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The Political Economy of Agrarian Change in the  
West Bank and Gaza Strip

Leila Farsakh



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**LEILA FARSAKH**

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Mediterranean Programme  
Robert Schuman Centre for Advanced Studies  
European University Institute  
Via delle Fontanelle, 19  
50016 San Domenico di Fiesole (FI), Italy

Fax: + 39 055 4685 770

E-mail: [lotta.svantesson@iue.it](mailto:lotta.svantesson@iue.it)

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## **Abstract**

Like many Middle Eastern countries over the past thirty years, the WBGS has seen the share of its agricultural sector in the gross domestic product fall, its productivity fluctuates and its labour emigrates. However, by the late 1990s Palestinian access to their land has been seriously curtailed and agriculture reverted to being a reservoir of low productivity labour, unable to sustain its rural population. Understanding the Palestinian agrarian question requires an analysis of the specificity of Israeli occupation and the Palestinians' attempt to resist it. The first part of the paper analyses the components and rural implication of Israel's land policy in the WBGS, giving particular attention to the restriction on land reforms, access and investment, as well as to the construction of illegal Israeli settlements. Part two assesses Palestinian response to these measures, central among which has been rural emigration for employment in Israel and the settlements, which made the prospects for resolving the Israeli-Palestinian conflict over the land increasingly difficult. Also important has been Palestinian attempts to keep hold of the land by expanding family labour, seeking domestic and international aid, and reverting to agricultural employment whenever access to Israel has been curtailed. Part three of the paper examines the attempts by the Palestinian Authority, during the Oslo years, to regain hold of the land, and its limitations in turning the agricultural sector into an employment generating and export led sector. The paper concludes that the dynamics of conflict over land in the WBGS has led to a process of 'Bantustanisation', as Palestinian areas have been fragmented into unsustainable labour reserves encircled by Israeli settlements.

## **Keywords**

agrarian change, labour migration, Israel/Palestinian Territories

## Introduction<sup>1</sup>

The Israeli-Palestinian conflict has taken various shapes, but it has remained a struggle over land, water resources and demographic realities. The implication of the conflict on the agrarian question in the West Bank and Gaza Strip (WBGs), though, has not always been clearly explained. Like many Middle Eastern countries, the WBGs witnessed important changes in its economy, and particularly in its agricultural sector, over the past three decades. The share of agriculture in West Bank GDP fell from 34.8% in 1970 to less than 16% in 2000. In the Gaza Strip, it fell from 31% to 18% respectively. Agricultural productivity increased in the 1970s, and fluctuated in the 1980s. In terms of employment, agriculture absorbed less than 28.1% of the West Bank labour force in 1991, compared with 44.8% in 1969. In the Gaza Strip, it employed 21.6% of the working population in 1993 compared with 33.1% in 1969 (Farsakh, 2005, 163). In 2000 it absorbed less than 18% of total employment (MAS, 2001, 167).

Particularly characteristic about the Palestinian agrarian transformation is the way it has been stimulated by Israeli occupation and the implications it had on labour release and transfer. The Israeli-Palestinian conflict over land has led to major labour transfer out of agriculture. This transfer, however, did not take place to jobs in urban areas or in industrial or service sectors, but rather to Israel, which absorbed over one third of the Palestinian workforce between 1970 and 1992 (Farsakh, 2004, 234). While in other Middle Eastern countries migration to urban areas, and particularly to other countries, has been an important feature of their agrarian transformation (Dyer, 1998; Richards and Waterbury 1996), the Palestinian experience has been unique in that its labour transferred to an occupier's environment. Israeli occupation expropriated Palestinian labour from their own land while at the same time relied on it. Although Israel tried since 1993 to restrain the mobility of Palestinian workers to jobs beyond the Green Line, Palestinian workers continued to be employed in Israeli settlements in the West Bank and Gaza Strip. In the 1990s, Israeli policies of closure and permits forced a Palestinian return to agriculture while at the same time institutionalising a process of 'bantustanisation' (Farsakh, 2004, 2005). This is a process by which the Palestinian territories have been transformed into *de facto* population reserves encircled by Israeli settlements and the newly built 'security wall'. These 'reserves' continue to be dependent on the Israeli economy, but at the same time have been unable to gain access to it, or evolve into a sovereign independent entity, in which agriculture can play an active and sustainable role.

The first part of the paper analyses the nature of the Palestinian agrarian structure and its evolution over the past three decades. Part two focuses on the components and rural implication of Israel's land policy in the WBGs, giving particular attention to the restriction on land reforms and investment, as well as to the construction of illegal Israeli settlements. Part three assesses Palestinian response to these measures, central among which has been rural emigration for employment in Israel and the settlements. It also examines developments during the Oslo years and the ability of the Palestinian Authority to regain hold of the land and turn the agricultural sector into an employment generating and export led sector. Part four discusses how a process of 'bantustanisation' reality that has been institutionalised as a result of Israeli response to the Al-Aqsa Intifada.

