

CEPR MEMO

Agriculture in Palestine:
a post-Oslo analysis



Agriculture has a strong significance for Palestinian identity due to its affiliation to land, cultural heritage and social life. Considering its potential in terms of trade and employment, agriculture has limited impacts on the overall Palestinian economy. It is fundamental for Palestinian policy-makers and international donors to enhance the positive effects that agricultural production could have on Palestinian society.

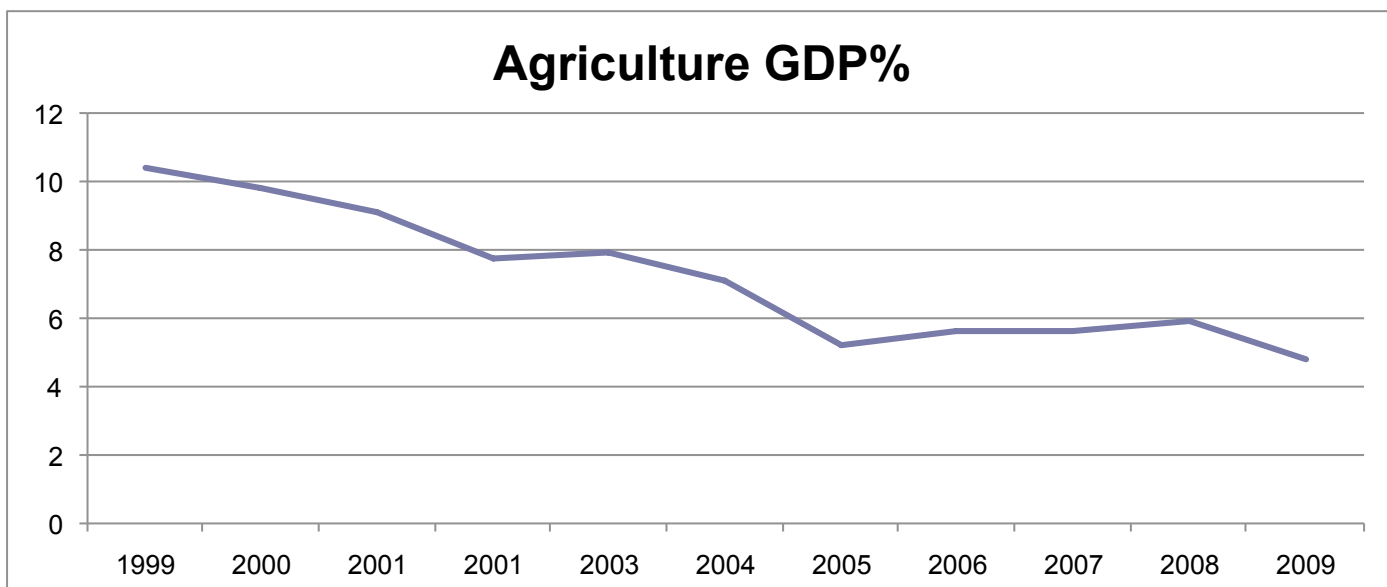
Palestinian olive tree grove between the Israeli separation wall and the access road from Jerusalem.

2012

Introduction

Agricultural land in Palestinian and Israeli administered areas is subject to uncontrolled urban expansion. The natural resources available are getting scarcer and polluted. Palestinians are among the most food dependent in the world and 33% are “food insecure”. There is no agricultural growth to speak of; instead, the contribution to Palestinian GDP is decreas-

ing and has dropped from 13% in 1993 to 4.8% in 2009. This decline is due to several factors, particularly Israeli policies of land confiscation and limited control over water resources and market exports. A comprehensive definition of the role of agriculture in Palestine is needed in order to enhance a long-term strategy.



