is that, if not for the outstanding aid effort of the international community directly to the population of Gaza and indirectly through the PNA's budget support channel, the economic meltdown in Gaza would have been much more disastrous, and Gaza would have faced a major humanitarian crisis.

Summary and Recommendations: Going Back to Negotiations with a Clear Vision of the Permanent Status

The current political stalemate is highly dangerous, as it entails an explosive combination of political frustration and social resentment. If not attended to, this situation may develop into a major political and economic crisis that may even entail the fall or disintegration of the PNA and a new round of major violent confrontations between Israel and Palestine.

Against the ominous background of the Status Quo and the risks it entails, it is vital to make the right choice and seize the opportunity of a new "September Process" for going back to meaningful negotiations with a clear understanding of the permanent status, as suggested in this paper.

In addition to avoiding the immediate risk of political and economic deterioration, there is an urgent need to replace the Status Quo economic regime in order to shift a larger part of aid inflows from the financing of recurrent expenses and social security needs, to development projects. This can only be achieved as part of renewed political process. Gaza is the key for enabling the required change in the mix of international aid uses from recurrent expenses and social security to economic development. Under the present political situation and the Status Quo economic regime, most of the external aid, even if maintained at the high level of recent years, will continue to be diverted to the pressing recurrent and social needs of Gaza.

Since the old US-controlled track of the Peace Process is at a dead end, the "September Process" is probably the best opportunity for a revival of a meaningful political process.

Furthermore, looking from a wider perspective at the fundamental changes the region is undergoing, a new strategic threat must be added to the equation when analyzing the risks entailed in continuing the Status Quo. **Recent socio-political developments in the Arab world pose aclear threat of bringing other Arab countries into the vicious circle of Israeli – Palestinian violence if the situation should deteriorate.** The strong reaction in Egypt to relatively low-intensity violent clashes between Israel and Gaza, in August 2011, indicates how powerful and influential this new factor can be.

1. Introduction: the Political Context

1.1 Aix Group – Uniqueness and Brief History

Since 2002, the Aix Group has been one of the only forums for dialogue and cooperation where Israelis and Palestinians have continued to meet and engage in rational discussion of the future relations between the two sides. The Group identifies economic aspects of the conflict and makes economic recommendations in order to promote win-win outcomes for Palestinians and Israelis.

Building sustainable peace between Israelis and Palestinians requires sound economic arrangements; policy-makers have not given sufficient importance to the economic aspects. The Aix Group has provided comprehensive economic studies that assist in the important task of informing decision makers about this issue. In particular, the findings serve to provide key decision makers within the region and internationally with a solid basis for facilitating political decisions regarding final status issues. Importantly, the information presented by the Aix Group takes into account Palestinian, Israeli, and international perspectives, ensuring that the research and analysis is as impartial as possible.

1.2 The Two-State Solution: Aix Group's Vision of the Basic Principles for a Viable Palestinian Economy

It is of utmost importance to work with a clear vision of one's direction and ultimate target. Therefore, in 2003, the Group agreed on the following basic principles, which remain central in its discussions to this day: reverse engineering and the need for symmetry.

The first principle is reverse engineering. The Group came to the conclusion that one of the fatal mistakes committed by the two sides at the start of the Oslo process in 1993, and followed since then, was to base the peace process on "gradualism" without a clear vision of where the peace process is heading. The right way forward, in the Group's opinion, is to adopt what the Group has called a "reverse engineering" approach. In this approach, the sides first agree on where they want to go, i.e. on the contours of a permanent agreement, and then decide how to reach that end. Gradualism, on the other hand, is an incremental approach, moving one step at a time with no agreement on or even discussion of the end result. We believe that a feasible agreement is two states based on the 1967 borders, drawn so that the two states will have continuity, and with Jerusalem as the capital of Palestine and Israel. All outstanding issues between the two sides should be agreed upon first and at one time; thus the permanent agreement will constitute a historical compromise on all outstanding issues. Delaying agreement on any issue would mean leaving the contract incomplete and open to attacks and will negatively affect the reconciliation process between the two sides and exacerbate mistrust. Hence, it is extremely important that the final outcome of any negotiations be comprehensive, final and clear and that gradualism be used only as a tool for smooth implementation. Any steps to be taken should be part of the reverse engineering concept, whereby the final outcome is well known and a series of steps are devised to ensure that the final outcome is achieved.

The second principle is the importance of formal symmetry between the two sides in order to devise sustainable solutions. Symmetry implies that two independent states will be able to coexist and engage with each other without exercising control over one another. The Aix Group is well aware of the large political, military and economic gaps between the two sides, and the fact that no peace agreement will eliminate these. However, formal symmetry in the peace agreement, and the process to reach it, are essential.

In addition, the Group rejects the view that economic development could pave the way to a political process or be a substitute for such a process. Both reality over more than 40 years and a strong set of arguments prove the futility of this approach. Hence, the calls for "economics first" measures are at best naïve, or worse, are hiding the desire to avoid the difficult historical

political compromise that is necessary in order to achieve the change to which we aspire.

Concerning the final economic agreement, we base our analysis of future relations between the Palestinian and Israeli economies on the concept of economic sovereignty, implemented in two independent states with separate geographies, independent policies, full control over theirterritories and borders, and cooperation between them. This is in full accordance with the principle of symmetry. We believe that Palestinian and Israeli interests would be best served by a Free Trade Area (FTA) arrangement that enables each customs authority to be a partner to the other side without losing its basic independence. Unfortunately, the deviation from these principles to date has led nowhere, has made things more and more complicated, and has contributed to a large extent to the failure of the peace process.

1.3 The "September" Process as a Crossroads: Breaking the Deadlock Towards a Two-State Solution, or Facing the Risks of the Status Quo and Deterioration

1.3.1 The Palestinian UN bid: an opportunity for re-booting peace negotiations

The political stalemate of recent years is unsustainable, and is detrimental to the prospect of a two-state solution, especially as it is accompanied by unilateral actions creating facts on the ground that make revival of a meaningful peace process almost impossible. The continuous expansion of settlements, including in East Jerusalem; the closing of Jerusalem to the West Bank; the blockade of Gaza; the separation wall\barrier; the restrictions on access and movement; the non-recognition

of trade agreements between the Palestinian Authority and third parties - all these are elements of the entrenchment of occupation rather than the rolling back of occupation that was the main aim of the peace process, meant to be a prelude to the peaceful coexistence of two sovereign states.

The deadlock in negotiations is a direct result of these policies on the ground and of the Israeli government's refusal to commit to the main principles of the peace process and previous agreements. This situation is undermining the Two-State solution. In this context, the Palestinian UN bid can be considered as an opportunity for breaking out of the current deadlock.

The Palestinian UN bid is in line with the two key principles mentioned above: reverse engineering and symmetry between the sides. The recognition of Palestine as a state based on 1967 borders with East Jerusalem as its capital, and its admission in the UN, will preserve the Two-State solution and will clarify the end game. Any resumption of negotiations should be based on these borders and a total freeze of all policies that do not respect the sovereign territory of the State of Palestine. Negotiations will then be between two internationally-recognized states, thus securing formal symmetry. That symmetry must be complemented by the international community's involvement in countering the imbalance of powers on the ground, based on this new political and legal reality.

1.3.2 The importance of international involvement in the renewed negotiation process

Since its establishment, the Aix Group has consistently appealed for international involvement and has included representatives from the international community. From the international conference in Madrid to the establishment of the Quartet and the adoption of its Roadmap, it was clear that third party involvement was key and should be intensified, not diminished. The Palestinian move in the UN brings the question of Palestine back to the most prominent international forum, going from an asymmetric bilateral process that has enabled increasing Israeli unilateralism, to a multilateral process able to push both parties to abide by their commitments and previous agreements.

The peace process has been undermined by a lack of accountability and disrespect for deadlines. The September deadline represented both a national and international commitment. In August 2009, the Palestinian government launched its two-year plan entitled, "Palestine-Ending occupation, Establishing the State". This state-building program was supported by the international community and was successfully implemented by the Palestinian side, as acknowledged by the Ad Hoc Liaison Committee (AHLC) meeting held in Brussels on April 13, 2011. The Chair's summary welcomed "the assessment of the World Bank, the IMF and the UN that the PNA is above the threshold for a functioning state in the key sectors they studied, and that Palestinian institutions compare favorably with those in established states". A successful state-building process must yield a State.[2]

The September deadline was also a result of the timeframe decided by the Quartet for peace negotiations. These negotiations have stopped due to the Israeli refusal to freeze settlement activity. The current Israeli government continues to refuse a two-state solution based on 1967 borders, with Jerusalem as capital of two states. In 1999, at the end of the interim period, the international community refused to accept its responsibilities and left the parties to find a solution to the political deadlock on their own. Following the failure of the Camp David talks, the political situation led to the outbreak of the Second Intifada. Since then, all international initiatives, including the Taba agreement, the Road Map, and pushing the two sides towards negotiations, have unfortunately led nowhere. The international community must address the political situation through positive steps in line with the terms of reference of the peace process and of the Two-State solution. UN recognition and admission of the State of Palestine based on 1967 borders is in line with the Two-State solution and should therefore be fully supported.

Moreover, the September deadline was also a result of President Obama's speech at the UN General Assembly in September 2010, calling for Palestine as a new member of the UN in 2011. Since then, South-Soudan has joined the concert of nations without preconditions and despite less readiness for assuming the duties of statehood. The US has been unable to ensure Israel's

2 Meeting of the Ad Hoc Liaison Committee, Brussels, 13 April 2011, Chair's summary

clear commitment to the parameters and policies of peace. On the contrary, the US is pleading for a return to gradualism and asymmetry, as well as a differentiated approach and timeframe for final status negotiations with no agreement on the end game, all recipes for failure as proven by two decades of such negotiations.

1.3.3 Re-start of negotiations

The current situation is one of sharp asymmetry between the two sides, between occupied and occupier, between one side that has long since gained independence and one side that still yearns for it. UN recognition and admission will help to address this situation politically and legally;however, while an important condition for a new paradigm in the political process, it is not enough on its own to substantially change the situation on the ground. It must be accompanied by a substantial upgrade in international efforts to translate this recognition into a reality on the ground. The Palestinian UN bid could be a unique opportunity to recognize and agree upon the final goals and the basic principles of the peace process. It is an opening for the whole world to recognize where the peace process is heading based on international laws and the agreed-upon principles and UN resolutions, so as to preserve the Two-State solution. There are those who argue that if Palestine obtains recognition and membership in the UN based on 1967 borders, Palestinians would be encouraged to give up negotiations with Israel. This claim totally misinterprets the rationale behind this Palestinian act. On the contrary, the recognition of the State of Palestine and its admission to the UN will encourage the sides to go to negotiations based on internationally-recognized terms of reference that will enable a meaningful and credible process in a limited timeframe.

The Israelis should be wise enough to change their position and look at UN recognition as a declaration of principles towards resuming negotiations and ending the conflict. The threats will only make the current situation worse and more complicated, widening the gap between the two sides. This is not of benefit for either side, or for the prospect of peace in the region.

1.3.4 Making the right choice, understanding the risks of continuation of the Status-Quo and renewed conflict

The following chapters analyze the economic implications if the September process will result in a UN recognition of Palestine as a state on the 1967 borders. Consequently, we will analyze three scenarios that may arise:

- Going back to negotiations with a clear vision of and terms of reference for permanent status.
- Continuation of the status-quo, which would most probably lead to economic and political deterioration.
- The worst-case scenario of renewed conflict, expanded blockade, increased access and movement restrictions, and reduction of international aid.

2. The "September" Process as an Opportunity for the Two-State Solution: The Aix Group's Vision for a Viable Palestinian Economy

2.1 Palestinian Development Strategy: Addressing Fundamental Weaknesses, Building on Economic Strengths

Going back to negotiations with a clear vision of and terms of reference for permanent statuswill make it possible to achieve concrete steps in implementing Palestinian development strategies, and will allow for immediate interventions to address the fundamental weaknesses of the Palestinian economy. At the same time, it will make use of Palestinian economic strengths and comparative advantages to build a competitive environment that will form the bedrock for a viable Palestinian economy.

2.1.1 Basic weaknesses and Challenges of the Palestinian economy

Palestinian long-term development planning has to address a very wide spectrum of weaknesses and challenges, which have been developed and accumulated over the last four and a half decades. These weaknesses include: extreme dependencies on Israel; under-developed economic infrastructure; acute demographic and labor-market challenges; political weaknesses and vulnerabilities; constraints related to the economic regime and restrictive arrangements with Israel; access and movement restrictions; special development challenges such as the rehabilitation and economic recovery of Gaza and absorption of Palestinian returnees; and many more.

These manifold weaknesses and vulnerabilities of the Palestinian economy, which constitute an impassable barrier to sustainable long-term economic

growth, are discussed in detail in the next chapter, "The Unsustainability of the Status Quo".

2.1.2 Remarkable resilience to economic shocks

In spite of these weaknesses, the Palestinian economy and society have provento be surprisingly resilient to economic shocks, even of the magnitude of the harsh measures and extraordinary circumstances of the Second Intifada. This resilience can be attributed to the combination of the following three key factors: First, the Palestinian Authority continued its orderly operation, maintaining the regular delivery of basic public services to the population and paying the monthly salaries of its swelling workforce. In 2002, this workforce represented26 percent of total employment inside the West Bank and Gaza (WB&G), and 40 percent of all domestic wages. Thus, PNA wages were instrumental in supporting the livelihood of the population at large and in injecting vital purchasing power into the market, which made the difference between survival of the dwindling domestic private sector and a far more dramatic collapse. Second, donor support, which doubled in the Intifada period compared to its pre-Intifada level, to an annual level of around $1 billion. Donor budgetary support was the primary source for the regular payment of PA salaries; other forms of donor support played a major role in financing a widespread social security net, cushioning the impact of the economic shocks on the population in general. Third, Palestinian society remained cohesive, resilient, and functional in spite of the prolonged violence, curfew, and closures. Widespread lending and sharing and family and other informal social safety nets, in addition to donor support, compensated for the steep decline of household incomes.

The combination of these three factors enabled Palestinian society to absorb and survive the economic shocks and high levels of unemployment that might have torn the social fabric in less resilient societies.[3]

3 IMF, West Bank and Gaza: Economic Performance and Reform Under Conflict Conditions, September 2003, p. 11; World Bank West Bank and Gaza Office, West Bank and Gaza Update April–June 2003 (Jerusalem: World Bank, April–June 2003), p. 3.

2.1.3 Palestinian economic strengths

Careful analysis of the basic characteristics of the Palestinian economy indicates promising potential for rapid, sustainable long-term economic growth under a new growth-supportive economic regime, as detailed below. This rapid development potential stems from a combination of the following factors:[4]

First, the Palestinian economy is very small, about 3 percent of the Israeli economy and one-quarter of Jordan's (measured by the size of the GDP). Developmentally, this is a great advantage: (a) from a macro-economic point of view, it is easier and quicker to change the course of a small boat than a giant ship; and (b) the small size of the economy combined with the small geographical size of the West Bank and Gaza enable development planners to look at the rehabilitation and development of the Palestinian economy as a medium-scale regional development project. This conceptual observation implies that a set of successful local or sectorial projects can make a great difference. These projects can serve as growth engines and employment generators for the Palestinian economy at large.

This observation is especially applicable to Gaza; a set of well-chosen sectorial and local projects could uplift the tiny Gaza economy, and put it on a sustainablehigh growth path.

Second, Palestine has an ample and highly-educated workforce, and unused production capabilities. Once economic recovery begins, the basic resilience of the Palestinian economy would be reflected in a speedy mobilization of ample, unused production capabilities: (a) some 300,000 unemployed working-age persons ready to accept new work opportunities; plus some 50,000 new entrants a year into the workforce; (b) an extremely high percentage of unused production capacity in industry, construction, and in other branches of the economy. Third, Palestine has close ties with the large and advanced Israeli economy: These ties were formalized under the Paris Protocol (Annex IV of the Oslo Agreement), the legal framework that governs Palestinian – Israeli economic

4 Based on the authors' detailed analysis in Peres Center for Peace and PalTrade, The Untapped Potential, December 2006, p. 74-75.

and trade relations. The agreement formulates a quasi-customs union (unified "customs envelope") between the Palestinian and Israeli markets, with the original aim of promoting Palestinian economic development through the following basic principles:

- Free movement of goods between the two markets (Palestinian and Israeli) without tariff and non-tariff barriers. .
- The adoption of a joint/unified tariff list while giving the Palestinian Authority the right to determine duties and standards requirements for a list of basic/strategic commodities known as lists A-1, A-2 and B[5]. The purpose of these lists was twofold: to allow Palestinian traders to do business with Arab and Islamic markets without interference from Israel[6], as well as to provide the Palestinian Authority with flexibility to meet some basic market needs in specific strategic and construction commodities.
- The concept of revenue sharing, whereby Israeli customs (while still in control of external borders for the West Bank and the Gaza Strip) would clear goods imported by Palestinian traders on behalf of Palestinian customs (based on the unified customs envelope) and thentransfer this money to the PNA on a regular basis.[7]

The original aim of the Paris Protocol failed to materialize under the Status Quo, and economic integration with Israel has impeded the development of the WB&G domestic economy.

Nevertheless, under a new growth-supportive economic regime, close economic relations with Israel, would turn, into an important asset for Palestinian development prospects.

5 Duties are applied on lists A-1, A-2 and B, however standards requirements are applied on list A-1 and A-2.

6 The Oslo Agreement and the Paris Protocol requires a special permits for the import of goods from countries that do not have diplomatic relations with Israel, with the exception of what is on the lists.

7 The agreement states that the Israeli side will facilitate trade coming in from Israeli ports, but that Allenby and Rafah should be under Palestinian control and therefore payments on Rafah and Allenby should be to the PA directly.

The relatively giant Israeli economy provides huge economic growth opportunities for the PNA through the following: (a) Israel is an immediate, ready market for Palestinian exports and for sub-contracting to Israeli industries; (b) the PNA would export labor services to Israel, albeit to a much lower extent than in pre-Intifada times; (c) Israel is a ready reservoir of technical know-how, production infrastructure, and marketing channels; and (d) partnerships with Israeli companies would enable Palestinian businesses access to various development projects and export-oriented joint-ventures directed at other markets. Fourth, the PNA would have free access to Arab markets in addition to other large trading partners.

Palestinian external trade with partners other than Israel was always of the highest priority for the PNA, which led the PNA to sign many trade agreements with potential trade partners. These agreements, as mentioned above, are one of the main strengths of the Palestinian economy and will be a major driving force in developing the Palestinian economy. Going back to negotiations with a clear vision forward will demolish many challenges that are locking the potential provided by these agreements. The following are brief summaries of these free trade agreements:

Greater Arab Free Trade Area (GAFTA)

GAFTA is a first step towards achieving an Arab common market by 2020. 18 Arab countries are members in GAFTA: Jordan, Morocco, Kuwait, United Arab Emirates, Bahrain, Saudi Arabia, Oman, Qatar, Syria, Lebanon, Iraq, Egypt, Palestine, Tunisia, Libya, Sudan, Yemen and Algeria. As of January 1st, 2005, the agreement reached full trade liberalization of goods through the full exemption of customs duties and charges. Arab countries are currently engaged in negotiations to liberalize services and investments among them.

The Interim Association Agreement (IAA) with the European Union

This agreement, which emanates from the Barcelona Process' "Union for the Mediterranean", was signed in February1997. It aims at providing duty-free access of Palestinian industrial goods and some agricultural goods into the

European Union, as well as European goods into the Palestinian market. The IAA is considered one of the most important agreements for the Palestinian economy because of the potential it provides through a duty-free, quota-free treatment for Palestinian export of industrial goods and agricultural products to the EU market. In the 9th Union for the Mediterranean Trade Ministerial Conference, Brussels, 11 November 2010, Ministers endorsed a package of measures to facilitate trade of Palestinian products with other Euro-Mediterranean partners on a bilateral and regional basis.

The Interim Agreement with the European Free Trade Association (EFTA)

This agreement was signed with the EFTA States - Iceland, Liechtenstein, Norway, and Switzerland - on November 30, 1998 and entered into force on July 1, 1999. The agreement provides for free trade in industrial products as well as fish and marine products. Furthermore, separate bilateral agricultural agreements were also signed. These agreements are part of the tools for the creation of the free trade zone.