## Agrarian Change and Labour Transfer

Israel's occupation of the West Bank and Gaza Strip in 1967 and its decision to integrate the Palestinian economy into its own, albeit on an unequal basis, has shaped the nature of structural change in the Palestinian areas. Over the past three decades the Palestinian economy has been

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1 Paper presented at the Fifth Mediterranean Social and Political Research Meeting, Florence and Montecatini Terme 24–28 March 2004, organised by the Mediterranean Programme of the Robert Schuman Centre for Advanced Studies at the European University Institute. Some of the material produced in this paper will also appear in a forthcoming book by the author entitled *Palestinian Labour Migration to Israel: Labour, Land and Occupation, 1967-2000*, London: RoutledgeCurzon.

transformed from an agrarian to service-oriented economy directed towards Israel. The change, however, did not always take place smoothly and nor did it have equal implications on the agrarian structure and on the different segments of the rural population.

### ***Structure of Palestinian Agriculture***

When Israel occupied the West Bank (5.65 million dunums) and Gaza Strip (0.365 million dunums) in 1967, it found itself in control of a Palestinian agricultural sector that was already exposed to outside markets. In the West Bank, own-occupier farmers cultivated the majority of agricultural land and agricultural production had been providing local and Jordanian markets with most of their food and agricultural consumption needs. In the Gaza Strip, citrus production and exports were developed (UNCTAD, 1993). In 1967, the West Bank exported 80% of its entire vegetable crops and 45% of total fruits to Jordan and the rest of the Arab World (Butterfield *et al.*, 2000, 2).

The land structure in WBGS, however, was characterised by a skewed distribution as well as by high fragmentation of land plots (UNCTAD, 1993; World Bank, 1993). Based on the 1967 census, which was the only one conducted so far,<sup>2</sup> 43% of agricultural households in the West Bank owned their farms compared with 14% in the Gaza Strip. Meanwhile 48% of landowners in the WB worked on land plots less than 20 dunums (i.e. less than two hectares). In the Gaza Strip, 68.7% of total holdings worked on such small plots (see Table 1). On the other hand, in terms of land distribution, large landowners owned the lion's share of the cultivated land. This was particularly true in the Gaza Strip where 4.1 % of total owners holding land of over 100 dunums possessed one third of the total cultivated area. In the West Bank, 8.6% of owners, possessing over 100 dunums, cultivated 38% of the land (see Table 1).

**Table 1. Land Distribution by Size of Holding in the West Bank (1970) and Gaza Strip (1968)**

Size of Unit (dunums)	Size of holding		% Total cultivated area		% Owners in total holdings	
	West Bank	Gaza Strip	West Bank	Gaza Strip	West Bank	Gaza Strip
1-20	220,100	126,614	10	21.9	48.0	68.7
21-50	499,700	37,044	24	25.6	29.6	20.1
51-100	579,500	13,085	28	20.0	13.8	7.1
100+	791,800	7,556	38	32.5	8.6	4.1
Total	2,091,100	184,300	100	100	100	100

Notes: Farm owners also refer to tenants.

Source: Farsakh (2005) based on Israeli Central Bureau of Statistics data.

In terms of land production, the WBGS concentrated on fruit trees, particularly olives and citrus fruits, field crops and increasingly vegetables. Olive production remained the largest production item in the West Bank, contributing in the range of 21-40% of total crops' output in the 1980s (Farsakh, 2005). These are crops that tend to be labour intensive. Over the years, the size of the irrigated land has increased, particularly with the introduction of drip irrigation and new technologies, but had different impact in each of the Gaza Strip and the West Bank. In the Gaza Strip, 58.6% of the land was irrigated, compared with 5.1% in 1991 in the West Bank (Table 2). The size of irrigated land increased by 32% in the Gaza Strip between 1966 and 1991, while in the West Bank it fluctuated, remaining at less than 8% of total agricultural area (Table 2). Irrigated land provided over 60% of total agricultural area and income in the Gaza Strip in the 1984. It

2 The Palestinian Central Bureau of Statistics planned to conduct an agricultural census in 2000, but this was stalled with al-Aqsa intifada and Israeli reoccupation of Palestinian areas.

represented less than 24% of agricultural income in the West Bank (Awartani, 1994, 21). Irrigated products have mixed effects on water demand and salination, and in turn on the sustainability of production.