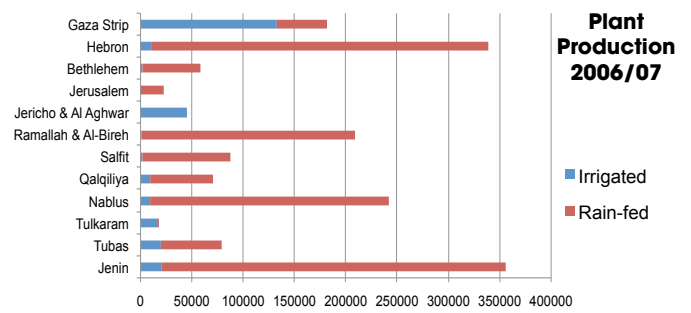
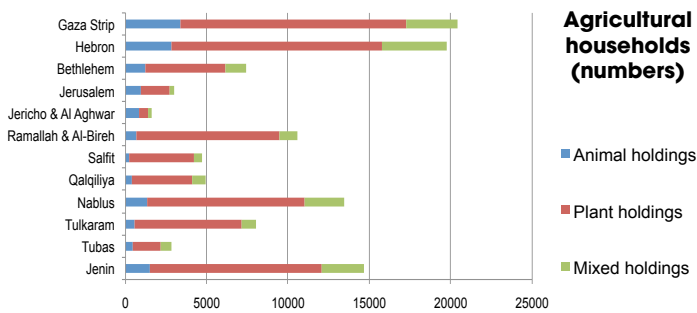
Topography

The West Bank and Gaza Strip are characterized by five agro-ecological zones on a relatively small surface area that allows for the production of a wide range of agricultural products all year-round. The Ministry of Agriculture identifies:

- The coastal zone: Gaza Strip, inner plains grain plantation
- The semi-coastal zone: Jenin, Tulkarem and Qalqilya, receives the most rainfall
- The middle elevation zone: extending from Jenin to Hebron, moderate summer
- The steppe zone from Jenin to the Dead Sea, a range-land
- The Ghor: western Jordan Valley warm winters

The agricultural activities in these areas are all defined by concentrated irrigated farming and widespread rain-fed farming, which forms the primary area of overall cultivated Palestinian land. Cultivation of trees is a key segment of plant production. Livestock production is an unstable sector mainly because of forage price and inputs to the sector. As a result, animal numbers vary considerably from year to year. Animal production consists of cattle, small ruminants, broiler birds and beehives.

“The contribution to Palestinian GDP is decreasing and has dropped from 13% in 1993 to 4.8% in 2009.”



Palestinian Authority Palestinian Central Bureau Ministry of Agriculture of Statistics (2011), Agriculture Census (2010).

Agricultural activities in the occupied Palestinian territories (oPt) are characterized mainly as family-based production activities to subsist household needs. More than half of both plant and livestock production are mainly for domestic consumption, 23% to sell the surplus after meeting the domestic consumption, and only 20% for direct sale. Due to the Palestinian

family inheritance land ownership system and Israeli land confiscation policies, agricultural holdings in the oPt are getting smaller and increasingly fragmented. The average agricultural holding area is 18.6 dunums over a total area of agricultural land of 1.53 million dunums. In the vast majority, agricultural land owners are small-holders farmers.¹