The Interim Association Agreement with Turkey

The objective of this agreement is to increase and enhance economic cooperation. The agreement includes a gradual phasing out of all the obstacles and restrictions on trade in goods, including agricultural products, in addition to promotion of trade and cooperation between the parties in the markets of third countries. The parties shall gradually establish a free trade area between them.

Palermo protocol

In March 2009, Palestine endorsed the Palermo protocol. This protocol allows for the principle of diagonal accumulation of origin so that parties' industrial sectors can increase exports to all markets covered by Palermo Protocol, especially EU markets. Other markets included are Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Syria, Tunisia, Palestine, the EEA / EFTA countries (Iceland, Norway, Switzerland and Liechtenstein), Romania, Bulgaria, the Faroe Islands and Turkey.

Agadir Agreement:

In 2009, the Palestinian cabinet decided to join the Agadir agreement. In the 9th Union for the Mediterranean Trade Ministerial Conference, parties to the Agadir Agreement (Morocco, Egypt, Jordan, Tunisia) promised to conclude procedures for the accession of the Palestinian Authority to the agreement by early 2011.

Other Free Trade Agreements and Arrangements

Other free trade arrangements are the ones reached with the US and Canada as an extension of their free trade agreements with Israel. These agreements potentially open the door for the Palestinian exporter into the large US and Canadian markets.

Considering the similarity between the PNA and Jordan in their basic resource base, the rapid development of Jordanian regional and other exports is an indication of Palestinian export potential. Moreover, the combination of this asset with Palestinian access to Israeli advanced technology and production capabilities can place Palestinian exporters in a position of comparative advantage in Arab and other markets. Fifth,exceptionally large international economic support: The international donor community is ready to generously support viable Palestinian economic rehabilitation and development program as soon as political and security conditions allow it.

Historical review of Palestinian economic performance reveals remarkable growth whenever the political situation allowed. This strength was manifested in the early 1990s, in 1997–1999, and in 2008-2010, all periods of relative political stability and relatively eased security restrictions. Nevertheless, historical experience shows that all these instances of fast growth were short-term and ultimately failed because of the impassable barrier of structured weaknesses of the Status Quo. The same course of events has

started to unfold in 2011. The high-growth of 2008-2010, in the West Bank, started to weaken, as shown later in Chapter Three.

In order to enable long-term sustainable growth based on these strengths and advantages, Palestine would need to replace the present economic regime with a new growth-supporting one, as proposed below.

2.2 Palestinian State-Institution Building: Plans and Achievements

Since its establishment, the PNA, with the support of the international economy, has worked extensively to build the institutions needed for statehood. Between the deteriorating situation on the ground since the year 2000 and the failure of the peace process, many of these efforts were lost or weakened.

2.2.1 The 2009 – 2011 13th Palestinian Government's program, "Ending the Occupation, Establishing the State"

With the 2009 launch of the 13th Palestinian Government's program, "Ending the Occupation, Establishing the State", the PNA outlined a state-building vision. This vision defined strategic priorities for each ministry and agency to implement, with the overall aim of building the institutions of a state over a two-year period. The program of the 13th Government was founded on the belief that hard "bottom up" work will clear the path towards the establishment of the independent and sovereign State of Palestine.

The plan was welcomed by the Ad Hoc Liaison Committee (AHLC) in September 2009 and was supported by the Quartet with the intention of building the institutions of a Palestinian state in two years. The target set by the parties in September 2010 for seeking a negotiated framework agreement on permanent status within one year became the PNA's target

date for completion of institutional readiness for statehood. It was crucially important for the Palestinian Authority that the state-building and political processes be brought into alignment by September 2011.

Since the program was launched in August 2009, the PNA has been systematically strengthening its institutions and performance in the fields of governance, social development, economy, infrastructure, and fiscal responsibility. It has also been strengthening and increasing public confidence in justice and rule of law institutions; enabling private sector-led economic growth and sustained provision of social services that exceed regional standards; and significantly enhancing external aid effectiveness.

In his introduction of the PNA's report to the AHLC on April 13th, 2011, Prime Minster Fayyad stated, "I believe that our governing institutions have now reached a high state of readiness". The PNA's achievements are in line with the conclusions of the UN report to the AHLC that "in the limited territory under its control and within the constraints on the ground imposed by unresolved political issues, the PNA has accelerated progress in improving its governmental functions. In six areas where the UN is most engaged, governmental functions are now sufficient for a functioning government of a state". This reaffirms the World Bank's assessment in September 2010, noted by the Quartet, that "if the PNA maintains its current performance in institution-building and delivery of public services, it is well positioned for the establishment of a state at any point in the near future. This is a significant achievement arising from the commitment of the PA and strong donor backing."[8]

The same UN report also concludes that "despite the progress achieved, the key constraints to the existence and successful functioning of the institutions of a potential State of Palestine arise primarily from the persistence of occupation and the unresolved issues in the Israeli-Palestinian conflict". [9]

8 OFFICE OF THE UNITED NATIONS SPECIAL COORDINATOR FOR THE MIDDLE EAST PEACE PROCESS, PALESTINIAN STATE-BUILDING: A DECISIVE PERIOD, Ad Hoc Liaison Committee Meeting Brussels, 13 April 2011

9 ibid

2.2.2 The Palestinian National Plan 2011-2013 (PNP): continued commitment to improve state institutions, while enhancing economic development

In spite of the achievements of the 2009-2011 program, the PNA still lacks the environment and basic economic setting that enables sustainable economic development, namely: the resources and pre-conditions needed to develop a prosperous private sector; to develop human resources as the growth engine of a knowledge-based economy; and to enhance export-driven growth based on producing goods and providing services with high added value and competitive advantage.

The Palestinian National Plan 2011-2013 (PNP) was drafted with the aim of tackling these key strategic objectives, combined with continued efforts to support the state building agenda, including redressing inequities, investing in rural development, and addressing constraints to access. The policy framework focuses specifically on improved service delivery, increased economic interdependence, improved infrastructure, and effective and accountable public institutions. The PNP, therefore, reflects the PNA's continued commitment to improving state institutions and government functions.[10]

2.2.3 Palestinian Development Strategies: Addressing Fundamental Weaknesses, Building on Economic Strengths

Considering the weaknesses and vulnerabilities presented above, the PNA development strategy points to the following main challenges that need to be addressed in order to enable sustainable long-term economic development: First, addressing the extreme dependence on Israel, diversifying trade and other economic relations through the opening and development of new markets, and boosting exports in a manner that will enhance independence from the Israeli economy.

Second, enhancing the competitiveness of Palestinian companies: The challenge lies in the fact that the Palestinian economy is based mainly on small and medium businesses that lack many competitive factors.

10 The Palestinian National Plan 2011-2013 (PNP)

Third, integration of the different development strategies that have been applied to various economic sectors, the financial sector, etc.

Fourth, effective comprehensive horizontal and vertical policiesthat support restructuring and diversification of trade and less dependency on international aid.

These strategies would enable the PNA to address the manifold weaknesses of the Palestinian economy, including:

- Weak and small Palestinian local market;
- Difficulty of movement of goods within Palestinian cities;
- Low confidence in investment in Palestine;
- Need to upgrade the existing institutions so that they are capable of running a sovereign state and a viable Palestinian economy;
- Low capital structure and difficulty of acquiring the latest technology;
- Loss of Gaza market due to the blockade;
- Structural deficiencies in the process of infrastructure building and development;
- Random and irregular market environment;
- Weak competitive advantage of Palestinian products due to the high transaction costs that result from the Israeli measures on the ground;
- Budget of PNA depends on international aid;
- Migration of capital due to political instability;
- Migration of youth due to weak job market;
- Lack of Israeli recognition of trade agreements signed by the PA.

2.3 Palestinian development plans and achievements: towards the diversification of Palestinian trade, and strengthening competitiveness

The PNA's efforts to overcome the difficulties and challenges were clearly reflected in the national objectives within the National Plan of the 13th Government – "Palestine, Ending the Occupation, Establishing the State", and in the Palestinian National Plan 2011-2013 (PNP). Consequently, the PNA's policies were directed towards diversifying Palestinian trade, creating a competitive business environment, and strengthening competitiveness to attract investment and compete locally and internationally while building on the Palestinian comparative advantages.

As per this positive scenario, the PNA could start immediately implementing its strategy and benefit from the vast potential provided by its trade agreements to diversify trade and to find alternative markets for Palestinian goods and services. This would reduce Palestinian dependency on trade with the Israeli markets (or exporting via Israel) and increase the competitiveness of the economy in general and productive sectors in particular, taking into consideration that Israel strategically will remain, for strictly economic reasons, a major trade partner. It will then be possible for the PNA to move from interim agreements to full association agreements with the EU, Turkey and EFTA countries

Moreover, Palestinians will control formulation and implementation of the needed policies towards developing a competitive business and investment environment in Palestine, and become competitive with other business environments in the region.

Building on the Palestinian comparative advantages will put the PNA in a more competitive position for attracting investment locally and internationally. These advantages come in part from the different Palestinian regions, especially economic development of the Jordan Valley. Development of the Valley will play an active role in the Palestinian economic recovery and development. In general terms, an immediate transfer of Area C to the PNA

will open it to widespread development of the stone and marble, agricultural, and construction sectors. Designing integrated programs for all economic sectors in parallel and in a complementary manner is a key to development of a viable Palestinian economy.

2.3.1 The Critical Importance of External Economic Relations

As a very small economy, Palestine can attain sustainable long-term growth only through an export-oriented growth strategy: export of goods, services (e.g. tourism), and "export of workers" to foreign markets that can absorb some of Palestine's excess labor supply.

As detailed below, a new economic regime with Israel is the key for sustainable export-driven, long-term Palestinian economic growth. In addition, Palestine would need a large and stable inflow of external aid for the coming decade.

The analysis below relates to the three most important fields of Palestinian external economic relations. First, economic relations with Israel; and then, the two other vital realms of Palestinian economic relations: the international donors, and the Arab world.

2.3.2 Economic Relations with Israel: From Dependency to Opportunity

As detailed in Chapter Two below, "The Unsustainability of the Status Quo", the current framework of trade and economic relations between the PNA and Israel is a mix of an imperfect customs union and Israeli unilateralism. Key elements of the Paris Protocol, which were formulated to guarantee Palestinian economic interests, have not been implemented; and in the wake of the Intifada, a new set of harsh access and movement restrictions was added toall of these overwhelming structural weaknesses of the present Palestinian-Israeli economic regime.

2.3.3 A new Palestinian – Israeli economic regime

Detailed analyses of the diverse and interrelated elements of Palestinian – Israeli economic relations point to the huge potential for growth and other economic advantages under a new trade regime and economic arrangements with Israel, which would replace the Status Quo.[11]

The most promising new regime envisages replacement of the present Quasi-Customs Union trade regime with a Free Trade Area agreement (FTA), namely duty-free treatment of mutually originating goods and services, between two independent and equal economic entities, Palestine and Israel. The recommended new economic regime further envisages that this FTA will be enhanced through a "Cooperation Agreement", which will include components like cooperation on health, tax, standardization, competition and bank supervision authorities, harmonization and recognition of product standards and professional qualifications of service providers, and institutional arrangements such as joint committees and dispute settlement.

The Israeli – Palestinian FTA can be designed to encourage agreements with third parties like QIZ[12]-style arrangements with the US, the EU and other markets; special arrangements for export-oriented free zones; special economic development zones (in the Jordan Valley or in Gaza); and special-status industrial estates.

For Palestine, the new regime would include the freedom to benefit from preferential trade agreements that Israel is not party to, such as the Greater Arab Free Trade Area (GAFTA) or the Agadir Group (Egypt, Jordan, Tunis and Morocco).The new economic regime will include negotiated arrangements on sectors like agriculture or tourism, and on issues like the use of shared water resources, the environment, transportation, impediments to exchange of services, etc. Most importantly, under the new envisioned

11 The discussion below is based on several previous works which included in depth analysis of these factors; mainly The AIX Group, Economic Road Map, January 2004; PalTrade and the Peres Center for Peace, The Untapped Potential, December 2006; and PIBF and NIR, Future Economic Relations between the Palestinian and Israeli Economies, December 2007; as well as the Palestinian government assessments in PNA, Palestinian Development Plan for 2011 – 2013, April 2011.

12 Qualified Industrial Zones

regime, movement and access arrangements and security procedures would be revised to enable orderly movement of goods, businesspeople and tourists between Israel, Palestine and third party countries, under stable political and security situation inside Palestine and between Palestine and Israel. The envisaged new economic regime also assumes actively encouraging Israeli and Palestinian governmental policies towards business cooperation and Israeli investments in Palestine.[13]

Enhanced trade and economic cooperation with Israel under such new economic relationsis probably the best way for a new strong upsurge of the Palestinian economy. Once the Status Quo impediments are removed, Israel would present a large, ready market for increased Palestinian exports, including promising niche markets such as the Israeli Arab market, and retail border trade. The Palestinian access to Israeli technological know-how and advanced industrial infrastructure and products would give Palestinian exporters a solid competitive advantage in regional markets, and cooperation with Israel would give Palestinian producers access to Western markets by using Israeli marketing platforms and by supplying semi-finished products and sub-contracting to Israeli exporters. Cooperation with Israel would also boost the development of various Palestinian service-sectors, such as tourism, transportation, etc.

2.3.4 Expanding into Arab and Other Export Markets: The Economic Leap Forward

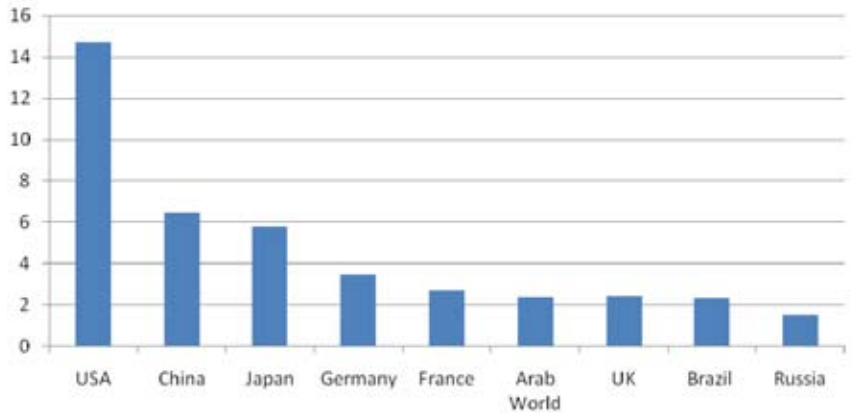
As explained above, Palestinian sustainable long-term economic growth must be export-driven. A large part of the projected jump in Palestinian exports under the recommended new economic regime relates to Palestine expanding into Arab markets, especially the lucrative markets of the Arabian Gulf. In doing so, Palestine would benefit both from its membership in GAFTA and from its access to Israeli advanced products and technologies. This would provide Palestinian exporters with a unique advantageous position,

13 Aix Group, Economic Road Map, 2004, p. 13-27; PIBF and NIR, Future Economic Relations Between the Palestinian and Israeli Economies, December 2007, p. 10, 42 – 45, 49.

compared to other Arab exporters, in penetrating and expanding exports to the lucrative markets of the Arabian Gulf.

Arab markets, and mainly the Arabian Gulf market, have greatly expanded over the last decade. The combined GDP of the Arab World is estimated at $2.4 trillion in 2011, the equivalent of the United Kingdom or Brazil, the sixth and seventh largest economies in the World. The GCC economic bloc, comprising Saudi Arabia and the other five Arabian Gulf countries (Kuwait, the United Arab Emirates, Bahrain, Qatar, and Oman), with a combined GDP of about $1.4 trillion in 2011, is the equivalent of the world's eleventh largest economy, Russia.

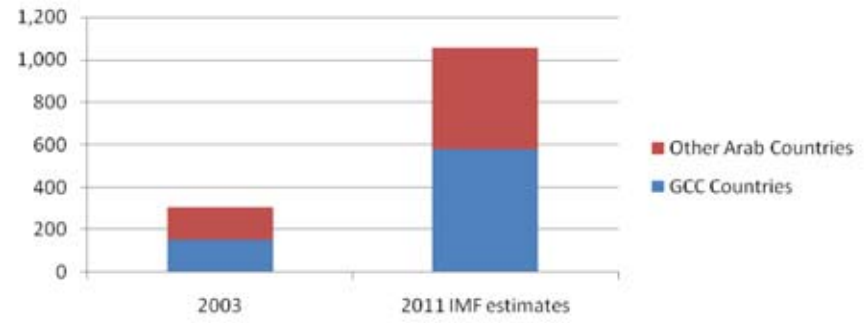
Chart 4 \\ Total Arab GDP Compared to World Leading Economies ($ trillions, current prices)



IMF estimates for 2011

Arab imports of goods and services, increased by 250 percent from 2003 to 2011. In comparison, the global import volume increased by only 130 percent in the same period. The lion's share of Arab imports, 55 percent of all Arab imports in 2011, is concentrated in the GCC countries.

Chart 5 \\ Arab Imports of Goods and Services ($ billions at current prices)14



Source: IMF, Regional Economic Outlook, MENA 2011 p. 88; MENA 2007, P. 46.

2.4 Palestinian Economic Prospects Under the New Economic Regime

Our in-depth analyses of possible alternative economic and trade regimes for Palestine found that a cooperative approach, under a Free Trade Area Agreement with Israel, would generate enormous advantages for both the Palestinian and the Israeli economies. This impact would be particularly high on certain sectors and subsectors such as tourism, fruits, vegetables, olive oil, garments, ITC, and others.[15]

The high growth rates projected under this scenario reflect the exceptionally depressed level of the Palestinian economy at present, and the enormity of unutilized production capabilities. Once the restrictive elements of the Status Quo are gone and the growth-inducing elements of the new economic regime

14 Iran is included in the figures for "other Arab countries" because of technical IMF definitions. The other non-Arab Middle East countries, Turkey and Israel, are excluded.

15 As per the analysis of "cooperative agreement" scenario (FTA plus cooperative economic arrangements) in PIBF and NIR, ibid, p. 9; indirect impact included. The detailed analysis & calculation method is presented in Annex 2 of the source.

are in place, these unutilized production capabilities will be the generators of such high growth rates.

These unutilized production capacities include 300,000 working age people who are either formally unemployed or have never looked for work and who would readily join the labor force once work opportunities open; high unused production capacity in industry and construction; and the de-developed economic infrastructure.

2.4.1 Long-term sustainable fast growth under the new economic regime

The exceptional growth potential of the depressed Palestinian economy was demonstrated, several times, in periods of relative political stability, and recently again, in Gaza.As an immediate consequence of the partial lifting of Israeli blockade on Gaza in June 2010, the economy of Gaza rebounded. Real GDP jumped 26 percent in 2011[16], following 15 percent real growth in 2010 (compared to 2009). These macroeconomic indications have been substantiated by business activity data. A study of Gaza's business sector reaction to the partial lifting of the Israeli blockade found that average sales increased by 31 percent from June 2010 to March 2011, and reported capacity utilization in industry grew from 34 to 42 percent.[17]

In spite of its impressive size, this upsurge represents no more than a fraction of Gaza's economic growth potential. Though the partial relaxation of Israeli restrictions on Gaza's trade has allowed the number of import trucks entering Gaza to almost double compared to their number before June 2010, the average number of trucks passing between Israel and Gaza in the early months of 2011 was still less than 20 percent of the volume of freight

16 PCBS preliminary estimates for January – September 2011, published December 2011.

17 PCBS, Preliminary Estimates of Quarterly National Accounts for the First Quarter of 2011, June 2011, p. 14; IMF, April 13, 2011, p. 3; Office of the Quartet Representative, PalTrade and PFI Report, Tracking Changes in Key Industrial Sectors in Gaza Following the Partial Easing of Israeli Restrictions in June 2010, Second Round of Results, March 2011, p. 2-3.

movements needed to support "normal economic activity" in Gaza.[18] The same study of Gaza's business sector found that business activity is still greatly constrained, mainly as a consequence of the unreliable supply of electricity, the unpredictable availability of raw materials and extremely limited access to export markets.[19] Hence, the new envisioned economic regime of FTA Plus Cooperation Agreement with Israel is expected to generate very high real growth rates in the coming few years, by integrating these unutilized production capabilities into Palestinian economic activity.