In terms of labour employment, Palestinian agriculture up until the 1970s relied on family farming and sharecropping, especially in the West Bank. Tenants tended to be responsible for 50-60% of all commercial farms in areas of intensive farming, such as Jericho, Jenin and Tulkarem (UNCTAD, 1993, 44). Tenants were usually of three types: either 'cash tenants,' especially in the Gaza Strip and areas of the West Bank involved in vegetable production; or 'kind tenants', who worked in a classical sharecropping mode, particularly pronounced in labour intensive farming in the Jordan valley; and 'olive tier' tenants, who predominated in the olive picking industry. The share of landless and wage labourers in Palestinian agriculture in 1968 was particularly high in the Gaza Strip. Wage earners represented 14% of total employment in agriculture in the West Bank and 57.1% in the Gaza Strip in 1968 (Kahan, 1987). The figure would be higher if refugees involved in agriculture were included in the data. However, it is argued that refugees in the West Bank have tended to enter in sharecropping relations with landlords rather than work simply as wage labourers (Kahan, 1987).

**Table 2. Size of Cultivated Land in WBGS ('000 dunums)**

Cultivated land size, of which	West Bank				Gaza Strip				Israel	
	1973	1984	1991	1998	1966	1984	1991	1998	1987	1992
Irrigated areas	82	101	90	118.8	75	108.5	110.5	127.6	2,268	1,815
% of total area	4.1	6.1	5.1	7.0	45.0	62.0	58.6	62.5	52.4	50.8
Rain-fed land	1,941	1,538	1,704	1,557.6	91	66.5	77.5	76.6	2,064	1,760
% of total area	95.9	93.9	94.9	93.0	55.0	38.0	41.4	37.7	47.6	49.2
Total	2,023	1,703	1,794	1,675.4	166	175	188	204.2	4,332	3,575

Source: Farsakh (2005)

Over the past three decades, four important developments occurred to the Palestinian rural structure. First, the size of the over all land use decreased particularly in the West Bank. It is estimated the size of the cultivated land in the West Bank fell by 30% between 1965 and 1994 (from 2,435 square klm to 1,707 square klm) (Butterfield *et al.*, 2000, 2). In the Gaza Strip, there was been some attempts to cultivate previously unused land, but between 1967 and 1968 the Gaza Strip lost 20% of its land as a result of confiscations (Roy, 2001, 125). In terms of land structure, the share of large landholdings did not increase, especially in the West Bank, but land became more fragmented.

Second, the number of those employed in agriculture fell. The number of farm owners and tenants fell by nearly 15%, from 34,000 to 27,400 in the West Bank between 1970 and 1987, while in the Gaza Strip, their number fluctuated around 5,000-7,400 workers (Table 3). The largest shift, however, happened with regard to wage earners. Between 1970 and 1987, a total of 6,100 wage-workers from the West Bank and 9,800 from the Gaza Strip left Palestinian agriculture to Israel over this period (calculated from Table 3).

Third, labour transfer to Israel became important, particularly for workers from the Gaza Strip. By 1970, Israel had taken a *de facto* decision to prevent the transfer of capital from the Israeli or foreign economies into the WBGS but allowed Palestinian workers to move beyond the Green line in search for jobs. Between 1970 and 1992, Palestinian labour employed in the Israeli economy (which include the settlements) represented over one third of the Palestinian labour force. It reached a total of 115,600 in 1992, and again 145,000 in 2000 just before the Al-Aqsa Intifada erupted (Farsakh, 2004, 233). The Israeli labour market absorbed two thirds of total Palestinian employment growth during this period, while the domestic WBGS economy only created one third of all jobs filled. The Palestinian economy proved unable to absorb its growing labour force as it has been constrained by various Israeli

institutional and market-led inhibitions (Farsakh, 1998). Since 1975, Israeli agriculture absorbed more Palestinian agricultural wage earners than WBSG agriculture. Between 1985 and 1987, the total number of Gaza Strip workers employed in Israeli agriculture, which ranged around 9,000-9,700 wage earners, was larger than the total number of both employed and wage earners in Gaza agriculture (see Table 3). Many workers in Israel were employed in the Israeli agricultural sector, especially in the 1970s when it absorbed a quarter of all Palestinian workers employed in Israel.<sup>3</sup> Work in Israel has been a key factor in helping per capita income more than double between 1970-1992.

Last, but not least, domestic agricultural employment increased after 1987. While it released workers prior to that date, in the period 1987-1993 employment creation in domestic agriculture was positive and after 1993, employment in agriculture increased more in the WBSG than in Israel (Table 3). Between 1995 and 2000 Palestinian agriculture returned to be a reservoir of labour, particularly in the Gaza Strip where 20,300 new workers were absorbed during this period (Table 3). Agriculture's share in total employment fell in comparison to the pre-1993 period and moved in correlation with decreasing access to Israel. It fluctuated between 12% and 19% of total domestic employment in the West Bank and between 6% and 17% in the Gaza Strip in the period 1995-2000 (MAS, 2001, 166).