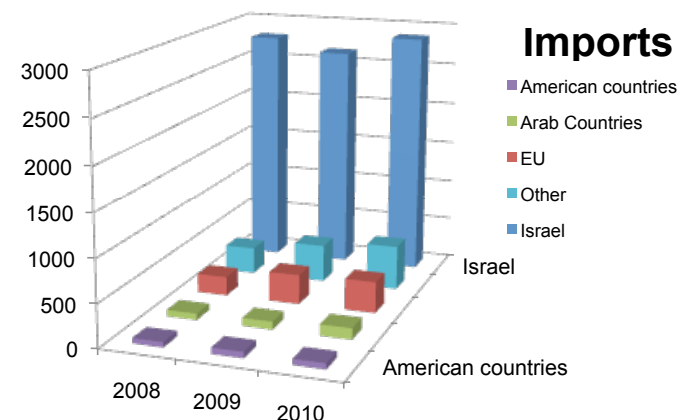
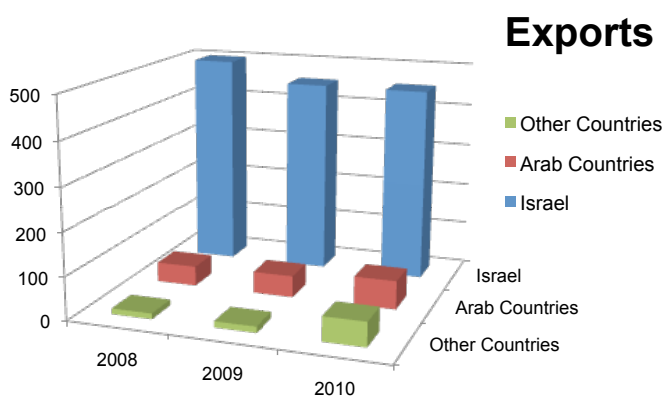
Trade

Agriculture production is a core activity both for exports and in providing essential needs to most of the population. Agricultural trade patterns represent a unique case in the Palestinian economy. While imports of agricultural products (\$103m in 2011) are higher than exports (\$50m), they still comprise 15.3% of total Palestinian exports. Production lines are shifting to higher value added crops such as flowers, strawberries and cherry tomatoes in order to be more competitive in the global market. 75% of Palestinian exports to the European market come from agriculture.

market. Conversely, Israeli goods constitute 80% of total imports to the oPt.

Even if this is a remarkable figure, it is important to consider that even if the Palestinian Authority signed free trade agreements with the EU as well as the US, Turkey and Canada, 90% of Palestinian exports are absorbed by the Israeli

This results in a complex situation of interdependency with strong negative effects on the Palestinian agricultural sector. A major reason for Palestinian economic dependence on Israel has been the lack of export market access for Palestinian goods and the Israeli restriction on the flow of goods from abroad. A second dependency is that Israel has been the major employment outlet for Palestinian workers. Due to the unstable political situation and the lack of independent marketing ports, frequent closures of Palestinian borders (which became prominent after the 1993 Oslo Accords) have created a crisis situation for Palestinian workers, particularly during the 2000 Al-Aqsa *intifada*.



¹ In Israel, Palestine, Syria, Jordan, Lebanon and Turkey, the dönüm is 1,000 square metres (10,764 sq ft), which is 1 decare.

The continuous blockade of the Gaza Strip since June 2007 was especially harmful, as its agricultural sector and many of its industries are export-oriented. There is high dependency on imported food items for household food consumption. Only 60% of main food items are produced locally, where less than 5% of the cereals and legumes consumed in the oPt are locally produced. More than 25% of Palestinian

consumed food commodities are imported from Israel. As the EU is Israel's largest trading partner in the Mediterranean, it is important to consider that high quality products are intended for export only to European markets. The lower quality goods and left-over products are then dumped in Palestinian markets at lower prices, thus bringing down prices and reducing profits for Palestinian producers.

Employment

Unemployment in Palestine is a problem in all sectors of society. Young professionals and particularly Gazans are particularly affected: 70% of young people in Gaza and 24% in the West Bank are unemployed. Even if women constitute 60% of the population, only 16% participate in the labor market which is statistically among the lowest in the world.

Agriculture has always absorbed an important share of both formal and informal labor force: 13.4% of the labor force and over 90% of all informal employment is absorbed by the agricultural sector. Agriculture has become the main employer in the majority of rural communities and witnessed an increasing trend since the beginning of the 2000 intifada until now. The lack of employment infrastructure and the fragile agricultural sector made Palestinian workers more reliant on the Israeli labor market. This has proved detrimental for Palestinian workers rendered unemployed by Israeli closure policies. Moreover, the absence of agricultural and entrepreneurship training fa-



"Of the Women, By the Women, For the Women".
Source: Grassroots International.

cilities for young professionals, combined with poor labor market institutions, has a negative impact on the cost of doing business, and the productivity and profitability of the agricultural sector. Palestinian farmers that face limited access to export market for their produce are also constrained by limited access to the credit market. Restrictions on the import of technological and infrastructural inputs necessary for agricultural progress further affects the profitability of agricultural production in Palestine.