2.4.2 The growth potential of export-oriented branches of the economy

The new economic regime will enable release the growth potential in a wide range of export-oriented branches of the economy which have not been able to realize their growth potential under the Status Quo. The following two examples will suffice for demonstrating this point: tourism and export-oriented agriculture.

The tourism sector has shown a modest recovery in recent years, as a result of partial relaxation of Israeli restrictions on access and movement in the West Bank. Nevertheless, it remains very small, accounting for only 1.5 percent of the West Bank's GDP. This tiny contribution of tourism to the Palestinian economy is in striking contrast to the great potential of Palestine as a tourism destination, and in comparison to neighboring countries like Jordan and even Syria (until the latest uprising there).

Under the envisioned new economic regime, the high growth potential of the tourism sector will be released, as a result of the following changes: movement restrictions would be replaced by free and orderly movement of tourists in Palestine and between Palestine and Israel; Palestine would become a safe and independent tourist destination; the average length of stay and spending

18 160 trucks per day, on average, compared to over 1,000 truckloads per day needed for normal economic activity. See detailed analysis on this point in: The Peres Center for Peace, "Gaza Strip Crossings: Israeli Policies in a Broader Perspective: A Summary and Analysis of Palestinian-Israeli Roundtables, June 2011, p. 9-12, 30-31

19 Office of the Quartet Representative, PalTrade and PFI report, March 2011, p. 1

of visitors would show an increase; travel destinations and points of interest would diversify beyond the strong dependency today on the Christian market; the Palestinian tourism infrastructure would be rehabilitated and developed; and cooperation with the Israeli tourism sector would enhance worldwide marketing of a broader "Holy Land" product.

As noted, the removal of Israeli restrictions would enable the Palestinian tourism industry to tap non-Christian markets (business and conferences, tour packages for Jordan and Egypt, Muslim pilgrimage and visiting friends and relatives or leisure travel), and to lure in the large private investments required for building a tourism infrastructure that would enable Palestine to become an attractive tourism destination for millions of tourists.[20]

Export-oriented agriculture is another branch that has been almost non-existent under the Status Quo. Its huge potential is apparent, however, from the most successful small-scale beginnings in Gaza, as well as the success of this branch in Jordan and Egypt. Under the new economic regime, the largely one-sided agricultural trade between Palestine and Israel (namely, Palestinian imports of agricultural products and inputs many times higher than Palestinian exports) would both increase substantially and become much more balanced. A wide range of mutually advantageous export-oriented agricultural and agro-industry business activitieswould be set in motion, in fields like high-value vegetable, flower and fruit exports to European and other markets.

The new economic regime would also enable Palestine (and Israel) to benefit from export of high-value Palestinian agricultural products to Arab markets, based on Israeli advanced technologies and inputs.[21]

20 See detailed quantitative analysis and forecast in PIBF and NIR, ibid, p. 52, 55; PCBS, Hotel Activity Survey, First Quarter 2011,

21 See detailed quantitative analysis and forecast in PIBF and NIR, ibid, p. 57

2.4.3 Economic growth forecasts under the Palestinian National Development Plan 2011–2013

The macroeconomic framework of the new Palestinian National Development Plan for 2011–2013 is based on a scenario assuming continued removal of obstacles to access and movement and removal of the blockade on Gaza, while all other elements of the Status Quo remain in place. Though these assumptions imply an economic environment that is less encouraging for economic development than the FTA Plus Cooperation Agreement regime, the plan forecasts an increasing path of real growth, from 9 percent in 2011 to 12 percent in 2013. Furthermore, the plan includes the possibility of a more positive scenario, if sovereignty is attained. In this case, the plan forecasts more aggressive growth of the Palestinian economy, as "the West Bank and the Gaza Strip economies can be reintegrated, international trade can flourish, significantprivate sector investment can be unlocked, and long-delayed large-scale public investment projects can be launched".[22]

2.5 Feasibility Analysis: Palestinian Economic Prospects from Long-Term and Regional Perspectives

2.5.1 The extremely low economic starting point of Palestine

The high GDP growth and the fast growth in the other main economic indicators, forecasted under the new economic regime, reflect recovery of lost economic potential over the last two and a half decades, since the First Intifada. Furthermore, even if the Palestinian economy achieves

22 PNA, Palestinian Development Plan for 2011 – 2013, April 2011, p. 64

exceptionally high growth of 10-11 percent, on average, over the coming decade, the Palestinian GDP per capita in 2020 will be far below the 2010 level of the Jordanian GDP per capita, and Palestine will still be among the poorest Arab economies.

The extremely low economic starting point of Palestine, in the aftermath of the Second Intifada, is described in detail in Chapter Two below, "The Unsustainability of the Status Quo".

An illustrative snapshot of this situation is provided through comparing the Palestinian Gross National Income (GNI) per capita to the Middle East and North Africa (MENA) regional average. In 1999–2000, the Palestinian GNI per capita was at the same level as the MENA average (which is heavily weighted with oil-rich countries). It was slightly below the Jordanian GNI per capita, almost twice as large as that of Syria, and 4–5 times larger than the poorest Arab countries, like Sudan and Yemen. By 2006, the Palestinian GNI per capita was justunder 45 percent of the MENA average, less than 40 percent of Jordan's GNI per capita, and only two-thirds of the Syrian GNI per capita. Moreover, the PNA dropped much closer to the poorest Arab countries, as the PNA GNI per capita was only 50 percent higher than that of Sudan or Yemen. In Gaza, GNI per capita was already below that of Yemen and Sudan.[23] The comparative picture for 2010 is not better, as shown in Chapter Two below.

2.5.2 Feasibility analysis considering the Jordanian case

Jordan is a most relevant case for evaluating the Palestine's economic growth potential. Palestine is quite similar to Jordan in its basic resource base. It also enjoys quite similar favorable trade arrangements with major trade partners.

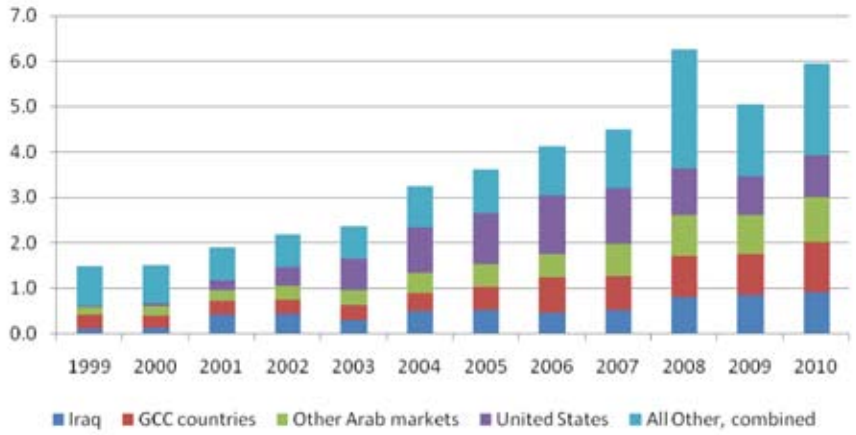
The main difference between the PNA and Jordan, alas, is that the PNA lacks security, stability, free movement, and access to the markets. Once these disadvantages are removed under the new economic regime, Palestine will be able to develop its economy on the same lines as Jordan has over the

23 Comparisons based on the World Bank's World Development Indicators series

last decade. Moreover, Palestine's better access to the Israeli market, Israeli technologies, etc., put it in an advantageous position compared to Jordan. All in all, an export-oriented growth strategy, which the envisioned new economic regime would enable, is expected to work for Palestine at least as well as it has worked for Jordan over the last decade.

Export of goods and services has been Jordan's most important growth engine. Jordanian exports of goods to Arab markets grew fivefold between 2000 and 2010, from only $600 million to $3 billion, and exports to the US (under the preferred QIZ and the FTA agreements) grew from negligible volumes in the 1990s to around $1 billion a year in the second half of the 2000s.Total exports grew fourfold, from $1.5 billion in 2000 to $6billion in 2010.

Chart 6 \\ Jordan – Domestic Exports of Goods by Main Markets ($ billon)



Source: Central Bank of Jordan, Monthly Statistical Bulletin, Geographical Distribution of Domestic Exports

Total export of services, primarily tourism, transportation and logistical services, grew more than threefold, from $1.6 billion in 2000 to $5.2 billion in 2010, with Arab markets contributing most of this growth. In addition, remittances of Jordanian workers abroad, mostly from Arabian Gulf countries, doubled, from above $1.5 billion in 2000 to above $3 billion in 2010.All in

all, Jordan succeeded in tripling its total export revenue, plus its income from "export of Jordanian workers", in a decade, from below $5billion in 2000 to almost $15 billion in 2010. Furthermore, foreign direct private investments (again, mainly from the Arabian Gulf) jumped more than fourfold, from an average of slightly above $0.5 billion a year in the first half of the 2000s, to an average of about $2.5 billion a year in the second part of that decade.[24]

The starting point of Palestine, in 2011-12, is much lower than that of Jordan in 2000 in all aspects. The volume of Palestinian exports of goods and services in 2010 is below $1 billion, around the same level as it was in 1999. Exports are confined mostly to Israel, while exports to non-Israeli markets are negligible. Workers' remittances from Arab markets are very low as well. This very low starting point, combined with Palestine's favorable competitive position under the new envisioned regime, would enable it to achieve higher export increase rates which, in turn, will sustain high economic growth rates, as per the forecasts mentioned above.

2.6 The Role of the International Community: From Preventing Economic Disaster to Supporting Long-Term Development

The PNA has enjoyed most generous international support from its early days; indeed, it has been among the top world recipients of international support per capita for the last fifteen years. The most important donors are the US and EU, which accounted for almost half of all aid in 2009, and the UN, through UNRWA and other aid arms. The rest of the international aid comes from over 40 major donors (states and international organizations), and many smaller donors, which channel aid through about 1,500 NGOs estimated to be active in Palestine.[25]

24 Central Bank of Jordan, Monthly Statistical Bulletin, Balance of Payment, Tables 31 and 32. 2000 – 2008 was a period of a great leap forward for the Jordanian economy. The continuous fast growth paused at the end of 2008, whereas Jordan was negatively affected by the global economic crisis. The growth in exports to Arab countries, however, has continued in 2009 – 2010.

25 The Portland Trust, REDUCING AID DEPENDENCY IN THEPALESTINIAN TERRITORY, Economic Feature May 2011, p. 1

2.6.1 The development of international aid: 1994 - 2009

International aid started in 1994, with the advent of the PNA, at a level of around $500 million per year, and remained around this level through the second half of the 1990s, until the outbreak of the Second Intifada in September 2000.[26] Most of the aid in 1994 was in form of budget support, for the financing of the PNA's recurrent expenses. Beginning in 1995, however, as the fiscal situation of the PNA showed impressive improvement and its current deficit began to rapidly decrease, the share of budget support decreased, and most international aid to the PNA took the form of development assistance, as well as humanitarian aid through non-budgetary channels, such as UNRWA's education and health activities, direct financing of food and other elements of the social safety network, and a multitude of other non-governmental relief activities and development projects. In 1998 and 1999, the PNA succeeded in fully covering its recurrent expenses from its own fiscal sources, and the PNA's international aid was used wholly for development expenses.[27]

With the outbreak of the Intifada in 2000, the international donors shifted their budgetary aid from development expenses to financing of the PNA's recurrent deficit while significantly increasing their non-budgetary aid, financing the growing relief needs of the Palestinian population. By 2005, overall international aid was estimated at close to $1 billion, of which about $350 million was budgetary support covering part of the PNA's recurrent deficit. The rest was non-budgetary support, mainly for social security.[28]

Since 2006, total international aid has steeply increased, growing to over $1.5 billion in 2007, then jumping to about $2.5 billion in 2008, and peaking at $3 billion in 2009. Budgetary aid grew almost fivefold, to almost $2 billion in 2008 and 2009, mostly for financing the recurrent deficit. Non-budgetary support doubled to around $1 billion in 2009.[29] At this magnitude, external aid represented close to half of Palestinian GDP; it was also a dominant

26 The Portland Trust, ibid, p. 2

27 The PNA Ministry of Finance, Review of 2010 budget Performance, February 2011, p. 12; IMF WB&G Report, April 2011, p. 23

28 The Portland Trust, ibid, p. 2, 3; IMF WB&G Report, March 2007, p. 10

29 The Portland Trust, ibid, p. 2, 3

source of finance for the PNA budget, covering above 40 percent of recurrent government spending in 2009.

2.6.2 The critical role of international aid in sustaining Palestine's long-term development over the coming decade

Though the Palestinian Development Plan for 2011-2013 (PDP) predicts continued decline in the PNA's need for budget support aid, total international aid to the PNA's budget would need to continue at the same high level of $1.5-2 billion per year in order to finance the public development plans required to support the envisioned rapid economic growth.[30]

Considering the non-budgetary social relief and project aid of about $1 billion, Palestine would need a stable flow of international aid at the total magnitude of $2.5-3 billion a year for the coming decade, in order to support and sustain its economic recovery and development plans, while also providing the social safety net required for securing social stability.

30 PNA, Palestinian Development Plan for 2011 – 2013, April 2011, p. 13

3. The Unsustainability of the Status Quo: Risks and Implications

3.1 Fundamental Economic Weaknesses Under the Status Quo

The basic properties of the Palestinian economy were shaped during the period of direct Israeli rule. These characteristics were formally crystallized under the Israeli – Palestinian economic agreement (the Paris Protocol) of 1994, and have dominated Palestinian economic development ever since. Moreover, the Palestinian economy has been faced, from the initial period of Palestinian self-rule, with a set of overwhelming challenges and obstacles: demographic, political, economic regime issues, and more, over and above the structural weaknesses from the period of Israeli rule. Then, in the wake of the Second Intifada, a new layer of harsh access and movement restrictions was added. These weaknesses, vulnerabilities and interconnected economic and social challenges are structured in the Status Quo and woven into the political stalemate; they have repeatedly and severely disrupted Palestinian economic activity and impeded Palestinian economic growth.

3.1.1 The economic legacy of the Israeli direct rule period

The economic regime that evolved during the formative period of Israeli direct rule (1967–1993) had two distinctive characteristics: one-sided economic integration, and a dual policy of economic welfare and under-development.

The basic aspects of the Israeli policy of one-sided integration were described by the World Bank as follows: export of Palestinian manual, unskilled labor to Israel (skilled labor was either directed to the Gulf or remained

unemployed); and trade conducted predominantly with Israel, as exports faced barriers or prohibitive costs in going anywhere else; the exception was agricultural goods, which were directed to and through Jordan.[31] In addition, the Israeli policy of under-development produced an economy with low capital formation, low capital-labor ratios, and low labor productivity, which had a long-term negative effect on the production capabilities and performance of the Palestinian economy.[32]

These policies were mirrored in the development of a series of structural weaknesses in the Palestinian economy that crippled its productive capacity and rendered it extremely vulnerable to external economic and political shocks. The major structural imbalances and distortions of the Palestinian economy, as of 1993, were summarized by the World Bank as follows: (1) heavy dependence on employment in Israel; (2) an unusually low degree of industrialization; (3) a trade structure heavily dominated by trading links with Israel, and with a large trade deficit; and (4) inadequacies in the provision of public infrastructure and services.[33]

3.1.2 The Paris Protocol, and continuation and deepening of major economic structural weaknesses under Palestinian self-rule

The Israeli-Palestinian Protocol on Economic Relations, known as the Paris Protocol, was signed in April 1994 with the aim of administering Palestinian–Israeli economic relationships for a transitional period of five years, and was expected to be replaced by a permanent status agreement. However, with the absence of such a permanent status agreement, the arrangements formalized in the Paris Protocol have continued to govern Palestinian –

31 World Bank, Developing the Occupied Territories: An Investment in Peace (Washington, D.C.: World Bank, 1993), Vol. 2: The Economy, p. 27.

32 The World Bank study of 1993 estimated the ratio of WB&G public sector development expenditure to the GDP, in the Israeli-rule period, at less than one-third of the worldwide average for developing countries, and less than a quarter of that in Jordan (data for the early 1990s); World Bank, Developing the Occupied Territories, Vol. 2, p. 34–35.

33 World Bank, Developing the Occupied Territories, op. cit., Vol. 1: Overview, p. 5

Israeli economic relations since 1994.Basically, the economic arrangements embedded in the Paris Protocol reflect the extension of the major elements of the economic regime of the Israeli-rule period. It formalized the integration of the Palestinian economy with the larger Israeli economy and preserved the quasi-customs-union trade regime between the two economies. The monetary union was preserved, and continued access of Palestinian labor to Israel was allowed.[34]

In effect, dependency on external sources continued, and even deepened, under Palestinian self-rule. On the one hand, the PNA registered commendable achievements such as the creation of a wide network of international trade agreements (detailed in Chapter One above), or the building of a functioning public administration and fiscal systems. On the other hand, the structural weaknesses of the Palestinian economy, combined with the restrictive economic regime under the Paris Protocol as applied on the ground and with other restrictive Israeli policies, resulted in the continuation of the major economic trends of the Israeli-rule period.

Despite its significant potential, the network of international trade agreements did not benefit the Palestinian economy as expected. Since signing the Paris Protocol, Israel has implemented unilateral measures and continuously violated some of the Protocol's articles that address Palestinian needs and interests. It is imperative to note that the Paris Protocol is no longer functioning as agreed, and is missing the spirit of mutuality that was built into it when it was first signed.

Israeli non-recognition of most of the PNA's international trade agreements is another serious impediment to these agreements' full realization, as is the

34 Gaza-Jericho Agreement Annex IV - Economic Protocol, 29 Apr 1994; Israel, Ministry of Foreign Affairs, http://www.mfa.gov.il/MFA/Peace+Process/Guide+to+the+Peace+Process/Gaza-Jericho+Agreement+Annex+IV+-+Economic+Protoco.htm

The protocol included certain provisions meant to significantly mend the one-sided nature of Israeli-Palestinian economic relations from the Israeli-rule period, such as allowing free Palestinian export to the Israeli market (except for certain agricultural products), or allowing for some Palestinian export diversification with Arab countries. On the ground, however, no significant change was noticed, except for the successful implementation of a mechanism for VAT and other indirect tax collection by Israel, which became a cornerstone of the PNA's fiscal system (see World Bank West Bank and Gaza Office, Long-Term Policy Options for the Palestinian Economy (Jerusalem: World Bank, July 2002), p. 1, 5–6, 15; Arie Arnon et al., op. cit., p. 7.

matrix of Israeli movement and access restrictions which lead to sky-rocketing transaction costs that severely reduce Palestinian competitiveness. Other impediments include: complete closure of the Gaza Strip; internal closures in the West Bank; the Separation Wall\Barrier; non-implementation of the safe passage between the West Bank and the Gaza Strip; Israeli control of border crossings and the implementation of internal commercial crossings between the West Bank and Israel in contravention of the Paris Protocol; movement restrictions on Palestinians in the Jordan Valley area of the West Bank; impediments to the movement of the trade and business community in Jerusalem; impediments to obtaining visas for investors; Israeli non-recognition of Palestinian Certification of Standards and Sanitary and Phytosanitary compliance; Israeli non-recognition of Kosher certification; impediments on Customs clearance, tax offsetting, and discrimination against Palestinian Trade; and the Israeli commitment to not sell Palestinian imports in Israel.

Another obstacle arises as a direct result of these many impediments: the Palestinian Authority and the Palestinian private sector are forced to prioritize survival over development strategies. This explains the lack of a Palestinian national strategy to develop trade through exports to date, even though such a strategy was highlighted in all of the PA's plans and strategies. It is very complicated to think of any Palestinian strategy that could diversify trade and develop Palestinian exports without the removal of all of these impediments.

In the first period of Palestinian self-rule, from 1994 to 2000, total domestic expenditure surpassed domestic production (the GDP) by between 55 and 65 percent of GDP. From 2001 to 2006, as workers' income from Israel diminished, international donors' aid replaced it as the principal external economic source of the Palestinian economy. Total contribution of external sources retained its long-term share, the equivalent of around 50 percent of GDP.[35]

This huge structural economic imbalance was also mirrored in similarly gigantic deficits in the balance of payment and the PNA's budget, in addition to the dependence on Israel for the collection of a large part of PNA's fiscal revenue.