**Table 3. Distribution of Workers Employed in WBSG's and Israel's Agriculture, 1970-2000 (Figures in Thousands)**

Years	West Bank				Gaza Strip			
	Total no. in domestic agriculture	Farmers employed dom.agri	Wage earners dom.agri	Wage earners in Israeli agri.	Total no. in domestic agriculture	Farmers employed dom.agri	Wage earners dom.agri	Wage earners in Israeli agri.
<b>1970</b>	42.5	34.0	8.5	2.6	16.9	6.0	10.9	2.4
<b>1973</b>	30.0	26.0	4.0	3.4	11.8	5.0	6.8	8.4
<b>1974</b>	36.2	27.4	8.8	4.5	11.8	6.0	5.8	8.6
<b>1977</b>	31.0	28.1	2.9	4.5	12.6	7.0	5.6	5.6
<b>1980</b>	31.7	28.9	2.8	4.0	8.9	7.0	1.9	6.3
<b>1985</b>	28.4	25.8	2.6	5.1	8.8	6.7	2.1	9.0
<b>1987</b>	29.8	27.4	2.4	6.2	8.7	7.4	1.3	9.7
<b>1990</b>	37.8	36.0	1.8	5.5	12.4	8.7	3.7	6.8
<b>1993</b>	37.4	34.8	2.6	4.0	16.5	13.2	3.3	4.6
<b>1995</b>	32.7			5.7	11.9			1.0
<b>1997</b>	46.9				6.2			
<b>2000</b>	44.6			10.4	32.2			2.7
<b>Total change per period ('000)</b>								
<b>1970-1980</b>	-10.8	-5.1	-5.7	1.4	-8.0	1.0	-9.0	3.9
<b>1980-1987</b>	0.9	1.3	-0.4	2.5	0.1	0.9	-0.8	3.9
<b>1987-1993</b>	7.6	7.4	0.2	-2.2	7.8	5.8	2.0	-5.1
<b>1995-2000</b>	11.9			4.8	20.3			1.7

Note: farmers refer to owners as well as to tenants.

Source: Farsakh (2005) based on Israeli and Palestinian central bureau of statistics labour data.

3 Between 1975 and 1992 Israeli agriculture absorbed around 15% of all WBSG migrant workers (Farsakh, 1998, 37).

## **Israeli Occupation and its Agricultural Policies**

Israeli occupation played a major role in the transformation of agricultural structure by influencing the pattern and rate of Palestinian labour transfer, the level of productivity, its exposure to external market, and above all the ability of the Palestinians to control their land and its use. Three key policies were particularly important in this regard: Israel's land and settlement policy, its constraint on agricultural investment, and its trade policies. While these policies evolved over the years, they remained consistent in their concern to limit Palestinian capital accumulation, prevent Palestinian agriculture from competing with Israeli agriculture and maximise Israel's expropriation of the largest amount of land in the WBGS.

### ***Land and Water Policy in the WBGS***

Since 1967, Israel restricted Palestinian access to their land by preventing them from registering their property rights. It thereby restricted the scope for agricultural expansion and investment. In 1983, Israel forbid Palestinians from cultivating their land without having permission from the military governor (military order 1039). Moreover, it did not carry out any land reform in the WBGS and kept the land structure as it found it in 1967. This meant that the scope for increasing Palestinian agricultural productivity, and the implication thereof the land structure and labour release, remained limited. Meanwhile, Israel confiscated Palestinian land and declared at least 39% of the West Bank and 27% of the Gaza Strip as Israeli 'State land' (Farsakh, 2005, 168).

Israeli water policy also influenced Palestinian agrarian change in so far as it restricted the Palestinians access to their natural resources. After 1967, the water resources in the WBGS (ground aquifers and wells) were integrated within the Israeli water system, and Israel controlled the supply of water to Palestinian households and agriculture. In 1970 Israel severely restricted the Jordan River water to the Palestinians, thereby limiting Palestinian agricultural expansion in the Jordan valley, which represented 47.5% of total irrigated land in the West Bank (Isaac and Shuval, 1994, 125). Moreover, in 1975 Israel imposed limits on water use from individual wells and production of water for agricultural purposes. These quotas did not change until 1986, when they were further reduced by 10% (World Bank 1993, vol.4, 20). Meanwhile, although the West Bank aquifers had an annual recharge renewal of 600 million cubic meters (mcm) in the 1980s, Palestinians were only allowed to use 110-132 mcm annually (World Bank 1993, vol 4, 20-21). In the Gaza Strip 95 mcm ground waters were withdrawn annually, of which only 60 mcm were annually recharged, leading to serious salination problems on cultivated lands.