Palestinian crops growing in mini greenhouse rows south of Gaza City.

Food Security

The first food security assessment in the oPt took place in 2003 and concluded that more than one third of the Palestinian population suffers from food insecurity. The current food (in)security situation in Palestine is a reflection of the years of political instability. Palestine has moved away from a position of self-reliance in the field of food production. A combination of Israeli land, water and macro-economic policies imposed on the Palestinian agricultural sector has made the Palestinians more dependent on both Israel and Israeli trade channels for food imports, of which the most critical basic staple is wheat.

Israel controls about 80% of Palestinian water, which is the sole resource for drinking and irrigation purposes. This has led to the scarcity of water resources needed for irrigated agriculture, thus exacerbating agricultural productivity in the area. Moreover, Israel controls over 60% of the West Bank in Area C limiting Palestinian access to the agricultural areas and natural resources found there. Continuous land confiscation further limits Palestinian use of their land and resources. Moreover, the Israeli authority has also completely destroyed large Palestinian agricultural fields. Uprooting

trees has been a prominent feature of the occupation and is carried out both by the Israeli military, settlers, or a collusion of both. This has not only been an environmental problem but has also had repercussions on agricultural revenues and on food security.

Having a dependent economy without sovereignty over resources and lacking appropriate development policies, especially for land and water management, has made Palestinians vulnerable to external economic and political shocks, without a local economy to cushion it. With Israeli closure policy, the recession in the Palestinian economy has adversely affected the purchasing power of average households, especially for the poor. This has contributed to the asymmetrical and negative effects of food (in)security.

“The World Bank reports that over 30% of informal agricultural work in the oPt is performed by women as part of their domestic responsibilities.”

Environment

Environmental protection and sustainable development are not widespread concepts yet in Palestine, where decades of military occupation determined the political priorities for the Palestinian people. For this reason, the role of agriculture in the conservation of natural resources, protection of biodiversity and fight against desertification is largely neglected. Moreover, the case of Palestine is a striking example of the organic relationship between environmental degradation and political conflict. An effective control over natural resources is a key element to achieve sustainable development and sound environmental management. The inability to regulate land use over a fragmented territory makes it impossible to enforce a proper conservation of natural ecosystems or the monitoring of environmental protection.

The restrictions on water use imposed by stringent and discriminatory Israeli policies had a particularly debilitating impact on the Palestinian agricultural sector. Moreover, the lack of control over the use of pesticides and fertilizers is one of the main reasons for soil degradation and water reserve pollution. This phenomenon is related both to Palestinian practices in the agricultural sector and to the activity of Jewish settlers in the West Bank, where industries can avoid the compliance with the environmental regulations found in Israel. According to a study conducted by the Environment Office of the Israeli Civil Administration in the West Bank, an estimate of 1.3 kg of domestic waste is generated daily per Jewish settler. Jewish industrial parks built in the settlements are a hazardous source of pollution and lack of waste water and solid waste management are detrimental for the surrounding Palestinian environment.



Olive tree grove in Bethlehem.