35 PCBS, National Account Statistics.

The latent threat of this critical aspect of Palestinian economic dependence on Israel materialized after the outbreak of the Second Intifada, and again in 2006. Prolonged Israeli withdrawal of Palestinian tax revenues contributed to the special severity of the Palestinian economic crisis in 2001–2002, and again in 2006. The neglect of infrastructure development for two and a half decades under Israeli rule was followed by continued public under-investment after the advent of the PNA. The result was a poor level of economic infrastructure that deteriorated further as a consequence of the deep fall in investment in infrastructure during the Second Intifada.

3.1.3 Constraints related to the economic regime

The economic arrangements as formalized in the Paris Protocol, and even more so as implemented on the ground, left control over a large part of the economic policy-making tools in Israeli hands. The quasi-customs-union trade regime subjected Palestinian external trade to Israeli trade policies, customs and duty tariffs, and trade agreements. These policies and arrangements, which have naturally been tailored by Israel to benefit the Israeli economy, are not compatible with Palestinian interests and, in many cases, are clearly in contrast with Palestinian economic interests. The monetary union with Israel, and the use of the Israeli Shekel as the Palestinian legal tender, has restricted the PNA's use of monetary policy tools. The arrangement for VAT and other indirect tax collection by Israel for the PNA, left Israel in control of the lion's share of the PNA's tax revenues, and restricted the PNA's ability to apply fiscal policy measures.

Creating a competitive enabling environment requires the ability to formulate and apply the needed policies. The most important pillars of creating an enabling competitive business environment in Palestine are: 1) Creating a competitive legal and regulatory framework; and 2) Providing the proper infrastructure.

The PNA has exerted a significant amount of effort on creating a legal and regulatory framework (yet to be completed) for a competitive enabling business environment. Unfortunately, despite these efforts, the most important factors for an enabling business environment are political stability and the ability

to implement policies, especially policies related to foreign investments and policies that require border controls. Consequently, creating a competitive enabling environment is not feasible if it is impossible to implement the policies needed to achieve it.

Moreover, creating the required physical and non-physical infrastructure, including transportation, telecommunication, energy, etc., is not possible under the status quo. Improving and developing commercial roads is not possible since most of these roads and other infrastructure projects either pass through or are located in Area C. 60 percent of the West Bank is designated as Area C, an area in which Israel has full civil and military control. Even areas accessible to Palestinians are under the jurisdiction of the Israeli Civil Administration for planning and permit purposes. In 70 percent of Area C, Palestinian building is entirely forbidden; in the remaining 30 percent, construction is theoretically possible but getting building permits is practically impossible. Palestinians can build freely only on 1 percent of Area C – most of which is already built over. Re-operating Gaza Airport, building the port, the construction of an airport in the West Bank and/or the creation of logistic support centers at borders are therefore beyond the power of the Palestinians. It is fully controlled by Israel, and the only constructed Gaza Airport has been destroyed.

3.1.4 Access and movement restrictions

On top of all these weaknesses and challenges came the harsh Israeli restrictions on movement of goods and people that were introduced in the early years of the Intifada. These measures developed into a multi-faceted system that cut through the web of Palestinian economic life, raised the costs of business transactions and marketing, and disrupted the predictability needed for the orderly conduct of business.

The main cause of the rise in the cost of business transactions has been the sharp increase in transportation costs. Palestinian exporters, importers, and suppliers to the local market have faced a jump in truck transport costs as a result of longer travel distances and transport times, as well as more rapid depreciation of truck value due to poor quality and dirt roads. Palestinian exporters and importers have had to use much more expensive Israeli trucks

for shipments leaving or coming into the West Bank and Gaza through Israel. On top of these excessive transportation costs, Palestinian exporters and importers have faced substantial extra costs in Israeli sea and air ports, in comparison to Israeli importers or exporters.

3.1.5 Other physical restrictive arrangements

Furthermore, the PNA is not allowed to develop and take advantage of most of the West Bank's natural resources. As noted above, some 60 percent of the West Bank, defined as Area C, is under full Israeli control; this includes most of the Palestinian Jordan Valley, which is the only sparsely-populated part of Palestine that is large enough to support large scale national development plans. Another outstanding example, among many others, is the stone quarry industry, by far the most important export industry of the West Bank. The largest West Bank stone quarries are in Israeli hands, depriving the PNA of a large part of the export revenues of the West Bank.

The PNA is severely restricted in developing most of the other natural resources of the West Bank as well. Most infrastructure services, such as electricity and water supply, are in Israeli hands. The development of road infrastructure, communications, etc., as well as construction, industrial or agricultural development out of the confines of existing cities and villages, is blocked or restricted, in many cases, by Israel.[36]

3.1.6 Restrictions on the development of the Jordan Valley

The Jordan Valley has the potential to play a vital role in the Palestinian economic recovery and development. It is a unique area that offers opportunities in nearly all major economic sectors. The Jordan Valley has comparative advantages in the fields of agriculture, tourism, transportation and logistics, and potential for industrial and agribusiness development as well. Moreover, the Jordan Valley is the only large region of Palestine that is not densely populated. Therefore, only the Jordan Valley can support the substantial

36 See, for example, the detailed analysis in World Bank, the Economic Effects of Restricted Access to Land in the West Bank, November 21, 2008.

urban development, including new cities, necessary to sustain large-scale absorption of population growth.

At the same time, the Jordan Valley is under absolute Israeli control that isolates it from the rest of the West Bank.

The Japanese Corridor for Peace and Prosperity Initiative is a concrete example of the de-development in Jordan Valley under the Status Quo. This project promotes economic development in the Jordan Valley, with the aim of contributing to the agro-industry sector.

Nearly six years have passed since the declaration of this initiative, and nearly three years since the feasibility study for this project was prepared by the Japanese. Even with the continuous commitment by Japan to support and finance this initiative in general and the Agro Industrial Park in the Jordan Valley in particular, still nothing of this initiative has been implemented on the ground, despite an Israeli commitment to move this project forward.

3.1.7 Political weaknesses and vulnerabilities

The Palestinian arena has always been characterized by basic political instability, which has intensified over the last two decades. On the external front, the unsolved conflict with Israel, rooted in strong feelings of political frustration, is always ready to erupt. In the mid-1980s, the political frustration fused with rising "depth currents" of social discontent, igniting the First Intifada in December 1987. From this point on, the West Bank and Gaza has constantly been on the verge of violent explosion, suffering recurrent waves of violence in varying degrees of intensity, with short recesses of relative calm and stability. The economic deterioration and human degradation, which have deepened in the years of the Second Intifada, have strengthened the destabilizing forces of political and social frustration.

3.1.8 Demographic and labor-market challenges

The Palestinian demographic challenge stems from the extremely high natural growth rate of the Palestinian population. The Total Fertility Rate (TFR = the average number of live births per woman during her fertility period) in

the WB&G was6 births per woman in 1997. Though Palestinian TFR has significantly decreased over the 2000s, to 4.2 births per woman in 2010, it is still among the highest in the Arab world.[37]

Consequently, the Palestinian population is among the youngest in the Arab world: 62 percent is under the age of 24, of which 41 percent is under the age of 14.[38] This young population needs adequate education and healthcare; and as they reach maturity in ever larger numbers, they demand proper housing and appropriate work opportunities. The number of young Palestinians entering the labor force becomes larger and larger each year. From 2001 to 2005, the working age population grew by about 70-75 thousand per annum; this number has grown to almost 100,000 per year in the early 2010s, and will increase to about 120,000 per year in the 2020s.[39]

Another factor that may intensify the pressure on the labor market is labor force participation. The Palestinian labor force participation rate has been traditionally low, reflecting a very low participation rate among women. In 2000, only 41.5 percent of the working age population was employed or actively searching for work. The rate of participation has remained around this rate through the 2000s, except for a temporary decline in the early years of the Intifada, as many ceased searching for work and dropped out of the labor force. Even at this low rate of labor force participation, the Palestinian labor force has grown at a rate of about 5 percent a year since 2003.[40] This low participation rate is expected to increase in coming years, reflecting a large latent demand for work opportunities by the young, frustrated Palestinian work-age population. A quantitative analysis of latent Palestinian labor market trends shows that, under conditions of relative stability and economic recovery, the magnitude of Palestinian "hidden unemployment," in conjunction with

37 PCBS, Demographic and Social Survey of the Palestinian Population (in Arabic), July 2011, p. 16. The TFR of Egypt, for example, was 3 births, in 2010 (Population Reference Bureau. World Population Data Sheet, 2010)

38 PCBS, Demographic and Social Survey, ibid, p. 14-15.

39 Based on the present size of the 0-4, 5-9, 10-14, and 15-19 age groups; see PCBS, ibid, p. 15.

40 World Bank, The Palestinian Economy and the Prospects of its Recovery, March 2006, p. 9; PCBS, Palestinian Labor Force Survey, Annual Report 2010, April 2011, p. 57

the fast-growing numbers of youngsters entering the labor market every year, may generate annual growth of about 8 percent in the labor force.[41]

Hence, the Palestinian economy needs to more than double the number of available jobs over this decade. The number of employed persons must rise from about 750,000 in 2010 to about 1.5 million in 2020, merely to contain Palestinian unemployment around the alarming rate of recent years of 30 percent.[42] The number of new jobs needed in order to bring unemployment in 2020 back to the pre-Intifada rates of 10 to 12 percent, is close to 1 million; namely, about 100,000 new jobs per year, compared to an average of about 30,000 new jobs per year which were created from 2003 to 2010.

3.2 The Limitations and Fragility of Recent Economic Growth under the Status Quo Conditions

3.2.1 The combined impact of Palestinian economic weaknesses and constraints

The complex set of constraints, as detailed above, reflects negatively on key economic and societal aspects. Two examples will suffice for demonstrating the impact of these constraints: the impact on Palestinian exports, and the impact on Palestinian purchasing power.

Palestinian exports:

Under the customs-union trade regime, combined with other Israeli restrictions, Israel has become practically the sole market for Palestinian exports, as

41 Peres Center for Peace and PalTrade, The Untapped Potential (2006), p. 77; analysis based on of PCBS, Palestinian Labor Force Survey, 2010.

42 According to the relaxed definition of unemployment, including "despaired persons" who ceased actively searching for work. The unemployment rate under the stricter ILO definition is around 25 percent.

exports to Israel ranged between 88 to 90 percent of total Palestinian exports (of goods) over the 2000s.

As a very small economy, Palestine can generate sustainable long-term growth only through exports. Therefore, these constraints on Palestinian exports to non-Israeli markets have a very grave effect on economic development prospects. Moreover, considering the significant impediments on Palestinian exports to Israel, Palestinian exports to this market are constrained too.[43]As a result, the rapid economic growth of recent years was reflected in a steep increase in Palestinian imports, while exports showed only modest increase, and the trade deficit surged upwards accordingly (see Chart 1 above, in the Executive Summary).

Purchasing power:

The economic integration with the Israeli market is reflected in price levels similar to Israeli prices for most consumption products, which are either imported from Israel, imported through Israel, or produced locally using Israeli inputs. However, as Palestinian wages are much lower than in Israel, the purchasing power of Palestinian households is much lower than in neighboring Arab countries.

As a result, the real purchasing power of Palestinian households is much lower than the nominal level shown in national accounts and household income statistics. The impact of this linkage on price levels is dramatic. International comparison shows that Palestinian GDP per capita, when adjusted to local purchasing power, is far lower than that of neighboring Arab countries, and is only slightly higher than that of countries as poor as Sudan or Yemen(see Chart 2 above, in the Executive Summary).

3.2.2 The fragility and volatility of Palestinian economic growth

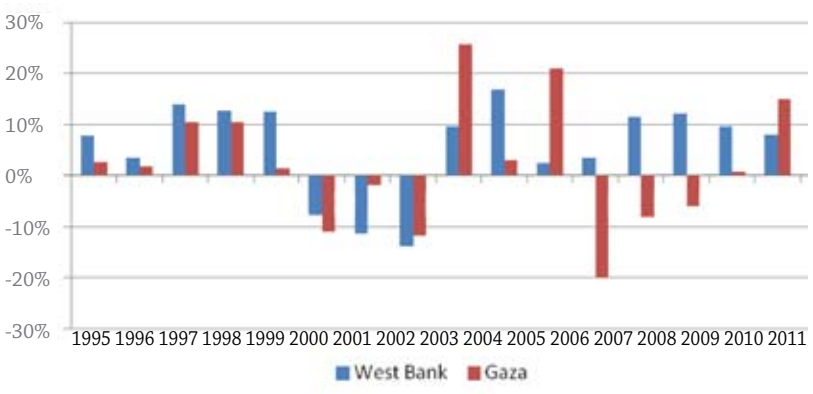
Given the depth and magnitude of these weaknesses and constraints, economic growth in the West Bank and Gaza in the last two decades has been extremely

43 PCBS, Foreign Trade Statistics, 2009, published March 2011, Table 1 p. 39; previous issues covering 1995 – 2008 data.

volatile and erratic. It was most strongly influenced by Israeli access and movement restrictions. Chart 7 below shows the high real growth rates in the relatively relaxed period of 1997 – 1999, and the steep fall in the early years of the Intifada (2000 – 2002). An upward correction came in 2003 – 2005, mainly in Gaza, where Israeli restrictions were relatively easier in those years.

The data for 2006 – 2009 shows the strong impact of the much stricter measures on Gaza since the advent of the Hamas government in 2006, and the takeover of Gaza by Hamas in 2007; and to the high growth in the West Bank under the Fayyad governments.

Chart 7 \\ GDP Real Growth in the West Bank and Gaza: 1995 – 2011 (percent)



Source: PCBS, National Accounts Statistics

A deeper look into the components and related macro-economic factors of the West Bank reveals the fragility and limited nature of its post-Intifada economic growth. Private consumption in the West Bank jumped 80 percent between 2005 and 2009 ($, current prices), while government consumption grew by as much as 136 percent. Another component that registered equally strong growth is investment in buildings, which increased by 120 percent, mainly reflecting an increase in construction for residential uses. According to a PCBS residential survey, the number of residential units in the West Bank

and Gaza increased by 21 percent from 2007 to 2010, and the total number of new residential units built over this period was as large as 150,000. On the other hand, non-building investments, reflecting investment in the economy's production capacity, were, in 2008 and 2009, even lower than in 2005.

The high growth in consumption and in residential construction was reflected in a huge increase in the West Bank's external trade deficit. The gap between West Bank's exports of goods and services and its imports almost doubled between 2005 and 2009, from $1.6 billion in 2005 to $2.8 billion in 2009.[44]

The steep increase in the trade deficit and in consumption and residential construction was enabled by an equally steep increase in external aid.

3.2.3 Negative indicators for the West Bank in 2011

The momentum of West Bank's recovery from the low level of economic activity of the Intifada period has slowed down in 2010 and 2011. As shown in Chart 7 above, the real growth rate of West Bank GDP decelerated from around ten percent in 2007 – 2009, to 8 percent in 2010 and 5 percent in 2011, reflecting slower growth even in sectors such as construction or trade, which led the GDP growth in the post-Intifada period.[45]

Slower economic activity was reflected in decreasing work opportunities and accelerated unemployment in the second half of 2010. According to the PCBS' labor force survey for 2010, the unemployment rate in the West Bank remained unchanged for 2010 as a whole, compared to 2009, after decreasing significantly in 2009. A labor survey published by UNRWA, indicated an increase in unemployment in the second half of 2010, compared to the first

44 PCBS, National Accounts Statistics; the Portland Trust, Palestinian Economic Bulletin, May 2011, p. 2

45 The Portland Trust, Palestinian Economic Bulletin, July 2011, p. 2;PCBS, Preliminary Estimates of Quarterly National Accounts, First Quarter 2011, P. 13; PCBS, National Accounts, GDP by economic activity by quarters

half of 2010 and the second half of 2009, and the PCBS' labor force survey for the first quarter of 2011 reflected continuation of the same trend in 2011.[46]

3.2.4 Decline in international aid in 2010–2011: higher risk of a major crisis?

At the same time, the PNA has been faced with a substantial decrease in the flow of international aid, seriously threatening its financial stability, and exposing the PNA to a risk of major financial and economic crisis.

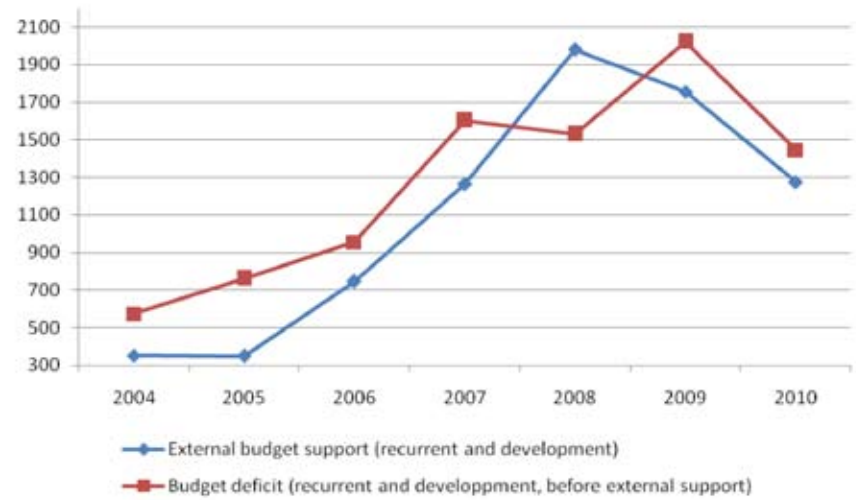
Total external support to the PNA's budget grew dramatically over the 2000s, from $350 million a year in 2004 – 2005, to as high as $2 billion in 2008. Since then, it declined significantly, to $1.75 billion in 2009, below $1.3 billion in 2010, and as low as $750 million in 2011.[47] The increase in external support until 2008 was generally in line with the steep rise of the PNA's budget deficit. Nevertheless, even after that most generous external support, the PNA was left with unfinanced deficits of $200 – 400 million per year, which were financed mostly by borrowing from the local banking system. In 2008, the PNA succeeded in generating a significant surplus, as a result of an exceptionally high external support level combined with containment of the budget deficit (before external support). In 2009, however, the budget deficit rebounded (reflecting mainly the burden of Hamas-ruled Gaza on the PNA's budget, as explained below), and the PNA had to re-approach the local banking system for supplementary financing.[48]

46 PCBS, Labor Force Survey for 2010, published April 2011, p. 125; UNRWA, Labor Market Briefing for the Second Half of 2010: West Bank, June 2011, p. 3; The Portland Trust, Palestinian Economic Bulletin, June 2011, p. 2

47 External support to the PNA's budget includes support for recurrent expenditures and for the development budget. It does not include direct supply of humanitarian aid by international official aid organization or NGOs, through non-budgetary channels, or direct financing of development projects by such organizations. The magnitude of external aid to the WB&G through such non-budgetary channels, on top of the support to the PNA's budget, was estimated at around $1 billion a year at the end of the 2000s.

48 The PNA Ministry of Finance, Review of 2010 budget Performance, February 2011, p. 4; IMF WB&G reports: April 2011, p. 34; September 2008, p. 19; March 2007, p. 10

Chart 8 \\ PNA Budget – External Budget and Development Support, Compared to the Budget Deficit, 2004 - 2010 ($ million, current prices, deficit before support / financing on commitment basis)[49]



IMF WB&G reports: April 2011, September 2008, March 2007; PNA, Ministry of Finance, February 2011

From mid-2010, the flow of external aid has become more irregular, decreasing to $70 million per month in the third quarter of 2010, and then jumping to $165 million per month in the fourth quarter. In 2011, aid flow dived to $60 million per month in the first quarter, and as low as $50 million per month in the second quarter. The cumulative deficit after external aid, for the first half of 2011, was as large as $450 million, on top of the $150 million deficit of 2010. Given the huge debt that the PNA accumulated in previous years, it was not able to borrow such large additional amounts from the local banking system. Hence, the PNA was forced to delay payments to its suppliers, accumulate more and more arrears, and even delay salary payments to its employees.[50] By the end of July 2011, on the eve of the Ramadan, the PNA

49 Not including non-budgetary aid, humanitarian aid by international official organization or NGOs, or direct financing of development projects by such organizations.