### ***Settlements***

Israeli settlements form an integral part of Israel's policy of land control and expropriation. Between 1970 and 1993 Israel built 132 settlements in the WBGS, and another 11 around East Jerusalem. The first settlements created in early 1970s have been mainly agricultural, distributed mostly along the most fertile land, mainly in the Jordan valley and in Etzion block area. Although the majority of settlements built in the 1980s were of the commuting suburbia type, by the late 1980s, 30% of settlements in the West Bank were defined as agricultural compared with over 70% of settlements in the Gaza Strip.<sup>4</sup>

Settlements shaped the scope of Palestinian agrarian question both because of the constraint they impose on Palestinian resources, and the way they fragmented Palestinian territorial contiguity, preventing thereby any scope for large scale Palestinian investment and infrastructural work. In terms of land size, the areas under Israeli settlements occupied 3.4% of the cultivated area in the West Bank and 6-8% of the total land in the Gaza Strip in 1984 (Kahan 1987:99-112). This may not sound large, but the magnitude of the appropriation and its economic implications can be fully grasped when one

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4 According to Kahan (1987: 165-166), out of a total of 113 settlements in the West Bank in 1987, 34 settlements were considered agricultural and another 11 undertook some agricultural activities. In the Gaza Strip 9 to 11, out of 13, settlements were considered agricultural.

considers the resources given to Israeli settlers. Israeli settlements in 1984 represented less than 1.5% of the total population living in the West Bank, but they occupied 45% of total cultivated areas of the fertile Jordan valley. Moreover 69% of settlers' cultivated land was irrigated, compared with less than 6.2% of the total land under Palestinian cultivation in the West Bank (Kahan, 1987, 112, 129). In the Gaza Strip, the magnitude of Israeli settlers' control of resources is even more striking. While representing less than 0.4% of the total population living in the area, Israeli settlers controlled 6% of the total cultivated area (Farsakh, 2005, 176). By 2000 nearly 370,000 settlers lived in the WBGS (including East Jerusalem), occupying directly 6.8% of the land, nearly half the size of land on which 3 million Palestinians were living (Arij, 2002, 1).

Israeli settlers were serious competitors not only for Palestinian land but also for its water. They were allocated disproportionate amount of water to the detriment of Palestinian agriculture. Israeli authorities prevented Palestinian farmers from digging new water wells, and restricted the rehabilitation of available wells to a total of 100-120 licences (World Bank 1993, vol.4, 20). Meanwhile, Israel's water company drilled over 32 new wells in the West Bank to be used mainly by Israelis and settlers. These produced 47% of all water discharged from the West Bank wells compared with 53% of Palestinian-owned wells. Kahan (1987, 113) estimated that the water consumption per irrigated dunum was 1,342 mcm in Israeli settlements compared with 712 mcm in Arab villages. In the Jordan valley in particular, where most West Bank irrigated and fertile land is found, Palestinians were allocated 36 mcm of water per year compared with 25 mcm for Israeli agriculture settlers in 1990 (Lavy, 1997, 7). According to Roy (2001: 25), settlers consumed 16 times as much water as Palestinians in the Gaza Strip.

Settlements also influenced the pattern of labour release both by contributing to people's expulsion from their land as well as by providing them with Israeli jobs. A third of all Palestinian workers employed in the Israeli economy are believed to have worked in the settlements in the 1990s, especially as Israeli regulation made it easier for workers to be employed in settlements than in Israel. Palestinian did not need a work permit as for those seeking to cross the Green line nor did they have to queue for long hours along checkpoints (Farsakh, 2004, 2005).

### *Trade Policy*

The nature of Israeli trade policy towards the WBGS proved central in making Palestinian agriculture dependent on trade relations to Israel, and not directed towards internal Palestinian or international markets. While Israel allowed the WBGS to have access to the Jordanian and Arab market, this access was not always open. Palestinian agricultural exports to Jordan increased in the 1970s only to drop after the 1980s, largely as a result of Jordanian and Israeli regulatory restrictions.<sup>5</sup> These restrictions, together with increasing protectionism by Jordan and other Arab countries, contributed to the fall of Palestinian exports to Jordan by 40% between 1977 and 1984, from 61,700 to 36,300 US\$ million (Farsakh, 2005, 171). The Palestinian competitive edge was weakened further by the fact that labour costs in Jordan were a third of those in the WBGS in the 1980s (UNCTAD, 1993, 52).

Israel remained the WBGS main trading partner absorbing 90% of its export and 70% of its imports. It is estimated that Israel exported 75,000-100,000 tons agricultural goods per year between 1977 and 1986 to the WBGS while it imported from it only 40,000-70,000 tons (World Bank 1993, vol 4, 13). While it is argued that the actual volume of trade is larger than that reported in official figures by 10-12%, Israel has maintained an agricultural surplus with the WBGS ever since 1970.