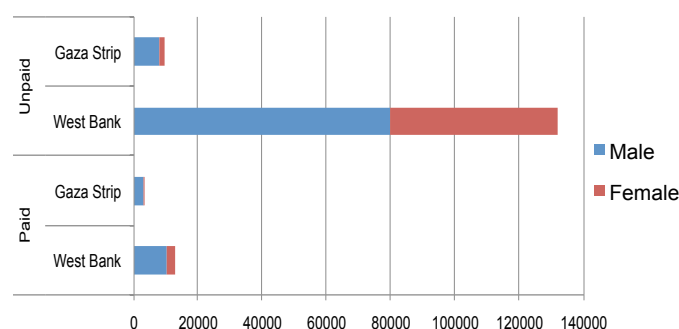
Palestinian natural resources are scarce, polluted, overexploited and threatened by deforestation, expansion of urban areas and lack of protection of natural reserves. The total forest area within the officially designated areas is reported to have decreased from 30,074 hectares in 1971 to 23,159 hectares in 1999. Of the 48 designated nature reserves, only 19 reserves are located in A and B. The lack of a Palestinian voice in management of the protected area is illustrated by the fact that several Israeli set-

tlements (with their associated by-pass roads), and military bases have actually been built inside or within parts of the nature reserves. This building has taken place despite the fact that both the core and surrounding buffer zones of these protected areas are designed to be carefully managed and free of human construction. The total area of the colonies and military bases located inside nature reserves is 3,0607 square km, which constitutes 0.63% of the total protected area in the West Bank.

Gender

Women in Palestine constitute about 49% of the population and hence a significant proportion of production capacity in the national economy. Women are however most vulnerable to poverty and discrimination due to their reduced level of income, social exclusion, their lack of professional skills and their limited access to and/or control over productive assets. The contribution of women in Palestinian agriculture is significant, yet often invisible and rarely recognized.

Formal and informal employment



The role of women is affected by the political situation, which has a marked effect on the number of Palestinians, predominantly males, employed in Israel. The presence of this large number of temporarily unemployed men is likely to influence the division of work tasks in rural homes. Restriction on the agricultural sector has had adverse impact on Palestinian rural women, who contribute significantly to farming activities. Women constitute 38.4% of the agricultural workforce and are responsible for harvesting fruit, cultivating homestead land, managing the use of by-products such

as manure and weed planted areas. Women work in agriculture more on a part-time basis than on a full-time basis due to other responsibilities they carry out, such as childcare and household chores.

Palestinian women contribute significantly to rain-fed agriculture, since many stages of agricultural production require only part-time work. The World Bank reports that over 30% of informal agricultural work in the oPt is performed by women as part of their domestic responsibilities.

The Occupation

The Israeli military occupation is the common denominator affecting Palestinian agriculture as it is in trade, employment, food security and environmental issues. The resulting predicaments (whether destructions, distortions, confiscation, settlement, the wall or limitation of movement) are considered the main obstacles to agricultural resource development. Israeli authorities have taken several measures to restrict Palestinian agricultural activity and decrease its profitability, such as:

1. Stopping Palestinians from digging new wells; limiting the pumping of water and imposing fines on offenders. (Israel allows Jewish settlers to pump Palestinian underground waters and to build wells with no quota)
2. Limiting Palestinian irrigated agriculture for alleged security reasons and closing down vast agricultural areas.
3. Closing down all branches of agricultural banks in the oPt and the restriction of a credit supply market.
4. Restricting export market access and regulating Palestinian agricultural exports to the Israeli market, while granting Israeli farm products free access to the territories.

Such policies were not totally alleviated with the signing of the Oslo Accords. Instead, due to increasing land confiscation and closure policies it has become more difficult for farmers to reach their lands to cultivate or to export their surplus to outside markets. This caused



Olive tree nursery next to the separation wall.
Source: Grassroots International.

the fall in prices of agricultural products and the fall of revenue. Moreover, Israel imposed non-tariff barriers and other economic sanctions on Palestinian products under the 'security' pretext. The Israeli government has also maintained a policy of extremely high protective tariffs on agricultural products and inputs. Another principal problem is restrictions in the Economic Protocol on the import of feeds and fertilizers from countries other than Israel, resulting in higher prices for Palestinian producers. Agriculture has become a less profitable enterprise, especially when the Palestinians are highly dependent on Israel for inputs (pesticides, fertilizers, seeds). Increased transportation costs caused by the closure further inflate input costs. Palestinian farmers are left with no choice but to purchase through Israeli importers or highly protected Israeli supply firms, thus perpetuating the Israeli occupation.