50 The PNA Ministry of Finance, Review of 2010 budget Performance, February 2011, p. 4; Monthly Report, June 2011, Table 4.

could pay its 150,000 employees only half of their previous month's salaries. Prime Minister Fayyad described the situation as "one of the worst financial crises the Palestinian Authority has ever faced."[51]

The imminent risk of financial crisis was prevented from materializing, in 2011, as a result of aid inflows in the second half of that year. Nevertheless, as of January 2012, the PNA was expecting a deficit of above $1 billion for 2012, mirroring the dangerous instability of its financial situation.

3.3 Summary of Palestinian Economic Prospects if the Status Quo Continues

Bearing in mind the complex set of weaknesses and barriers to sustainable economic growth that are woven into the Status Quo, the economic prospects for Palestine under these conditions looks rather gloomy.

The fragility and unsustainability of growth under the Status Quo conditions has been repeatedly stressed by various parties and observers. In a recent report, the IMF stressed that the recovery cannot be sustained without a further easing of restrictions on movement and access. The World Bank warned that "growth does not appear sustainable. It reflects recovery from the very low base reached during the second intifada and is still mainly confined to the non-tradable sector and primarily donor-driven…. Ultimately, sustainable economic growth in WB&G can only be underpinned by a vibrant private sector. The latter will not rebound significantly while Israeli restrictions on access to natural resources and markets remain in place; and as long as investors are deterred by the increased cost of business associated with the closure regime".[52]

51 NYT, July 27, 2011.

52 International Monetary Fund, STAFF REPORT FOR THE MEETING OF THE AD HOC LIAISON COMMITTEE, Brussels, April 13, 2011, p. 3; World Bank, ECONOMIC MONITORING REPORT, April 13, 2011, p. 5.

The new Palestinian Development Plan for 2011 – 2013 points to the unsustainability of economic development under the Status Quo conditions, as follows: "Continued impediment of trade and investment would inhibit private sector growth, while public sector investment plans would continue to be stalled; …and economic growth would falter…Budgetary revenues and external aid would be depressed. Rising unemployment and escalating poverty would necessitate increased expenditure on social transfers…."[53]

Furthermore, given the structural instability of the Status Quo, the continuation of the present situation entails a permanent risk of sliding into political crises with devastating economic effects, as was manifested in Gaza in 2007, or economic crises, such as the financial crisis which the PNA has been facing since 2011.

4. Gaza as a Case Study: Where the Economy Can Go in Case of Renewed Conflict

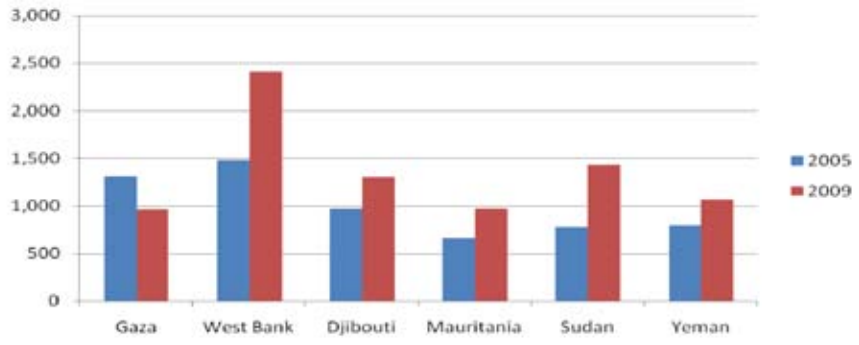
The detailed analysis in Chapter Two above, shows that the Status Quo would eventually lead to economic and political deterioration. Such deterioration entails high risks of intensified conflict, expanded blockade, stricter access and movement restrictions, and in certain circumstances may even result also in a sharp reduction of international aid. In fact, except for the reduction of international aid element, this kind of "worst case scenario" took place in Gaza in 2007-2010. Therefore, analysis of that case study would be most helpful for better understanding the possible outcomes and implications of such developments.

53 PNA, Palestinian Development Plan for 2011 – 2013, April 2011, p. 65.

4.1 The economic impact of political deterioration on Gaza

The extreme harshness of the Israeli blockade on Gaza in the wake of Gaza's takeover by Hamas in June 2007, combined with Gaza's economic weaknesses, has generated a particularly devastating economic effect. Gaza's GDP per capita decreased by almost 40 percent between 2005 and 2009; this put Gaza, by 2009, among the poorest Arab economies, as measured by the GDP per capita in current prices. When adjusted to the local purchasing power, Gaza's GDP per capita in 2009 was 25 percent below Mauritania, the poorest Arab economy (except for Somalia). [54]

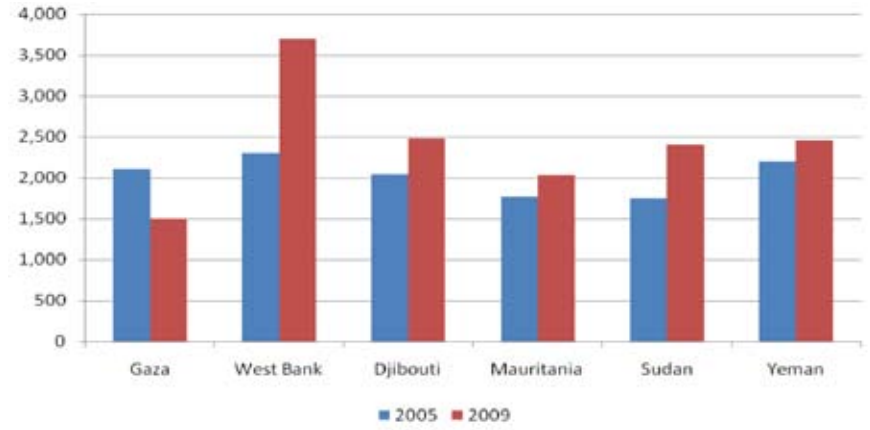
Chart 9 \\ GDP per capita at Current Prices: Gaza and West Bank Compared to Poorest Arab Economies (2005 and 2009; $ at current prices)



Sources: PCBS, National account Statistics; IMF, World Economic Outlook Database

54 PCBS, National account Estimates for 2008 - 2009, March 2011 p. 70-72 and 90-92; IMF, World Economic Outlook Database

Chart 10 \\ GDP per capita Adjusted to Local Purchasing Power: Gaza and West Bank Compared to Poorest Arab Economies (2005 & 2009; $ PPP)[55]



Sources: PCBS, National account Statistics, and CIA World Fact-book estimates for the WB&G; IMF, World Economic Outlook Database [56]

4.2 The special role of international aid in Gaza since 2007

Faced with the prospect that the economic calamity in Gaza would turn into a major humanitarian crisis, the international donor community stepped in, infusing large amounts of humanitarian aid, and in effect took upon themselves the role of supplying most of Gaza's population with a basic social security net through a host of welfare-supply mechanisms. By the end of 2007, 80 percent of Gaza's families relied on humanitarian aid from international donors, including provision of food aid to more than 180,000 families in Gaza, approximately 60 percent of the population.[57]Analysis of the PNA National

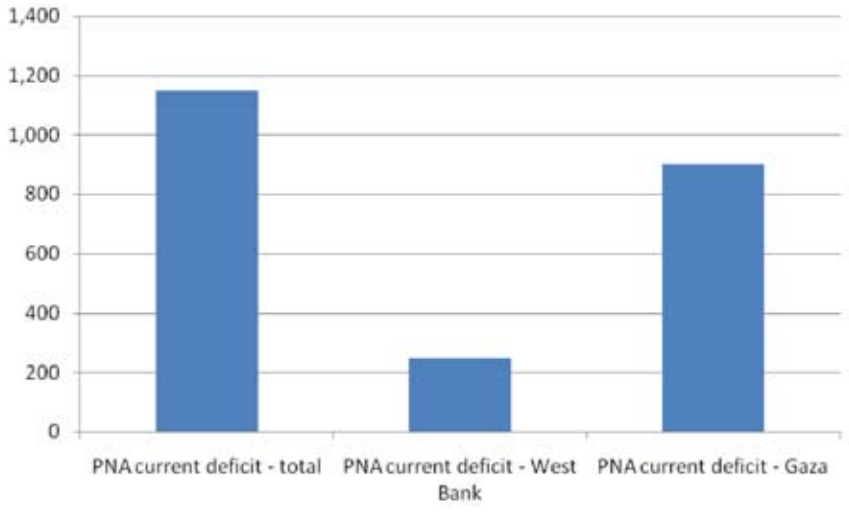
55 PPP = $ value accounting for local purchasing power, as per the Purchasing Power Parity method.

56 GDP per capita estimates for Gaza and the West Bank, separately, were computed by the author, based on the sources.

57 Crisis Group, RULING PALESTINE I: GAZA UNDER HAMAS, Middle East Report N°73 – 19 March 2008, p. 3-4

Accounts Statistics reveals that the total value of official donors' aid and other direct inflows of external support to Gaza was around $1 billion per year in 2007 – 2009.[58] In addition, the PNA has been paying a cumulative cost of close to $1 billion per year from its budget for the salaries of around 70,000 PA employees in Gaza who were hired before December 2005, as well as other running costs of basic government services in Gaza, such as the health and education systems.[59] Since the PNA has not been able to collect taxes in Gaza, and as its revenue from collecting taxes on Gaza's imports have covered only a fraction of recurrent expenses, most of these expenses have also been financed by international aid, though through another channel, the donors' "budget support" to the PNA. In fact, most of the PNA's recurrent budget deficit, financed by donors' budget support, has been needed to finance public expenditure of the Hamas-controlled government in Gaza.

Chart 11 \\ The PNA Current Budget Deficit – Split by Region ($ millions, 2010, rough estimates)



Author's estimates

58 Computed by comparison of the Gaza GDP with the Gross Disposable Income (GDI). The GDI combines the GDP with income inflows from abroad.

59 Close to 50% of the PNA's salary bill of USD 1.6 billion in 2010, plus a small share of non-wage recurrent expenditure of USD 1.2 billion in 2010 (based on PNA, Ministry of Finance Repot, February 2011, p. 4, and Crisis Group Report, p. 16).

All in all, this short analysis shows that most of the international aid to Palestine is directed towards Gaza; and its steep increase, in recent years, reflects the upsurge in the needs of Hamas-ruled Gaza for humanitarian aid, on the one hand, and financing of the recurrent budget deficits, on the other hand.

If not for the international community's outstanding aid effort, directly to the population of Gaza and indirectly through the PNA's budget support channel, the economic meltdown in Gaza would have been much more disastrous, and Gaza would have faced a major humanitarian crisis.

4.3 The Risks Associated with the Steep Decline in International Aid in 2010 – 2011

The trend of declining international aid that started in 2010 was moving further downward in 2011, as shown in Chart 3 in the Executive Summary. External aid to the PNA, for recurrent budget support and for development combined, fell by more than 60 percent from its peak in 2008 to 2011).

Considering the critical role of international aid in maintaining the social security net and financing vital government services, if this trend continues, it puts the PNA at a permanent risk of a major fiscal and financial crisis.

4.4 Economic and Social Risks in Case of Political Deterioration

International economic support to the PNA is politically-motivated. The international community has regarded its economic aid as one of the pillars of the Israeli–Palestinian peace process. The strong political motivation explains the readiness of the international community to maintain and increase this exceptionally high level of aid for so long.

Considering the internal economic pressures on the main donors, it is highly probable that the steep decrease in the volume of aid in 2010 – 2011 will not be reversed unless the international community feels that the peace process

revives and that there are realistic prospects of moving towards a political solution.

Since the old US-controlled track of the peace process is at a dead end, the "September Process" is probably the best opportunity for revival of a political process that would enable the continuation of large-scale international aid.

In view of the inherent unsustainability and instability of the Status Quo, and the heavy economic pressures that have already accumulated, the probability of the breakdown of the Status Quo is now much higher, and increasing.

Against this background, the political impasse and a potential political confrontation around the PNA's UN bid, entail a high risk of rapid deterioration towards a renewed vicious circle of violence, which would be dangerously inflamed by steep economic decline and social resentment.

5. Summary: Making the Right Choice, Going Back to Negotiations with Clear Vision of the Permanent Status

Against the background of the gloomy prospects of the Status Quo and the risks it entails, the need to make the right choice and seize the opportunity of a new "September Process" for departing from the Status Quo is clear. The parties must return to meaningful negotiations with a clear understanding of the permanent status, as per the principles suggested by the Aix Group regarding a renewed economic regime, as detailed in the Introduction and in Chapter One above.

In addition to avoiding the immediate risk of political and economic deterioration, there is an urgent need to replace the Status Quo economic regime in order to allow a larger part of aid inflows to shift from financing recurrent expenses and social security needs, to development projects. This can be achieved only as part of renewed political process.

Gaza is a key to this shift. Under the present political situation and the Status Quo economic regime, most of the external aid, even if maintained at the high level of recent years, will continue to be diverted to the pressing recurrent and social needs of Gaza.

Furthermore, looking from a wider perspective at the fundamental changes the region is undergoing, a new strategic threat must be added to the equation when analyzing the risks entailed in the continuance of the Status Quo; namely, the reaction of Arab societies.

As Arab societies have broken their decades' long silence, their reactions and their new-found influence on the policies and actions of their respective governments must be taken into consideration. While the Arab Spring is fundamentally domestic in nature and came as a response to youth unemployment, corruption, dictatorship, and human rights violations, it would be a grave mistake to ignore the possible dynamics that may unfold in case of renewed Israeli-Palestinian violent conflict.

These new socio-political developments in the Arab world pose an imminent and clear threat of bringing other Arab countries into the vicious circle of Israeli – Palestinian violence. The strong reaction in Egypt to the relatively low-intensity violent clashes between Israel and Gaza in August 2011 indicates how powerful and influential this new factor can be.

The Palestinian Refugees and an End to the Conflict:

Bilateral and Regional Dimensions

Saeb Bamya, Arie Arnon, Sharon Hadad

Contents

1. Introduction: A Bilateral Framework for a Solution - The Aix Group Approach

The Israeli-Palestinian conflict concerns two contradictory sets of claims that refer to both geographical territory and human rights. On the one hand, many Israelis claim that they have exclusive rights for sovereignty over the land between the Jordan River and the Mediterranean Sea; they also deny that Israel has deprived the Palestinian, in particular the refugees, of their basic rights. On the other hand, many Palestinians claim that they have exclusive rights to that same land, and that since 1948 and up to the present, Israel has denied the Palestinians, and in particular the refugees, of their basic rights. These contradictory claims, though they do not cover all the differences between the two sides, are at the core of the Palestinian-Israeli conflict, and define the narratives of the two sides. The strength and impact of these narratives in the two sides' internal public opinions are changing in direct relation to the distance from meaningful negotiations that may lead to the resolution of the above-mentioned claims, and thus to a peace agreement. In many ways, the strength of the narratives today is a clear sign of the difficulties we face, and indicate how far we are at present from a political compromise.

Over the last ten years, the Aix Group has outlined what its members believe to be a reasonable, practical, and forward-looking compromise. This compromise avoids the two conflicting narratives, and attempts to present a political alternative to the continued confrontation that even the most adamant on either side can live with. The compromise is defined by two dimensions: **territory** – known as Palestine to the Palestinians and Eretz Israel to the Israelis; and the **rights of the Palestinian refugees**. In essence, the compromise may be acceptable to the majority of Israelis and Palestinians, who are ready to acknowledge the realities of the conflict as they have developed over so many years. On both dimensions, the compromise that we (and many others) have discussed in detail answers the legitimate claims and minimum necessary core demands of the two peoples.

The **territorial compromise** we have discussed assumes two sovereignties with symmetrical features (control over their borders, having their capital as Jerusalem, similar authority over internal and external policy, etc.); i.e. "two [real and full] states." The territory between the Jordan River and the Mediterranean Sea will be divided on the basis of the 1967 borders, with agreed and minimal "land swaps." Jerusalem will be the capital of the two states. If there are asymmetries, on military arrangements for example, these should be balanced and agreed.

The **refugees** question will be solved in a way that will address both sides' legitimate claims and concerns, and provide an acceptable and desired common ground. The refugees issue has not received proper attention in many public discussions, and will be the focus of our discussion here. We believe that there will be no end to the conflict unless both the sovereignty and refugee questions are answered satisfactorily. Moreover, since the failure of gradualism is now beyond doubt, it is time to give proper answers to both issues.

In 2007 and 2010, the Aix Group outlined (and has continued to work on it since) a possible compromise on the refugees issue along the following lines:

- The refugees will make "choices" concerning their preferred future residential location: they will choose between the five possibilities mentioned in President Clinton's December 2000 parameters (see below). We propose that during the process of "choice," the refugees will rank their priorities.
- The representatives of the two sides will negotiate a comprehensive framework agreement addressing all the aspects related to the refugees (as well as the other permanent status issues). These will include a matrix scheme for relocation, where the agreed maximum and\or minimum number of people at each location will be stated after the completion of the implementation process.
- The IAPR (International Agency for the Palestinian Refugees) will be responsible for implementing the comprehensive plan, and will also address any possible inconsistencies between the outcome of the

above "choices" and the framework agreement, thus ensuring that the agreed matrix scheme numbers as well as the refugees' stated priorities are consistent.

- In addition, the IAPR – working with the authorities of the two sides, the regional countries involved in the refugees issue, other regional countries, and the international community – will be responsible for implementing all the aspects involved in resolving the refugee issue. The following four tracks in particular will be under its authority:
  - Relocation: including absorption, employment opportunities, housing, legal aspects, etc.
  - Rehabilitation: including infrastructure renewal, employment, legal aspects, etc.
  - Resolving 1948 Lost Properties claims
  - Addressing Refugeehood claims
  - IAPR efforts will be coordinated with the relevant regional countries that are linked to any solution for the 1948 refugees. In particular, the outcomes of implementing the above dual process ("choices" and "bilateral agreement") in Jordan, Syria, Lebanon, and other Arab states will address those aspects of the 1948 Palestinian refugee issue that were not addressed by the dual, bilateral process. These will include both backward- and forward-looking elements concerning past costs and claims, and possible negative impacts of the implemented solution on labor, housing, and infrastructure in the various guest countries.

The role of the IAPR is of the upmost importance. The IAPR will be responsible for implementing an agreed-upon mechanism to ensure that the final decisions satisfy the wishes of the refugees as much as possible and are in line with the overall agreements to be signed between the representatives of the two sides, as well as with the relevant host and other countries.

The IAPR will also supervise the various arrangements, mechanisms and programs that will address the following four critical topics:

- Resettlement/Repatriation (or what is described sometimes as Relocation Programs)

- Rehabilitation Programs
- Claims Concerning Properties
- Compensation for Refugeehood

In its 2007 paper, the Aix Refugees Working Team estimated separately the costs of relocation and the costs of rehabilitation (i.e., expenses covering those programs intended for refugees who choose not to change residency).

- In order to implement comprehensive resettlement programs, the IAPR will need funds in the order of US$8-19 billion over a period of ten years, depending on the number of refugees who choose to relocate.
- In order to implement rehabilitation programs, the IAPR will need funds in the order of US$10-14 billion, depending on the number of refugees who decide not to relocate and on whether those who so decide currently reside in or outside of refugee camps.

The question of settling claims concerning lost properties, and the financial dimension of such a question, is very complicated. Under international law, and similar to reparation programs pursued in response to other situations, reparations can take many forms. The Aix Group has discussed the options of restitution and compensation. These, among others, include appropriate forms of reparations for Palestinian refugees. The Group introduced a concept of "full and fair compensation" to be determined objectively by a board of experts associated with the IAPR that will administer the lost properties claims process. Restitution will be considered only in those cases where "full and fair compensation" has not been offered, and where the properties exist in a form that makes restitution practical and equitable.

- The funds needed for "full and fair" compensation for the expected property claims are not clear. The wide range of estimates reflects conceptual gaps as well as gaps in data.

We recommend the establishment of a fourth fund that will finance compensation for refugeehood not related to property claims or to the above-mentioned programs.