Israeli trade policy limited Palestinian agricultural growth in four main ways. First, it gave Israeli goods free access to Palestinian markets. Israeli products were subsidised, thereby diminishing the

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5 Jordan limited the size of Palestinian exports by making entry of goods dependent on proof that they had no Israeli inputs in them; by restricting the number of lorries crossing into the East side of the Jordan to a total of 400 lorries from the West Bank and 100 from the Gaza Strip; by allowing the West Bank to export only 50% of its produce; and by giving Gaza citrus exports only transit status in its areas.

competitiveness of Palestinian products. Israeli subsidies were not limited to water but also extended to electricity and all kind of inputs subsidies. Kahan (1987: 80) estimated that State subsidies in 1987 represented 25% of poultry prices and 30% of egg prices, two items that competed with Palestinian goods. Moreover, Israel protected its farmers by providing them with subsidised credits, and export subsidies, which were particularly important in the case of citrus, vegetables and flowers. These were goods that competed with Palestinian output (GATT, 1997, 4).

Second, Israel restricted the production and sales of certain goods within the WBGS local markets that might compete with Israeli products. The Israeli Agricultural Department in the WBGS forbid Palestinians from developing poultry, milk and potato farms without a licence from the Israeli authorities. These were restricted to protect Israeli milk and poultry industry. By the mid 1980s, 80% of the WBGS consumption of milk and meat products came from imports from Israel. Moreover, the Agricultural Department restricted Palestinian access to agricultural inputs from non-Israeli sources, imposed high import tariffs and limited quotas on third country's agricultural import (Farsakh 2005, 180).

Third, Israel restricted Palestinian exports and protected its markets through various tariff and non-tariff barriers. Israel imposed strict technical, sanitary and technical standards requirements on agricultural as well as manufacturing imports. Moreover, the Israeli Department of Agriculture in the WBGS, in accordance with the Israeli Marketing Board, restricted the entry of Palestinian goods into Israel through import licences. These licenses were only issued whenever the Israeli marketing board decided that Israeli supply was not enough to meet Israeli demand. In this respect, the Agricultural Department encouraged the development of WBGS irrigated cash crop products such as strawberries and tomatoes, in seasons that did not compete with Israeli production. Despite Israel's trade liberalisation policies in the 1990s, agriculture remains still the most protected sector, particularly in terms of tariffs and non-tariffs barriers (GATT, 1997).

Fourth, Israel prevented the development of any viable Palestinian institutional mechanism that would facilitate the marketing and upgrading of the WBGS agriculture. The Palestinians were restricted in their access to the only two banks left open in the area, and they were not allowed to have their own marketing board. Up until 1986, WBGS exports to Europe, which represented less than 8% of total exports, had to pass via the Israeli citrus exporting board (Agrexo), with its stringent standards for quality. After 1986, Palestinian exports to the EU, the majority of which were citrus, faced various quality and marketing difficulties, and continued to depend on access to Israeli ports in order to reach outside markets.

## **Palestinian Response to Israeli Agricultural Policies**

Palestinian resistance to the conflict with Israel over land, water and agricultural development had mixed effect. While trying to keep hold to the land, many continued to seek work in Israel, given that it was often the only viable alternative to them. Palestinian reaction has also been a function of the developments that occurred to agricultural productivity.

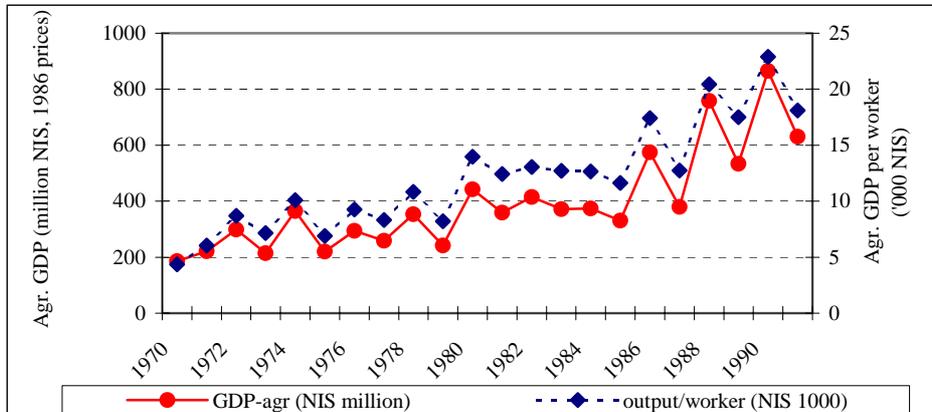
### ***1970-1978***

As seen from Table 3, Palestinian labour transfer went through 3 main phases. In the first decade of the occupation, agriculture lost over 19,000 workers. The release of labour in this period was caused by two main factors: the rise of productivity of agriculture as well as higher wages in Israel.