The Institutions

The first agricultural law was enacted by the Palestinian Authority in 2003. This law regarded the creation of a Farmers' Compensation Fund against natural disasters and a special fund in support of livestock production. The legislation remained incomplete and not fully enforced. In 2008, the Palestinian Ministry of Agriculture (MoA) started to develop a strategy to stimulate agricultural growth through private sector development. The Agribusiness Development (AD) program was established to promote the cultivation of higher added value crops and create post-harvest and marketing services to promote agricultural exports. Construction of agroindustrial business parks was considered to be a significant component of the AD program.

These efforts have always been demised due to the limited budget and financial support to the agricultural sector. Since 2008, the average budget allocated to agriculture constituted around 0.7% of the total PA budget. In 2009, the Palestinian Reform and Developmental Plan 2008-10 (PRDP) raised the MoA budget to around 1.21% of the total. This strategy identified the development of agribusiness the core priority in supporting the Palestinian agricultural sector. In the new National Developmental Plan 2011-13 these priorities are reconsidered. The fund allocated to agricultural and rural development raised to \$ 178m over the three years, accounting for 46% of the total planned PA development expenditure. Agribusiness and marketing services remain a key issue in the new strategy that also includes programs to generate employment and increase food security.

European Union

The problems related to the coordination between local stake-holders working in the agricultural sector are exacerbated at the international level, receiving less than 1% of total foreign donors' disbursements each year. The lack of focus on the long term development in the agricultural sector is compensated by a stronger emphasis on delivering food aid as part of crisis and emergency relief, creating a pattern of food dependency for the Palestinian people.

While the MoA is the institutional body responsible in the fields of planning, policy, investment programs as well as monitoring and evaluation, a wide range of local or international NGOs and farmers' organizations are actively promoting agricultural growth in Palestine. The inefficient sector coordination and lack of consistency vis-à-vis the MoA represent constraints to improving institutional capacity. One of the leading NGOs supporting rural and agricultural development is the Palestinian Agricultural Relief Committee (PARC). Its strategic objectives are to:

1. Enhance the economic role of the agriculture sector by achieving food security and sustainable agriculture;
2. Reinforce the sustainability of grassroots, institutionalized and specialized rural community based organizations;
3. Maximize PARC's role in the national and social struggle;
4. Ensure the organization's sustainability.

The lack of focused training and capacity-building effort adds to the weak coordination capabilities among different stakeholders working in the agricultural sector. In order to defend the farmers' interest in public institutions and solicit more funds to support agriculture it is important to improve institutional capabilities and performance of agricultural institutions and farmers groups, as well as to improve their efficiencies and effectiveness in delivering services.



Food staple distribution point in Gaza City.

The EU is the major contributor to the budget of the United Nations Relief and Works Agency (UNRWA) through the European Community Humanitarian Office (ECHO). UNRWA and the World Food Program (WFP) are crucial to the provision of food aid within the oPt. In 2010, UNRWA was providing food aid to more than 1.1 million refugees in the West Bank and Gaza Strip; the WFP provided food aid to 811.000 beneficiaries, meaning that around 47% of Palestinians living in the West Bank and Gaza were receiving food aid from these two organizations.

EU-PA cooperation in the agricultural sector is not limited to foreign aid. While European private investments are weak in the West Bank, the institutional cooperation between the PA and the EU covers issues related to the agricultural production and rural development. The main regional strategy covering the Mediterranean area - the 2006 Euro-Mediterranean Roadmap for Agriculture - is part of the Barcelona process that supports the economic integration and institutional cooperation around the Mediterranean since 1995. The core project of the Roadmap for Agriculture is a program of trade liberalization for agricultural products around the Mediterranean. Non-trade issues such as rural development, agricultural productivity and promotion of quality production must be addressed in order to support the process of economic liberalization.