- All registered refugees will receive uniform sums. Each refugee will receive a sum when he\she registers with the IAPR at the start of the process, and an additional sum when the decisions concerning the individuals are completed. This fund will require approximately US$22 billion.
- The main responsibility for compensation of refugee property taken over in 1948 and 1967 will lie with the State of Israel. If the State of Israel fails to produce adequate compensation, the restitution rule will prevail. Similarly the future state of Palestine will be responsible for compensation/restitution of Jews who lost their property in the West Bank.

A long-term resolution of the Palestinian refugee issue should be based on all relevant UN resolutions, including GA Resolution 194, while recognizing that a literal application of this resolution is no longer possible given the substantial changes on the ground. As in the Clinton parameters, the parties would agree that the measures recommended in the paper implement Resolution 194. The Aix Group considers that the right of the refugees to return to their homeland, even in a modified and limited sense, together with the other measures discussed in this paper, should be an essential component of closure in this issue**.**

The magnitude of the financial dimensions of an agreed-upon resolution for the refugees is very significant; we estimate it as between US$55 billion and $US85 billion over the period of implementation. The financial estimates are explained in the 2007 paper; one has to remember that resettling/relocating/ rehabilitating some 4.5 million people and settling 60-year-old claims on many lost properties is an enormous task.

The Israeli-Palestinian permanent status agreement and the API (Arab Peace Initiative) depend critically on reaching an agreed-upon solution regarding the refugees. All those involved in the old and bitter conflict know that such a solution is not easy to achieve. The principles guiding Palestinians and Israelis make this issue extremely contentious. Whereas for most Israelis the idea behind the creation of Israel is that of having a Jewish state in their historic homeland, for most Palestinians the rights of refugees to return

to their families' places of origin is no less sacred. Hence, an agreed-upon solution or, simply put, a compromise, between these two contradictory claims is both difficult to achieve and an absolute imperative for peace. On both sides, those who argue that there is no political formula that can complete the path to a historic compromise between Israelis and Palestinians tend to put the onus on the refugee issue. Thus, it is not surprising that those known as "rejectionists" – denying the possibility of peace and working against the "two states" compromise – use, on both sides, the refugee issue to prove their position.

2. The Palestinian Refugees in the Region

In this section, we will present a brief summary on the state of the Palestinian refugees in the region, highlighting some of the key socio-economic conditions that are characteristic of Palestinian refugeehood. The data presented is derived from surveys and studies conducted by the United Nations Relief and Works Agency (UNRWA), the Palestinian Central Bureau of Statistics (PCBS), and the BADIL Survey of Palestinian Refugees and Internally Displaced Persons.

2.1 The Palestinian Refugees: Definition

The term "Palestinian refugee" is primarily used to denote those Palestinians externally displaced in the context of past regional armed conflicts. “1948 Palestinian refugees” constitute those externally displaced beyond the borders of the State of Israel following the 1948 war. “1967 Palestinian refugees” constitute those externally displaced beyond the borders of the now occupied Palestinian territories (OPT) following the 1967 war. There is also a significant number of Palestinians (according to BADIL 464,000[1]) who have been internally displaced within either the State of Israel or the OPT.

1 BADIL, Survey of Palestinian Refugees and Internally Displaced Persons, 2008-2009

Producing exact and authoritative figures of the Palestinian refugee is complex. The lack of both a comprehensive registration system and a uniform description of a Palestinian refugee mean that estimates vary. According to BADIL, the number of Palestinian refugees is estimated at 6.6 million[2]. Almost 83% of the refugees reside in historic Palestine and bordering countries, some 10% reside in other Arab countries, while the remaining 7% reside in non-Arab countries around the world, primarily Europe and the Americas.[3]

As seen in Table 1, UNRWA figures provide a detailed picture of the location of Palestinian refugees within the region. However, these figures are based on UNRWA’s own definition of a Palestine refugee, which excludes, for instance, Palestinians displaced for the first time in 1967, non-1948 and 1967 refugees unable to return to the OPT, and internally displaced Palestinians in Israel and the OPT. UNRWA’s figures further underestimate the number of Palestinian refugees, as UNRWA registration is voluntary.

Table 1 \\ UNRWA-registered Palestinian Refugees (November 2011[4])

UNRWA Fields of Operations	Registered Refugees	By Location	Official Camps	Registered Refugees in Camps	
				Individuals	In Country
Jordan	1,999,466	40%	10	350,899	18%
Syria	495,970	10%	9	149,822	30%
Lebanon	455,373	9%	12	227,718	50%
West Bank	848,494	17%	19	206,123	24%
Gaza	1,167,361	24%	8	518,147	44%
Total	4,966,664	100%	58	1,452,709	29%

2 BADIL, Survey of Palestinian Refugees and Internally Displaced Persons, 2008-2009

3 BADIL, Survey of Palestinian Refugees and Internally Displaced Persons, 2006-2007

4 UNRWA Statistics 2010

Today the largest number of Palestinian refugees resides in Jordan (40%), yet the percentage of refugees living in camps in Jordan is lower than in other areas; this is a sign of the relatively favorable status afforded to most Palestinian refugees in Jordan vis-à-vis citizenship, as well as access to public sector jobs. By contrast, we observe that Lebanon has the highest percentage of camp refugees, a reflection of the multiple restrictions placed on Palestinian refugees there.

As shown in Table 1, the ratio between camp and non-camp refugees varies considerably. When discussing the situation of Palestinian refugees, we need to distinguish between camp and non-camp refugees, as their respective living standards differ significantly on a wide range of socio-economic indicators. Notably, the refugee camps are characterized by high living densities, creating very crowded and environmentally poor living conditions. However, in terms of some indicators, the camp versus non-camp divide is mixed. In some instances, camp refugees may have better access to certain utilities than those in other areas, such as sanitation and drinking water. This is primarily due to infrastructure projects carried out with the support of UNRWA and others inside the camps.

The other key variable in analyzing the living standards of Palestinian refugees is their country of residence. In some cases, certain refugee socio-economic indicators, such as educational or income levels, are more dependent on whether they reside in the West Bank or Lebanon rather than their status as camp or non-camp refugees.

2.2 Overview of Refugees' Socio-Economic Conditions

Below we present an overview of Palestinian refugee demographic and socio-economic data that reflects the refugees' situation over six decades of refugeehood and displacement. However, such data still remains unavailable for those refugee populations living outside UNRWA's operational areas, refugees who fall outside UNRWA's eligibility criteria, and those refugees who remain internally displaced within Israel and the OPT. Therefore, these

figures offer an incomplete picture of the refugee situation.[5] Nevertheless, by reviewing these demographic and socio-economic indicators, we aim to underscore the levels of vulnerability faced today by Palestinian refugees.

2.2.1 Demographic indicators

Demographic trends within the Palestinian refugee population generally follow those of the local non-refugee population in their respective host countries; the exception being the Lebanese refugee population.

- **Youth Population:** Similar to the rest of the Arab world, the Palestinian refugee population is characterized by a large proportion of under-15-year-olds. In 2010, the average number of Palestinian refugees aged 0-14 was 27%. The highest proportion was found in Gaza (34%), and the lowest in Lebanon (19%). In the West Bank, Jordan, and Syria, the proportion of under-15s was around 25%. This demographic bulge places considerable strain on the host country's education and health services, and will eventually put pressure on their respective labor markets.
- **Fertility Rate:** Improved female access to family planning, enrollment in higher education, and participation in the labor force has led to a steady reduction in the total fertility rate (TFR), which currently stands at 3.5% in Jordan, 2.5% in Syria, 3.2% in Lebanon, 3.9% in the West Bank, and 4.3% in Gaza. Differences between refugee and non-refugee populations are negligible. However, in Lebanon the TFR rate stands at just 1.8%; in contrast, the TFR for the refugee population is 3.2% – a reflection of limited access to education and employment afforded to Lebanese women.
- **Growth Rate:** The annual average growth rate has been on a slow decline. In 2010, the annual growth rate of Palestinian refugees ranged

5 BADIL (2009) calculate that data presented by UNRWA accounts for only 66% of all displaced Palestinians.

from 1.6% in Syria to 2.6% in Gaza. The largest difference between refugee and non-refugee population is in Lebanon, where the annual growth rate is considerably higher among the refugee population (2.1%) in comparison to the population as a whole (0.7%).

2.2.2 Labor force indicators

Refugees' access to employment is a key indicator of the success by which refugees are able to sustain an adequate livelihood. Whereas high labor force participation and a low unemployment rate promote and are an indicator of a good quality of life and inclusion into society, a low labor force participation rate and high unemployment are indicative of a low quality of life and social exclusion. Addressing youth unemployment is particularly important.

- Labor Force Participation: Labor force participation remains low among Palestinian refugees, ranging from 49.3%[6] in Syria to 37.5%[7] in Gaza. Barriers to employment due to their status as refugees means that labor force participation is consistently lower among the refugee population than the non-refugee population.
- Female Employment: Labor force participation among refugee women is comparatively low, ranging from 12.9% in Jordan to 18.0% in Syria.[8] This is considerably lower than the 26% female participation rate reported for the Middle East and North African (MENA) region as a whole.[9] Traditional attitudes towards the woman's role in taking care of the house and family duties are a central reason behind their economic inactivity.

6 Date from 2000. See "Statistical Abstract of Palestine 9", PCBS, 2008

7 "Labor Force Survey Database 2008", PCBS, 2009

8 Data from 2000. See "Statistical Abstract of Palestine 9", PCBS, 2008

9 World Development Indicators (WDI) 1999. Washington D.C.: The World Bank

2.2.3 Income and poverty

Low labor force participation, along with limited access to high-income professions, has a negative impact on per capita income and poverty levels among Palestinian refugees:

- **Per Capita Income:** Average monthly incomes range from US$450 to US$600 among Palestinian refugees in Lebanon, Syria, Jordan, and the OPT.[10] Between 1999 and 2007, income levels fell by 40% in the OPT, in part due to the fiscal crisis experienced by the Palestinian Authority during this period. Regionally, Jordan has the highest level of refugees living within the middle-income brackets (45%), followed by Lebanon (42%), and the West Bank and Gaza Strip (36%). Lebanon has the highest percentage of refugees living in the low-income bracket (36%), followed by the West Bank and the Gaza Strip (32%), and Jordan (17%)[11]
- **Poverty Levels:** Refugees living in Lebanon suffer from the highest levels of poverty than those hosted by Jordan, Syria, and the West Bank and Gaza. The proportion of Palestinian refugees living in poverty has been found to be twice as high as the Lebanese population.[12] The proportion of refugees living in extreme poverty is four times higher. Without the presence of UNRWA and their social assistance programs, estimates show that overall poverty among refugees would increase by 14%.

2.2.4 Housing and land ownership

A chronic and increasingly growing problem for Palestinian refugees living in the camps is the issue of adequate housing and infrastructure. Inadequate housing stems from a variety of reasons, such as the lack of a regulatory framework managing the ownership, buying, and selling of property; the lack of central planning authorities to coordinate new developments; and in

10 BADIL, Survey of Palestinian Refugees and Internally Displaced Persons, 2008-2009

11 Aix Group, "Economic Dimension of a Two-State Agreement Between Israel and Palestine," 2010

12 http://unispal.un.org/UNISPAL.NSF/0/9B0F79DDA2B865B085257829005AD56C

some areas (such as in Lebanon), the outright prohibition on construction in the camp.

- **Overcrowding:** Defined as three or more persons per room, the percentage of overcrowded households in 2007 was most evident in Jordan (34%). The situation is less severe in Lebanon (28%), Syria (22.5%), the West Bank (11.4%) and the Gaza Strip (11%).[13]
- **House and Land Ownership:** 63% of refugees in Lebanon own a house in the refugee camps, while those owning land in Lebanon did not exceed 1%. In Jordan, 48% own a house outside the camps, and 11% own land in the country. In the West Bank and Gaza Strip, 47% own a house inside the camps and 48% own a house outside the camps, while 17% own land.[14]

2.2.5 Education

Education is highly valued among Palestinian refugees, as it is considered as a window of opportunity to access the labor market and avoid poverty, and thus open the way for a better life and greater economic wellbeing. Access to primary and secondary education for the refugees is predominantly provided for by UNRWA, while others receive their schooling through the host country's education system. However, in some host countries, access to secondary and higher education in restricted. Financial limitation is an additional factor restricting Palestinian refugees' access to and continuation of higher education.

- **Illiteracy:** Levels of illiteracy among camp refugees aged 15+ continue to decline, currently standing at 25.5% in Lebanon, 17.6% in Jordan, 16.5% in Syria, and 5.7% in the West Bank and Gaza Strip.[15] Illiteracy

13 BADIL, Survey of Palestinian Refugees and Internally Displaced Persons, 2008-2009

14 Aix Group, "Economic Dimension of a Two-State Agreement Between Israel and Palestine," 2010

15 BADIL, Survey of Palestinian Refugees and Internally Displaced Persons, 2008-2009

levels in Lebanon and Jordan among refugees remain significantly higher in comparison to their respective non-refugee populations.[16]

2.2.6 Health

Analyzing the health indicators of Palestinian refugees gives a picture of a population that, while it has seen significant improvements, remains vulnerable. Child and maternal health indicators have shown particular improvement over time. This is in large part due to UNRWA's preventative health care programs that, for instance, provide prenatal care to three out of four pregnant women.[17] Indeed, the availability and quality of prenatal care is generally considered higher among refugees than non-refugees; the only exception being in Lebanon.

- **Infant Mortality Rate (IMR):** According to 2006 figures from UNRWA, IMR stood at 19.0 (per 1000 births) in Lebanon, 19.5 in the West Bank, 20.2 in the Gaza Strip, 22.6 in Jordan and 28.2 in Syria.
- **Psychological Distress:** 40%-60% of adult refugees across all countries are reported to suffer from a number of psychological distress symptoms.[18]

16 According the CIA World Fact Book (2011), illiteracy levels in Lebanon (2003) were 12.6%, and in Jordan (2003), 10.1%.

17 Aix Group, "Economic Dimension of a Two-State Agreement Between Israel and Palestine"

18 Rex Brynan and Roula El-Rifai, "Palestinian Refugees: Challenges of Repatriation and Development" (2007)

3. Refugees in the Region: The Case of Jordan

3.1 The Jordanian Economy

Jordan has a population of about 5.9 million, and a per capita gross national income estimated at about US$4,200 in 2009. Its social indicators are more favorable than other countries in the region: it has a much lower rate of infant mortality (27 versus 48 per 1000 live births for the region) and a smaller percentage of its population is considered undernourished (6% compared to 13%). Poverty is also estimated to be less severe than in other MENA countries.

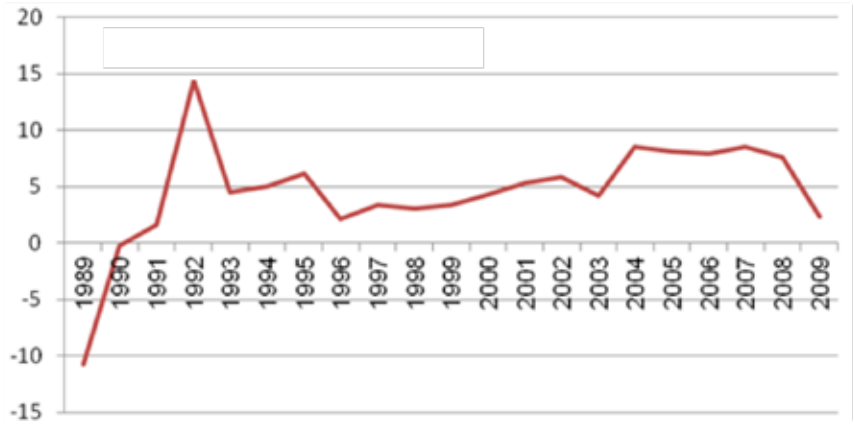
Jordan is a small, open-service economy with a very limited natural resource base. Though it is surrounded by the world's largest reserves of crude oil, it has almost none. Imports of crude oil are a major burden on the economy, as well as on its limited foreign exchange reserves. Jordan also suffers from a chronic water supply problem, and is vulnerable to droughts, which makes its land too arid for agriculture. The country has substantial deposits of phosphates and potash, which makes Jordan one of the largest producers and exporters of these and other chemical fertilizers at the global level. The Jordanian economy is highly dependent on other Arab economies, especially on the Gulf States and Iraq. The economy can be characterized by three important features: remittances from Jordanians working in other countries, which are important sources of national income (equivalent to 15-20% of GDP); the Gulf region is the primary destination for Jordanian exports; and Jordan obtains substantial aid from oil-rich countries in the region. This makes the country's foreign exchange pool exceptionally susceptible to external shocks, especially foreign currency flows from the tourism sector, remittance inflows, and official transfers and aid from the neighboring oil-rich countries.

A regional economic boom contributed to rapid growth in Jordan in the 1970s. Conversely, falling oil prices and recessions in the region's oil-exporting countries adversely affected the country in the second half of the 1980s, as

inflows of both official transfers and remittances from Jordanians working abroad fell, causing substantial negative consequences for the government's budgetary revenues. These negative incidences placed many problems on the Jordanian economy, including high unemployment rates, rising inflation, escalating external debt, and declining remittances. In 1988-89, in the wake of a severe economic crisis, Jordan embarked upon an austerity and reformation program supported by the Internatioanl Monetary Fund (IMF). Pressures on the Jordanian dinar mounted to the extent that the country was forced to devalue its currency by 50% in 1989. Other measures were taken in the context of an IMF program of economic reform, including the removal of government subsidies. Massive riots in April 1989 forced the government to reserve subsidies for the most basic products. By 1990, it was evident that economic performance had begun to improve the situation in Jordan. Unfortunately, the recovery was halted by the First Gulf War in 1991. Pursuant to the Gulf Crisis, some 300,000 Jordanians and Palestinians involuntarily returned back to Jordan, which boosted the resident population by 10%. This problem was compounded by the effects of the war on the region, as well as the cut-off of the international transfers from neighboring countries.

In the year following the 1991 Gulf Crisis, economic growth rebounded strongly, on account of an investment boom funded by the savings that the "returnees" brought back to Jordan (Figure 1). However, the spike was short-lived, and growth has fluctuated in the 5-7% range since the mid-1990s.

Figure 1 \\ Growth rate of real GDP

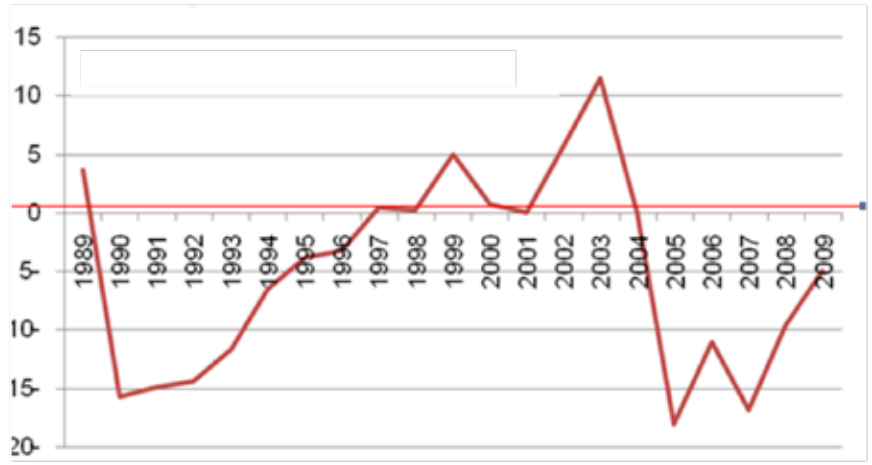


Source: IMF online statistics

Compared to the early-1990s, there has been a marked turnaround in the current account balance (Figure 2), from a negative peak of 15% of GDP to a surplus of 10% of GDP in 2003. The development in the current account balance explains the rise of gross international reserves from under US$1 billion to nearly US$5 billion, as well as the substantial reduction in the burden of external debt – from nearly 190% of GDP at the end of 1990 to less than 80% at the end of 2003. The increase in the world's commodity prices in 2004-2008 put pressure on Jordan's trade balance, which in 2008 posted a huge deficit of JD5,117.1 million (US$7.22 billion), equal to 36% of GDP. This deficit more than offsets the surplus in the balance of services,

which gave a net surplus of JD215.1 million (US$303 million); income account, with a net surplus of JD675.1 million (US$963 million); and the transfer account, with a net surplus of JD2,506.3 million (US$3.576 billion).