Between 1970 and 1978, Palestinian farmers were able to enhance their productivity as Israeli policy allowed for the expansion of WBGS agricultural production. The Israeli Agricultural Department provided credit to farmers, encouraged the introduction of drip irrigation, use of machinery and fertilisers, and allowed agricultural exports to Jordan. The use of fertiliser per dunum increased from 2.3 kg in 1968-69 to 9.5 kg in 1979-80 (Benvenisti and Khayat, 1988, 12). Agricultural output doubled between 1970 and 1980 in the West Bank and increased by 70% in the Gaza Strip

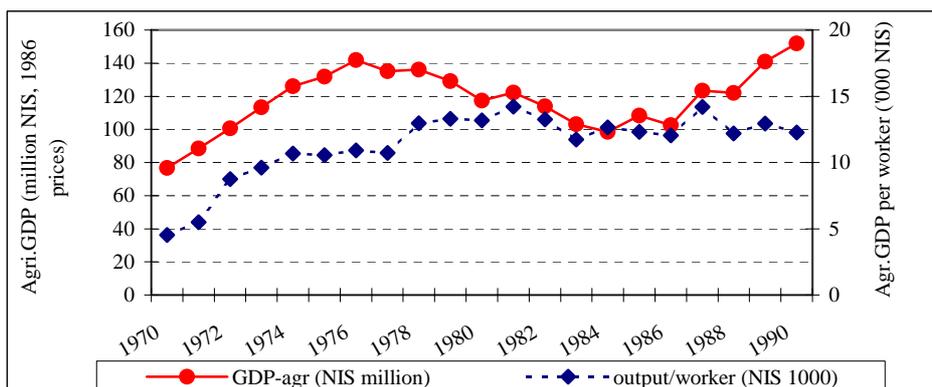
between 1970 and 1977. Agricultural value added per worker also tripled in the West Bank (from 5,000 to 15,000 New Israeli Shekel (NIS) and more than doubled in the Gaza Strip (from 4,500 to 10,000 NIS) over these periods (see Figures 1 and 2).

**Figure 1. Agricultural Output and Labour Productivity in West Bank, 1970-1991**



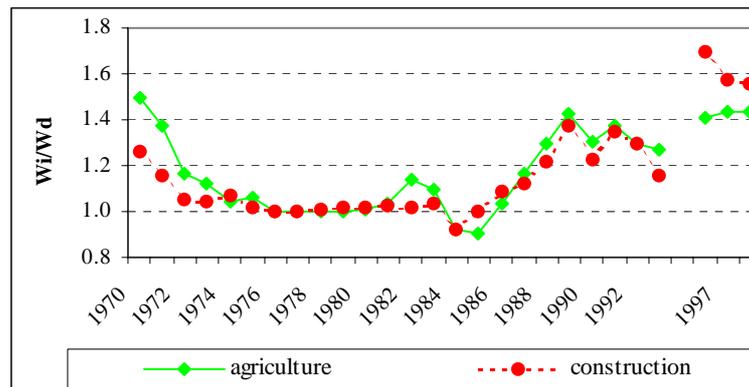
Source: Farsakh (2005).

**Figure 2. Agricultural Output and Labour Productivity in the Gaza Strip, 1970-1991**



Source: Farsakh (2005).

The process of technological upgrading that led to an increase in labour and land productivity caused a fall in the demand for workers, both of farmers and wage earners. The fact that the Gaza Strip released more labour to Israel than the West Bank can be attributed to the fact that land tenure in the former is more skewed towards large farm owners than towards family-based agriculture (Table 1). This facilitated mechanisation and tied labour demand to seasonal periods. Meanwhile, the integration of the WBGs' economy into the Israeli economy has encouraged labour migration. Wages in Israel between 1970 and 1973 were typically double the wages in the domestic economy (Figure 3).

**Figure 3: Ratio of Daily Wages Earned in Israel to Domestic Daily Wages**

Source: Farsakh (2005)

Yet, Palestinians tried to keep hold to the land while working in Israel. Wages in Israel were not always higher than wages in the domestic economy, especially between 1975 and 1986 (see Figure 3). Income earned from work in Israel was used to increase per capita income as well as enhance investment in agriculture. Moreover, as workers left agriculture to go to Israel, women, the elderly and children (the 'latent' labour supply) increased their participation in agricultural farming. In other words, there was an intensification of the use of family labour. According to fieldwork-based studies, families adopted a strategy of income diversification where a family member would work in Israel, while other members increased their involvement in local production (Tamari, 1989; Graham-Brown, 1989).