EU-PA cooperation in matters of agricultural market is described by Article 44 of the Euro-Mediterranean Interim Association Agreement signed by the PLO and the EU in 1995. Proto-

col I and II define the cooperation in trade of agricultural products towards a progressive liberalization of the market to the benefit of both parties. The EU-PA Agreement between the EU and the PA on the further liberalization of trade in agriculture, processed agricultural products, and fish and fisheries products, concluded in 2011 and entered into force in 2012. The PA and the EU cooperated on sanitary and phyto-sanitary (SPS) issues. An assessment under the EU TAIEX program noted various gaps

in the SPS legislation and in institutional capacity. A food safety strategy and SPS legislation are being prepared, aiming to support public health and sustainable economic development of primary production, food processing and retail sectors.

In terms of rural development, emphasis is given to a particular type of strategy for raising the productivity of an existing agricultural economy. The low productivity of farm labor, land and other resources in the agricultural sector is largely due to the lack of certain complementary inputs of a technical,

educational, and institutional nature. Under these circumstances a crucial requirement for devising an appropriate agricultural development program is to identify these complementary inputs, determine in what proportions they should be combined, and establish priorities among programs designed to increase their availability. According to the World Bank, the weak growth in the private sector compared to the public sector, bolstered by volumes of aid, has a detrimental effect on growth in the agricultural sector.

Europe and Gazan agriculture

The Gazan agricultural sector has not recovered from the shock of the Israeli military Operation Cast Lead in 2009. The political and economical isolation of the Hamas-ruled government in the Gaza Strip have made it impossible for local producer to access international markets for import and export. In the absence of any input for the agricultural sector, local producers are unable to increase the profitability of their work; the de facto annihilation of the food market led to the exponential increase of food insecurity in the Gaza Strip. Since Hamas is listed as a terrorist organization, the EU has stopped funnelling support to the agricultural sector through local Palestinian institutions. However, through UNRWA and ECHO, the EU has implemented several food aid programs and taylored development projects in support of Gazan farmers.

Conclusion

In July 2010, the Ministry of Agriculture defined the need for a sustainable and feasible agriculture, capable of achieving food security, that is competitive in local and foreign markets through an optimal use of resources as part comprehensive development, and cementing the bonds and sovereignty of Palestinians over their land and towards state-building.

The Palestinian Authority and international donors (among them the EU) must set a strategy to address these conditions. A strategy promoting agricultural growth must be aimed at changing Palestinian society. The focus of the Palestinian Authority and of the EU in promoting export-oriented agriculture seems irrelevant if not coupled with other interventions. These should address the Palestinian domestic market for agricultural product, land, credit and labor; the ever-increasing food dependency and food insecurity of Palestinian people; uncontrolled urban expansion; agricultural land fragmentation and pollution of scarce natural resources; the vulnerability of women in rural areas and empower this neglected sector of society. For Palestinian agricultural sector to develop, it is necessary to let Palestinians take control of it. The Israeli military occupation represents the core problem.

“The EU and the PA have yet to develop a comprehensive strategy to enhance the role of agriculture in Palestinian society.”



The “Tent of Nations” education and environmental farm, Bethlehem.

The Palestinian Authority has always highlighted this, but the solution proposed could not achieve any significant change. The EU and other international donors provide aid to the Palestinian people, but with very few results for the agricultural sector. The EU and the PA have yet to develop a comprehensive strategy to enhance the role of agriculture in Palestinian society.

The CEPR is grateful to Mr. Marcello Cappellazzi for drafting and compiling this Memo on Palestinian agriculture. Mr. Cappellazzi is pursuing a Master at the University of Maastricht on the European strategy to support Palestinian agriculture.

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