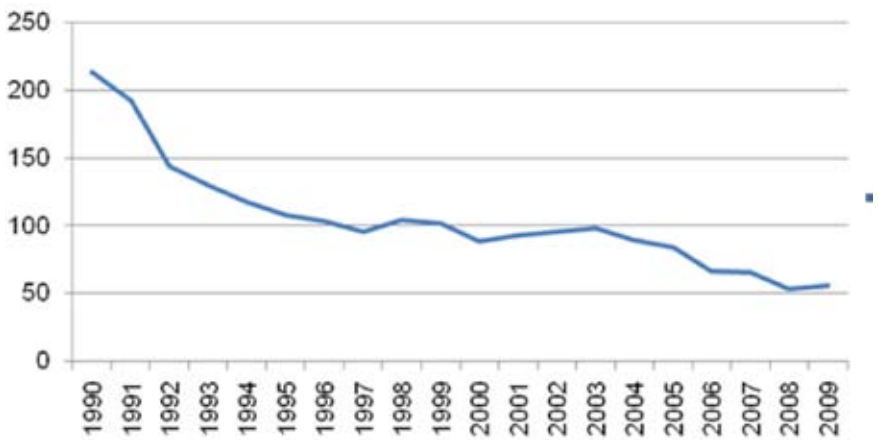
Figure 2 \\ Current account balance, % GDP



Source: IMF online statistics

The external debt reduction may also be explained by the impact of debt relief from official and commercial sources (Paris Club and London Club, respectively). Moreover, in recent years, privatization receipts have been used to reduce the stock of external debt. One of the remarkable achievements of the Jordanian economy in the past twenty years is its success in fiscal consolidation, which contributes to a general government net debt reduction. From the sky-rocketing debt figures of 213% of GDP in 1990, which presented a real threat to fiscal and economic stability, to slightly above 50% of GDP in 2009 (Figure 3), this debt reduction is the consequence of the economic structural change measures Jordan implemented with the support of the IMF. These measures include substantial reducing of government expenditures (from 45% of GDP in 1990 to 29.5% of GDP in 2010); increasing revenues collection due to eliminated exemptions; simplifying the tax system; downsizing the size of the public sector in terms of its share in the GDP; and an aggressive employment privatization program implemented over the past two decades.

Figure 3 \\ General Government net debt, % GDP



Source: IMF online statistics

3.1.1 The Current Situation

Similar to many emerging market countries, the global economic crisis adversely affected economic activity in Jordan. Real GDP growth fell from almost 7.33% in 2008 to 2.33% in 2009. Lower commodity prices worldwide and a weakness in domestic demand lowered inflation rates through 2009 to close to zero. Lower commodity prices also helped improve Jordan's external position. In 2009, the current account deficit narrowed from 9.5% to 5% of GDP, due to a strong flow of tourism and lower oil price imports. Foreign direct investment (FDI) and other inflows helped finance the current account deficit, and allowed official foreign reserves to reach a record high of US$11 billion.

On the other hand, Jordan's internal position deteriorated due to a significant fall in external grants, which induced a widening of the overall deficit by more than three percentage points of GDP, reaching 8.5% of GDP in 2009. As a result, the debt burden rose to about 56% of GDP at the end of 2009. The government responded to the growth downturn with fiscal austerity measures. Lower projected grant receipts and the decline in tax revenues compel fiscal consolidation to come mainly from the spending side, including

containment of the public sector wage bill, as well as reductions in the operating costs of public institutions and independent agencies.

The Central Bank of Jordan (CBJ) has successfully preserved financial stability by undertaking a variety of measures to support the stability of the Jordanian banking system and the private sector flow of credit. Starting in 2008, the authorities responded to the world financial crisis by issuing a full guarantee of bank deposits, which has been extended until the end of 2010; ceasing liquidity-withdrawal operations; gradually reducing reserve requirements; and increasing banks supervision and regulation through the introduction of Basle II (Pillars I and III) regulations.

These actions helped to protect the Jordanian banking system from the global financial crisis. The banking sector's macro prudential indicators remain strong – banks remain profitable and well capitalized, deposits continue to be the major funding base, liquidity ratios and provisioning remain high, while non-performing loans ratios increased modestly to 6.66% of outstanding loans at the end of 2009.

Table 3 \\ Jordan, Selected Economic Indicators

	2007	2008	2009	2010
Real sector	**(Annual percentage changes)**			
Real GDP at market prices	8.9	7.2	2.3	3.4
Consumer price index (average)	5.4	14.9	-0.7	5.7
Unemployment rate (%)	13.1	12.7	13.0	...
Gross domestic investment (in % of GDP)	30.6	24.9	23.0	21.4
Gross national savings (in % of GDP)	13.0	15.3	18.0	14.4
Public finance		**(In % of GDP)**		
Central government revenue and grants, *of which:*	32.5	29.1	25.1	23.3
Grants	2.8	4.5	1.9	1.6
Central government expenditure and net lending [1]	38.3	34.5	33.6	29.5
Central government overall fiscal balance including grants	-5.8	-5.4	-8.5	-6.2
Government and government-guaranteed net debt	68.0	52.9	55.8	57.3
Balance of payments		**(In % of GDP)**		
Current account balance (after grants), *of which:*	-17.6	-9.6	-5.0	-7.0
Exports, f.o.b. (US$ billions)	5.7	7.9	6.4	6.6
Imports, f.o.b. (US$ billions)	12.2	15.1	12.5	13.5
Gross usable international reserves (US$ millions) [2]	6,865	7,732	11,093	10,705
In months of prospective import cover	4.7	6.2	8.1	7.4
Relative to short-term debt by remaining maturity	7.9	11.6	18.4	15.7
Money and credit		**(Annual percentage changes)**		
Broad money	10.6	17.3	9.3	9.9
Credit to private sector	15.3	14.8	0.5	7.9
Exchange rates				
US dollar per Jordanian dinar (end-period)	1.4	1.4	1.4	1.4
Real effective exchange rate (% change) [3]	-3.8	12.2	-4.4	…

Source : http://www.imf.org/external/np/sec/pn/2010/pn10131.htm

Figure 4 \\ GDP per capita $

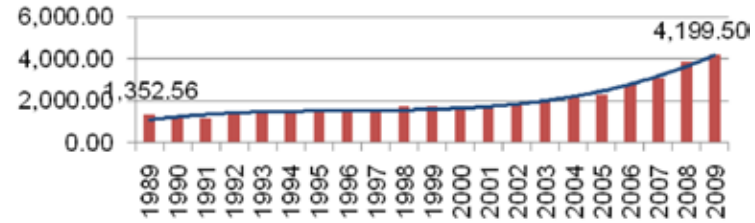


Figure 5 \\ Unemployment rate

Figure 6 \\ Inflation rate

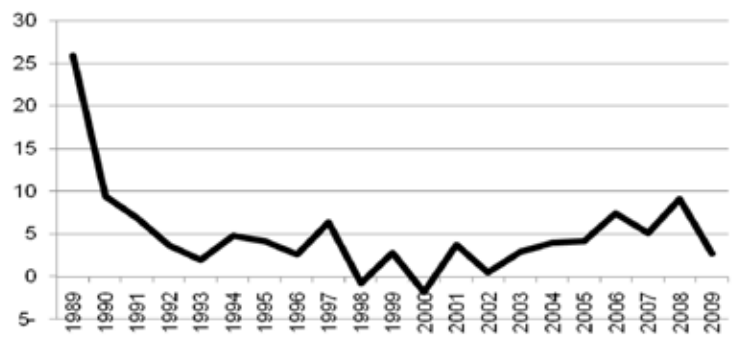
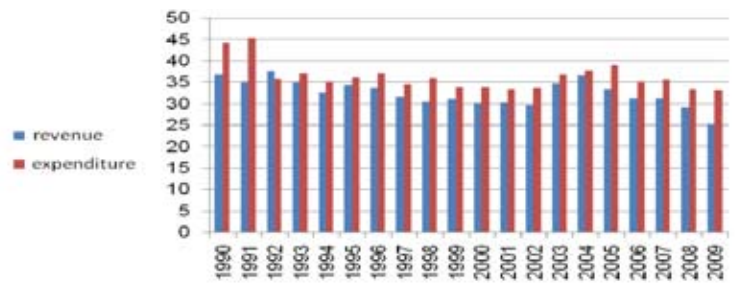


Figure 7 \\ Government expenditure and revenue (%GDP)



3.2 The Palestinian Refugees in Jordan

Jordan has the largest concentration of Palestinian refugees. By January 2010, 41.6% or 1,983,733 of UNRWA-registered refugees were living in Jordan. 17.2% of these refugees (341,994 persons) still reside in ten official and three unofficial camps,19 with other refugees living near the camps. The remaining 1,641,739 refugees have settled outside the camps, mostly in Jordan's urban centers.

All Palestinian refugees in Jordan are full Jordanian citizens, with the exception of some 120,000 refugees originally from the Gaza Strip, which up until 1967 was controlled by Egypt. These people qualify for temporary Jordanian passports, but they do not have full citizenship rights (such as the right to vote), and they are not permitted to work in the government sector. After the 1988 division of administrative and legal links between the East and West Bank, the legal status of Palestinians living in the West Bank changed. They were given temporary passports renewable every two years instead of regular passports that granted them full citizenship rights in Jordan. This placed the West-Bankers on a par with the ex-Gaza refugees, who had been granted temporary passports since 1968. [20]

As demonstrated in Table 4 below, the Jordanian government issued a series of colored cards to distinguish between various categories of Palestinians in the country. Those who hold Yellow Cards are holders of permanent Jordanian passports and of a national ID number, and they also have family reunification permits provided by the Israeli authorities. Green Cards were distributed to West-Bankers allowing them to visit Jordan and return to the West Bank, while Blue Cards were given to Palestinians from Gaza, also allowing them to visit. Pink Cards allow people from Gaza a temporary stay in the East Bank.

19 The unofficial camps are: Madaba, Prince Hassan (Nasser), and Sukhneh.

20 There are estimated to be 150,000 Gazans in Jordan (US Human Rights Report 2000: http://www.state.gov/g/drl/rls/2000).

3.2.1 Education and public services

Palestinian refugees with full Jordanian citizenship officially have access to all public services. Those living in the refugee camps, however, generally use UNRWA's services, including UNRWA schools and other educational centers.

Palestinian refugees originally from Gaza also have access to both public schools and UNRWA schools upon proving residence in a camp. However, as holders of temporary passports they are treated as foreigners, and are required to pay their fees in foreign currency.

3.2.2 Ownership

Palestinians have the right to own property, with the exception of holders of temporary passports (Gazans). They are requested to have a local Jordanian partner in any property they own, and to request the approval of a ministerial council.

3.3 Refugees in Jordan: Socio-Economic Conditions[21]

3.3.1 Housing and basic infrastructure

Refugee camps are located on land made available to UNRWA by the Jordanian government, which also is responsible for providing basic infrastructure, such as sewage disposal, water access, and electricity. As one would expect, higher income is a crucial determinant factor in access to basic infrastructure, so access to infrastructure in Jordanian refugee camps is poor. 60% of camp refugees have no stable access to a fresh drinking water source or basic sanitation; 20% of households in camps have no stable and safe electricity connection; while among non-camps nearly all households are connected to the electricity grid. The average number of household rooms in Jordan is 3.2 and 2.8 for camp and non-camp residents respectively. Given that the

21 This section is based upon FAFO 2003 survey. Up-to-date reliable data are not available.

average household size in Jordanian refugee camps is 6.4 persons, crowding problems can arise. Overcrowding (as previously defined) is quite common in camps (34%). In Jordan, the difference between camp and non-camp refugees is large in comparison to other countries, with camp households almost twice as big as non-camps.

Table 3 \\ Household Basic Infrastructure Problems

	Crowded (3+ person per room)		Drinking water access		Sanitation access		Electricity access		Dwelling average size
	%	pop	%	pop	%	pop	%	pop	No. of rooms
Camp	34	9,751	60	17,374	2	440	20	11,343	3.2
Non-camp	19	64,900	19	64,900	4	11,603	3	5,830	2.8

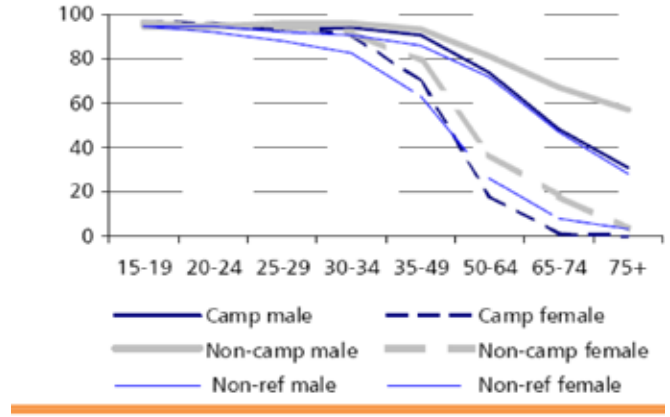
Source: FAFO 2003, chapter 3

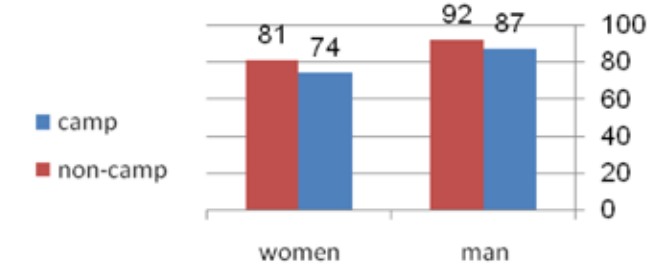
3.3.2 Education

Overall, Jordan has the highest-educated refugee population, with a general achievement level, mainly among non-camp refugees, more similar to southern Europe than the Arab countries. Over 20% of men are higher-educated, and 70% have at least a basic education (elementary school). Leastwise, 50% of non-camp refugees in Jordan have secondary education (high school),with twice the proportion at younger ages (20-24) compared to those aged 20-64. Camp refugees, however much less often achieve secondary education, with figures standing at about 30%. Moreover, the education level of camp-resident young men under 25 is lower compared to men between 25 and 50. Following the trend of much better education performance among the non-camp population, for every person that has no basic education there are two camp refugees. In addition, non-camp refugees are more literate than camp refugees, whereas in both groups, men are noticeably more literate

than women. Analyzing literacy by age group reveals a substantial decline in the level of literacy by age, especially for female camp residents.

Figure 8 \\ Literacy Rate by Gender and Age Profile





Source: FAFO (2003), chapter 4

3.3.3 Employment

As mentioned before, most Palestinians have been granted citizenship in Jordan, which theoretically includes full and equal rights of employment. In reality however, certain sectors, mainly agriculture and certain parts of the public sector, are traditionally closed to Palestinians. A noticeable feature of the Palestinians' employment pattern is the general low rate of participation and the very large gap in labor market participation between

men and women. The participation rate for men is around 70% compared to only 9-13% among women. In total, only 40-45% of the working age population is economically active. Taking into account that about 40% of the camp population is below 15 years old, this compounds the burden on household supporters. That is, only 24% of the entire camp population is economically active (or in other words, every household supporter must support three more persons in addition to himself).

The industrial structure of employment reveals four distinctions when comparing Palestinian camp refugees with other Palestinians. The first is the great importance of employment in public administration for male non-refugees, which provides employment to 30% of this working population. On the other hand, only 4-8% of male camp and non-camp refugees work in this sector. Second, agriculture is less important to both kinds of refugees than to non-refugees. Third, most of the male refugees find work in the private sector (especially in services like tourism and trade). Finally, women (both refugees and non-refugees) find employment in education, health, and administration, accounting for 39-46% of their total employment.

Table 4 \\ Employment

	Camp		Non-camp		Non-refugees	
	Male	female	Male	female	Male	female
Agriculture	1	5	4	8	12	18
Mining	20	31	20	18	10	8
Construction	13	0	10	1	10	1
Trade	28	11	26	7	14	6
Transport	11	0	11	2	8	2
Public Admin	4	3	8	5	30	6
Social services	11	42	9	39	8	46
Other services	11	8	12	20	9	14
Total	100%	100%	100%	100%	100%	100%

3.4 The Macroeconomics: The Impact of Rehabilitation and Repatriation of Palestinian Refugees on Jordan

In our previous analysis (Aix Group 2007), we assumed that a future practical solution for the refugee problem will be based on choices made by the refugees themselves: the refugees will assess what is best for them and will choose between the following alternative locations for residency:

- Resettlement/Repatriation, or what we describe sometimes as Relocation Programs.
- Rehabilitation, i.e. refugees that choose not to move from one place to another but rather to stay in their current location upon the agreement of the hosting governments.

There are over 4.5 million Palestinian refugees, the majority of whom reside outside historic Palestine. To ensure that the decision of a permanent domicile is made voluntarily, and to meet political and practical exigencies, the refugees should be given real options. The Palestinian refugees who wish to resettle will be presented with options for electing a place of permanent domicile through which, or in parallel to which, they may normalize their status, gain citizenship, and begin the process of rebuilding stable, prosperous lives.[22]

In this paper, we are primary concerned with the impact of the choice for Palestinian refugees in Jordan on the Jordanian economy. Based on assumptions made in the Aix Group (2007), we estimate that 60-80% of Jordanian Palestinian refugees will choose rehabilitation, i.e. will not move from one place to another. This means that in total, 1.2-1.6 million people would like to rehabilitate, while 380,000-780,000 people will emigrate from Jordan. This estimation is based up on the assumption that most of the camp refugees will choose to resettle, while the non-camp refugees, who enjoy better socio-economic conditions in general, will prefer to continue their

22 This study does not relate to displaced persons after the 1967 war. It is assumed that those displaced in 1967 who were not refugees of 1948 will have the right to return to their homes following the establishment of a Palestinian state.

integration in Jordan. In particular, we assume that 50-80% of camp refugees will choose to leave Jordan, i.e. 175,000-280,000 people.[23]

3.4.1 Direct costs of absorption

The rehabilitation process will be a major logistical undertaking for Jordan, demanding significant institutional and economic resources. These resources will have to be put in place to help those refugees staying in Jordan to interlace with the population. In particular, targeted projects will have to be employed in such areas such as housing, employment, and infrastructure, as well as educational and health services. The provision of resources and rehabilitation assistance should thus be integrated with the overall macro-economy and management policies of Jordan.

Other studies[24] that estimate the direct costs of absorption and rehabilitation of a certain number of refugees find that the costs per 1000 refugees range between US$9 million and US$14 million, depending on the location and the degree of rehabilitation necessary.

In Table 6, we present our three complementary scenarios estimating the costs of financing rehabilitation for those refugees who choose not to relocate. We assume that the average cost for rehabilitation differs between refugees living in camps and those outside the camps. Based on the various studies, we assume the average cost for rehabilitation in camps to be US$12,000 per capita, and that for rehabilitation outside the camps to be US$3,000 per capita. Furthermore, we assume that due their worse economic condition, refugees in camps will have a higher tendency to resettle/relocate than refugees outside the camps.

23 Assuming 350,000 camp refugees

24 See the survey in Kraft, N. and Elwan, A. (2007), "Infrastructure scenarios for refugees and displaced persons," in Brynen, R. and Roula, E. (eds) The Palestinian Refugees: Challenges of Repatriation and Development, London: Tauris, 2007 http://www.idrc.ca/openebooks/231-0/.

Table 5 \\ Estimating Rehabilitation Costs

	Scenario A	Scenario B	Scenario C
Refugees who choose to leave Jordan	780,000	580,000	380,000
Total number of rehabilitating refugees, *of which:*	1,200,000	1,400,000	1,600,000
Camp refugees	70,000	122,500	175,000
Non-camp refugees	1,130,000	1,277,500	1,425,000
Total costs	$ 4,230,000,000	$ 5,302,500,000	$ 6,375,000,000
%GDP[25]	14%	18%%	21%

According to the different scenarios in Table 6, the direct costs of the rehabilitation processes will consume 14-21% of the Jordanian GDP.

3.4.2 The Macroeconomic Effects of Implementing an Agreement on the Refugees

Given the financial size of rehabilitation efforts relative to the Jordanian economy, we expect Jordanian macroeconomics to be affected in several ways. First, the programs would boost aggregate demand and output through an investment multiplier effect. Normally, public investment might crowd out private investment in implementation of vast public projects. The crowding out is the result of an expansionary fiscal policy, causing interest rates to increase, and thereby reducing private investment as financing becomes expensive. The same forces and the large influx of foreign currency in the form of aid for financing projects can lead to an overvaluation of the real exchange rate, which in turn lowers the competitiveness of the recipient country's labor-intensive or exporting sectors, inevitably reducing export and increasing import. These developments lead some economists to believe

25 Jordan GDP in 2010 was approximately $SUS30 billion.

that regular fiscal multipliers are essentially zero.[26] Nevertheless, we believe that this usual crowding out effect would be smaller, and a multiplier effect would still exist. We hold this view for three reasons:

(1) Both peace and a change in the global strategic environment will provide Jordan with greater opportunities to sustain economic development.

(2) Rehabilitation can induce labor mobility, which in turn can accelerate the convergence to a steady-state growth path in the long run. The effect of migration on growth is known as the 'steady-state' effect in models of open economy growth. The standard textbook reference for these models is chapter 9 in Barro and Sala-i-Martin (1995),which develops a model of migration and growth. This model shows that for a small, open economy, higher labor mobility (as in higher capital mobility) speeds up the convergence to a steady-state growth path in the long run. This effect would be stronger if the investments in infrastructure were made by increasing the capital-worker ratio.

(3) The rehabilitation process can increase the demand for new investment. It is clear that targeted projects will have to be made, in particular in such areas as housing, employment, infrastructure, and public infrastructure, as well as educational and health services. These processes of accumulation and growth in a post-conflict peace economy may also attract FDIs from developed countries, which can equip Jordanian firms with better technology and managerial skills. Therefore, and as the accelerator theory of investments suggests, the hope for a better future will induce the Jordanian private sector to increase its productive capacity by increasing investments.[27] Propensity to invest, however, may not be sufficient. The Jordanian government must ensure the supply of funds to the local private sector. Most economists would agree that the best way to allocate funds efficiently is via competitive

26 In recent research with data set of 45 countries spanning from 1960 to 2007, Ilzetzki et al found support for this view, especially for developing open economy countries.

27 The recent financial crisis has shown us once again the relevance of psychological motives in economic processes. An atmosphere of peace and hope would vitalize the so-called 'animal spirit' of the Middle East economies, attracting more capital while helping the Jordanian government and local firms raise funds, in order to finance a smooth integration process.

capital markets. Consequently, it is crucial for Jordan, in coordination with international economic institutions like the World Bank and the IMF, to continue develop its financial markets alongside the rehabilitation project.

3.4.3 The impact of relocation on Jordan's labor market

The labor force participation rate in Jordan is approximately 50%, which creates a total labor force of about 1.8 million people[28]. The majority of the labor force is concentrated in government service sectors at the expense of the industrial-producing sectors. In 2006, 3.6%, 15.5% and 73.8% of total employment was created by the agriculture, industrial and services sectors respectively.

The Palestinian refugees constitute a share of 30% of the Jordanian labor force, which accounts for 540,000 people. A plausible assumption is that a minority of those people would like to leave Jordan. In line with the several assumptions made in Aix (2007), between 380,000 and 780,000 Palestinian refugees would leave Jordan; the decline in the labor supply will thus be between 100,000 and 200,000. The remaining refugees would choose rehabilitation. We expect that the rehabilitation and the repatriation processes will cause short to medium run pressures on the Jordanian labor market. The numbers above indicate that the relative decrease in supply of labor due to emigration would be comparatively small: 5.5- 11% of the labor market. Surprisingly, and contradicting some common fears expressed by many that immigration (emigration) shocks place downward (upward) pressure on wages and employment, there is a consensus in empirical literature on labor that immigration is not detrimental to the host labor market or economy. Borjas (2003, p. 1335) noted that *the measured impact of immigration on the wage of native workers fluctuates widely from study to study (and sometimes even within the same study) but seems to cluster around zero*. Longhi et al. (2005) identified 18 published studies in international literature on the impact of immigration on wages. The result from this meta-analysis is that the overall mean is -0.119, which can be interpreted as follows: if the immigrant ratio of the labor force increases (decreases) by 1 percentage point, the natural

28 World Bank (WDI)

logarithm of the average wage would decrease (increase) by 0.00119, i.e. wages would decrease (increase) on average by a little over 0.1%. Therefore, a decrease of 5.5-11 % of the labor market supply would on average increase wages only by 0.55-1.1%. On the demand side, the demand for infrastructure construction will result in a higher demand for professional workers, which could put extra pressure on wages.

In order to relieve these pressures and meet labor demand, Jordan could increase labor supply in three ways: by temporarily allowing Palestinians who leave Jordan to continue working in Jordan; by encouraging the return of Jordanian migrant workers to Jordan (the number of Jordanians abroad is slightly more than 300,000 people, who emigrate from Jordan mainly due to a mismatch between their higher skills and the lower domestic wage in Jordan – a massive infrastructure construction plan can induce some of them to return); and by issuing temporary work permits to foreign professional workers, mainly in infrastructure and construction. Since Jordan foreign labor has already reached some 300,000, it could absorb tens of thousands skilled workers fairly easily.

In summary, the Jordanian labor market is able to accommodate the demand and supply pressure arising from the rehabilitation and the repatriation of the Palestinians in Jordan without any sharp rise in wages.

3.4.4 The Fiscal Impact and the Role of Foreign Aid

On average, government spending in Jordan is about one third of its GDP, about US$9 billion.[29] As mentioned earlier (section 3.1), one significant achievement of the Jordanian economy is its success in fiscal discipline, which contributes to a general government net debt reduction to slightly above 55% of GDP. Although the fiscal position of Jordan has been improving, in our scenarios illustrated in Table 6, we estimate that the costs of rehabilitation would range between US$5.175 and US$7.32 billion, an overwhelming cost to Jordan's fiscal budget. Therefore, international assistant to Jordan is crucial

29 Government spending is cash payments for operating activities of the government in providing goods and services. It includes compensation of employees (such as wages and salaries), interest and subsidies, grants, social benefits, and other expenses, such as rent and dividends.

for the success of the process, as well as to sustain economic growth. The standard theoretical model used to analyze the impact of international aid on economic growth is the so-called "two-gap" model of Chenery and Strout. The model predicts a shortage of domestic savings and foreign exchange for financing development plans, and thereby states that developing countries can only attain a certain rate of growth if foreign aid supplies the missing resources for closing the savings and foreign exchange gaps. The vast empirical research on the relationship between development aid and economic growth has come to two important conclusions. The first follows Burnside and Dollar's (2004) analysis, which suggests that aid promotes growth only in countries with sound institutions. These results are quite intuitive, since most development economists believe that economic institutions and policies are the main determinants of long-term growth (Acemoglu et al, 2001).

The second conclusion stems from an influential study by the Center for Global Development (Bhavnani et al, 2004), which finds that short-term aid, including investments in infrastructure, and aid for the productive sectors were found to have had a robust and sizeable impact on economic growth.

The two conclusions are obviously interconnected; sound institutions can ensure that the aid funds reach their intended purpose, and are not utilized for bolstering the political base of the government or fall into the deep pockets of the ruling elites. Overall, international organizations like the IMF and the World Bank place Jordan among the MENA countries with the highest institutional development, especially for financial and fiscal institutions. Continuing with the sound institutional reforms that Jordan has been adopting over the last decades could help the country implement indispensable development projects, including a future rehabilitation of the Palestinian refugees. The latest IMF report on Jordan indicates that *The authorities have an ambitious program of large-scale infrastructure development, particularly in the provision of power, water, and rail transportation infrastructure, to be financed by public-private partnerships (PPPs).*[30] International experience has demonstrated that PPPs can offer better value for money in the provision of public infrastructure if a number of preconditions are put in place, including improving existing PPP

30 IMF report, p. 14

regulations to approve a legal structure that ensures adequate risk transfer to the private sector and prescribes a understandable and clear process for the evaluation and approval of PPPs. Other elements of a sound PPP framework would include competitive bidding procedures, capacity-building at the government level, and proper accounting and reporting of fiscal implications. The IMF report indicates that the Jordanian authorities are currently in the process of strengthening an earlier framework law for PPPs. We believe that combining the Jordanian business sector as the leading player of the future rehabilitation project under the supervision of the Jordanian government is essential for the social and economic success of the projects.

4. Refugees in the Region: The Case of Lebanon

4.1 Lebanon's economy

Lebanon has a small, open-market economy. The service sector contributes 80% of GDP, with dominant banking and tourism industries. About 35% of the total workforce is employed in the service sector. However, a history of military and political conflicts has made this sector extremely fragile, as these conflicts can freeze commercial activity. Lebanese citizens enjoy a GDP per capita income (in PPP 2010 terms) of $15,330, making Lebanon's economy one of the strongest in the Middle East.

In 1992, Lebanon embarked upon a substantial reconstruction program to repair its physical and social infrastructure overwhelmed by both its long civil war (1975-90) and the Israeli occupation of the south (1978-2000). Nevertheless, the dilapidated social balance between Lebanon ethnic groups is weakening the central government's efforts to capture revenues through taxes, leading to a substantial and chronic budget deficit. Thus, the government has been accumulating significant debt, which by the end of 2010 reached 137% of

GDP. Beside the large government debt, there are three other fundamental problems in the Lebanese economy. First, although there are no restrictions on foreign exchange or capital movement, the investment environment suffers from corruption, high taxes, and complicated bureaucracy, as well as inadequate protection of intellectual property.[31] Second, domestic markets are not sufficiently competitive, and many industries (about 33%) have a dominant firm with a market share of above 40%. As always, in the presence of limited competition, the reasons relate to the presence of entry and exit barriers. Some of these are natural; others are artificial, stemming from rules, commands, regulations, and norms that essentially restrict entry into business (Desus and Ghaleb, 2008). Third and most important, political instability in Lebanon negatively affects the government's ability to rule and thereby accomplish structural reforms. By contrast, stable political equilibrium can prolong a positive impact on the national economy.

Table 6 \\ Selected Economic Indicators of Lebanon

Population	4.2 million (2009)
GDP per Capita	UD$15000 (2009)
Household Consumption per Capita	UD$5000 (2009)
Labor force	1.48 million (2010)
Foreign workers	1 million (2010)
Unemployment	8.1% (2008)
Poverty rates	28% (2005)
Government expenditure	33% (2010)
Government Deficit (% GDP)	8.7% (2010)
Government Debt (% GDP)	137% (2010)
Current Account (% GDP)	-11% (2010)
FDI (% GDP)	10% (2010)
External Debt (% GDP)	160% (2010)
Gross Reserves (% GDP)	30% (2010)

Source: IMF Statistics and WDI

31 http://www.oecd.org/dataoecd/56/62/28498563.pdf

4.2 Palestinian Refugees in Lebanon

UNRWA estimates for 2011 indicate that there are around 455,000 Palestinian refugees in Lebanon, which account for 10% of the country's population. Most of them (90%) are refugees registered with UNRWA and the Lebanese authorities, who were forced to leave Palestine in 1948 during the war. Overall, the conditions of the refugees are very difficult, with a number of specific problems:

1. **Lack of social and civil rights.** The legal status of Palestinians in Lebanon has never been addressed since their arrival in 1948. In 1962, the Lebanese government classified the Palestinian refugees as foreigners, which required them to obtain work permits in the labor market. In 1987, the government unilaterally canceled all socio-economic rights previously approved to Palestinians. This action has placed enormous restrictions on the Palestinians in the form of legislation and bureaucracy: Palestinian refugees have no political, social, or legal civil rights, they are discriminated against, and they do not have access to public social services.

2. **Limited access to public health or educational facilities.** All Palestinian refugees are denied access to Lebanese public healthcare, which leaves them no choice but to rely on UNRWA medical centers. But since UNRWA can provide only basic primary healthcare and the health service costs are beyond the means of most refugees, they often face a choice between foregoing essential medical treatment and falling deeply into debt. Palestinian refugees are also denied access to Lebanese public schools. While UNRWA runs 74 schools in Lebanon, UNRWA itself admits that Palestinian refugees in Lebanon have limited access to public secondary education, while private secondary education is beyond the means of most Palestinian refugees.

3. **Employment restrictions**. Employment restrictions make the Palestinians in Lebanon highly dependent on UNRWA as their main relief provider and major employer. Refugees are unable to work in some professions, for example, as doctors, lawyers, engineers, or accountants. Although in 2005 the Lebanese government granted Palestinian refugees born in Lebanon the right to work in the private administrative sector for the first time, the impact of this decision is still very small. The refugee workforce is therefore substantially under-employed, and those of them who do find work are often employed in seasonal or casual work for low wages and with no social or welfare benefits.[32]

4.3 The Probable Impact of a Solution on Lebanon

Following is a rough estimate of the economic impact of the relocation of the Palestinian refugees in an overall peace agreement which includes Lebanon and Israel. While in Jordan many refugees will most probably stay in their host country, in Lebanon the common assumption holds that most, if not all, refugees will leave, since official estimates put the refugee population at around 10% of the total population (and many researchers believe that the actual number and ratio are even lower). If we assume that the average Palestinian household has a purchasing power of 50-70% of the average Lebanese household, we can conclude that the impact of the Palestinian emigrants on the Lebanese household demand will be very limited, in a magnitude of 5-7% of the total private household demand. In addition, since private consumption in Lebanon is 80% of the GDP, the impact on the domestic product will be also very limited (4-5.5%).

As for the labor market, a 2006 Fafo [33] survey estimates a working-age population of 69%, with a 37% participation rate in the Palestinian labor force, proportions that are similar to the general Lebanese participation rates. In fact, these figures indicate raw numbers of 160,000 Palestinian workers in the Lebanese economy, which comprise 6.5% of total workers in Lebanon. The impact on the labor market would probably be modest, but certain shortages will be felt in specific occupations, especially in the low-wage spectrum, and therefore certain markets will go through a period of adaptation. However, the profile of these occupations (temporary and part-time jobs) and the relative flexibility of the Lebanese market economy would allow for short and

32 http://www.unrwa.org/etemplate.php?id=65

33 http://www.fafo.no/ais/middeast/lebanon/labourforcestudy/pptpres-beirutworkshop070302.pdf

low-cost adjustments. Refugees will also take with them their accumulated wealth, creating a period of adaptation in capital markets as well. However, since the Palestinian refugees were never fully integrated in the Lebanese economy and society, their departure should create no major difficulties, and is not expected to threaten further the stability of Lebanon.

The real impact on the Lebanon economy would be from a peace agreement with Israel, as Lebanon could benefit greatly from such an accord. For example, Israel recently discovered three huge natural gas fields on its northern marine border. In response, the Beirut government declared ownership of the largest field of the three, Leviathan, which contains up to 16 trillion cubic feet of gas and 4.3 billion barrels of oil. These data reflect a gross economic value of US$80 billion,[34] twice the nominal GDP in Lebanon. Possible peace agreements with Israel will enable both countries to benefit from their natural resources along their joint borders.

4.4 Relocation Cost Estimation

In the work the Aix Group undertook in 2007,[35] we estimated the costs of financing the relocation programs. To do so, we made three basic assumptions:

4. The structure of the economy is that of the Palestinian economy before the 2000 crisis.
5. The economy will recover after a permanent peace agreement is achieved.
6. The relocation program will be implemented over 10 years.

Upon this basis, we assessed four possibilities of the fiscal structure of the Palestinian government: high government spending and low government spending, financed by high taxes or low taxes. These estimations are summarized in Table 8, which is an adaptation of Table 5 from Aix 2007, p. 102.

34 Sever Plotzker ,YNET ,published in Hebrew 02.01.2011

35 http://www.aixgroup.org/research.html

Table 7 \\Necessary Costs for Relocation of 450,000 Palestinian Refugees (US$ millions), 2007

	High taxes	Low taxes
High government	3615	5277.5
Low government	2183	3845.5

Thus the range of estimates for the costs of absorption concerning the refugees in Lebanon is around US$2-5.5 billion (2007). We can capitalize these amounts to a yearly annuity (assuming 10 years to implement the program and a real annual interest rate of 4%) of around US$ 270-678 million.[36]

As we emphasized in Aix 2007, the results should be interpreted with caution, since they do not reflect the entire burden in an economy facing such an enormous challenge. However, it is important to emphasize the magnitude of the costs of absorbing of half a million people.

36 The yearly payment X is calculated by : $PV = X\sum_{i=1}^{n}\frac{1}{(1+R)^n}$

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Presentation in FAFO:

http://www.fafo.no/ais/middeast/jordan/refugees/AmmanRWG.pdf

Appendix A:

From Badil's Survey:

"In general, UNRWA registration records do not include:

1. Refugees displaced in 1948, who:
    a. failed to meet UNRWA's definition of "Palestine Refugee";
    b. were outside the areas of UNRWA operation (and have not filed for registration under UNRWA's 1993 revised eligibility criteria);
    c. were dropped from the records owing to financial constraints limiting the number of relief recipients;
    d. are descendants of refugee mothers and non-refugee fathers;
    e. had an independent income or property (and have not filed for registration under UNRWA's 1993 revised eligibility criteria);
    f. improved their economic situation to the extent that they no longer met eligibility criteria (prior to the 1993 revision of eligibility criteria);
    g. refused to register for reasons of pride;
2. Palestinians displaced for the first time in 1967;
3. Palestinians who are not 1948 or 1967 refugees, and are unable (due to revocation of residency, deportation, etc.) or unwilling (owing to a well-founded fear of persecution) to return to the OPT;
4. IDPs in Israel and the OPT."

From Gassner, I. J. (ed.) (2009), "Survey of Palestinian Refugees and IDPs, 2008-2009" (Bethlehem: Badil) p. 59. http://www.badil.org/en/publications?page=shop.product_details&category_id=7&flypage=garden_flypage.tpl&product_id=119

Appendix B

Table 8 \\ Palestinian Legal Rights in Jordan

Origin	Residence	Kind of Passport	Card of Crossing **	Accessibility to services
Jordanian - East Banker	Permanent residency in Jordan	Five-year passport with the national ID number.	-	Full access
Jordanian - Palestinian of 1948	Permanent residency in Jordan	Five-year passport with national ID number	-	Full access
Jordanian - Palestinian of 1967	Permanent residency in Jordan	Five-year passport with national ID number	Yellow Card - family reunification	Full access
Jordanian-Palestinian of 1967	Permanent residency in the West Bank	Five-year passport without national ID number	Green Card	Work needs a work permit, university education payment in foreign fees, ownership with the approval of a ministerial council
Jordanian-Palestinian from Jerusalem	Permanent residency in Jerusalem	Five-year passport without national ID number	Green Card	Work needs a work permit, university education payment in foreign fees, ownership with the approval of a ministerial council
Palestinians of Gaza	Permanent residency in Jordan	Two-year temporary passport	In case of family reunification - Blue Card	Work needs a work permit, university education payment in foreign fees, ownership with the approval of a ministerial council
Palestinians of the West Bank or Gaza Strip	Permanent residency in West Bank or Gaza Strip	Palestinian authority passport (LP)	Permission to enter	Treated like any Arab in Jordan: as long as there is a valid residency they can access services permitted for foreigners

Source: Forced Migration Online (FMO), http://www.forcedmigration.org/

Notes:

** Card of Crossing (or Crossing Card [for the bridges]): a card given by "**El Mutaba wel Taftish**" (the inspection and follow-up department affiliated with the Ministry of the Interior in Jordan). The Yellow Card indicates that its holder is a permanent resident in Jordan and s/he is able to go to the West Bank due to the family reunification card s/he holds. The Green Card indicates that its holder lives in the West Bank and his/her visit in Jordan is temporary (one should usually provide a reason, i.e. work permit, education certificate, justifying their stay). The Blue Card is for Gazans who live in Gaza or in Jordan. It indicates that they were included in family reunification cards as being able to live in Gaza.

From: http://www.forcedmigration.org/research-resources/expert-guides/palestinian-refugees-in-jordan/palestinian-refugees-in-jord