Palestinian farmers adapted to Israeli restrictions by shifting production to cash and irrigated crops. Yet, as they moved towards the production of agricultural goods in demand in Israel, they became more sensitive to water and labour costs, and to Israeli policies more generally. This process has been particularly dominant in the Gaza Strip (see also Table 2). Israel discouraged Palestinian investment in permanent crops such as olives, grapes and citrus that requires long-term investment and work. Credits were not given to investment in citrus fruits and field crops but to drip-irrigated vegetables. Meanwhile, Israel was more lenient towards the imports of Palestinian vegetables than towards other crops. The size of land allocated to fruits in the Gaza Strip fell from 129,000 to 103,000 dunums between 1978 and 1992 while the size of vegetable-planted areas, more than doubled, increasing from 29,800 to 61,500 dunums over the same period (Farsakh, 2005, 331). In terms of products, output per dunum of vegetable-planted area was the highest among all agricultural products in both the Gaza Strip and West Bank. The use of drip irrigation and modern techniques in agriculture also increased. In 1990 it is estimated that over 85% of the vegetable cultivated area in the Gaza Strip used modern techniques of irrigation compared with 65.9% in the West Bank. Among tree orchards, only 48% relied on modern techniques in the Gaza Strip and 17.6% in the West Bank (UNCTAD, 1993, 107). Drip irrigated seasonal products increased land and water efficiency, but made Palestinian agriculture more dependent on Israel's water supply and pricing.

### 1980-1993

During the 1980s, Palestinian agriculture continued to lose wage labourers and to absorb a diminishing proportion of the growing labour force. Yet, the loss of labour to Israel was not due to wages, since income equalized between the two sides of the Green Line between 1975-1987 (Figure 3). It was rather an indication of lack of enough employment at home. The rate of labour release slowed down while agricultural output fell, particularly in the Gaza Strip in the period 1980-87 (see Figure 1). In the West Bank production fluctuated on a two-years' basis, given its reliance on olive oil production, and grew at 3.2% p.a. between 1980 and 1987 (compared with over 6% in the pre-1979 period, Arnon et al. 1997: 172).

Meanwhile, labour productivity and real agricultural income fell. The income of hired workers fell by over 39% in the Gaza Strip and by 7.6% in the West Bank between 1978/80 and 1983/85. Family income dropped by 9.2% in the Gaza Strip and 31% in the West Bank over the same period. Palestinians also faced serious constraints in developing their agricultural output and exports in 1980s as a result of rising costs and reduced access to credit. All Israeli credits were stopped after 1977 and informal financial resources remained limited (Farsakh, 2005, 180).

The first Intifada in December 1987 marked a turning point for Palestinian agriculture, for it became a reservoir of low productivity labour. Palestinian labour access to the Israeli market was curtailed, especially for people from the Gaza Strip, and with it Israeli earned income. Israel introduced the magnetic cards in 1988 and the permit system by 1990. It thereby made Palestinian access to the Israeli economy a function of a security clearance produced by the Israeli military authorities. Israel also started to build the Erez checkpoint and a fence around the Gaza Strip thereby ending the open door policy that was maintained between Israel and the Occupied territories up until then. Greater control on labour out-migration had a direct effect in making people return to agriculture. Agriculture absorbed 7,800 new workers between 1987 and 1993 in the Gaza Strip but wages dropped (see Table 3). The West Bank agriculture also absorbed 7,600 workers over the same period, but workers continued to have access to the Israeli labour market. By 1992, over 72,000 West Bankers worked in Israel compared with 63,000 in 1987 (Farsakh, 2005, 322).

### **Peace Process, Agriculture, and Labour Reserves: 1993-2000**

The Oslo peace process promised to improve the conditions in the Palestinian rural sector, but failed to change the pattern of structural change that occurred over the previous 25 years, namely the dependency on Israel. The Economic Protocol (EP), which is an integral part of the Oslo accords, created a customs union between Israel and the WBGS, which sought to alleviate some of the inequalities established in the pre-Oslo period. It allowed for the free movement of capital and goods except for a list of items, but it did not guarantee freedom of labour movements between the two sides. It gave the Palestinians the permission to trade directly with Arab and foreign countries for a limited list of goods.<sup>6</sup> Moreover, the CU gave the Palestinians the right to decide on their economic priorities, to determine the nature of their employment, industrial and agricultural policies, as well as to tax and invest in areas under its control. It also gave the Palestinians limited leeway in monetary and trade policy, but under Israeli trade policy supervision.<sup>7</sup> However, Palestinian trade remained bound by Israel trade and tax policies.

With regards to agriculture, Article VIII of the Economic Protocol promised, 'There will be free movement of agricultural produce, free of customs and imports taxes, between the two sides, subject to the following exceptions and arrangements'. It also allowed Palestinian agriculture to trade with other countries, lifted the ban on investment and allowed the Palestinian to run their agricultural plans. However, the EP just as the result of the Oslo agreement it did not give the Palestinian full control over the land, thereby limiting from the outset their ability to conduct land reform or major agricultural investment. By 2000, the elected Palestinian authority had only functional jurisdiction over 93% of the population. It had control direct over less than 19% of the land in the West Bank and 60% in the Gaza Strip (Area A). It had no sovereignty over land or water resources, which remained under Israeli regulation. Israel continued to control 59% of the West Bank (area C) and 40% of the Gaza Strip, as well as have territorial responsibility over area B (22% of the West Bank).

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6 These include the lists A1, A2, B. Quantities to be imported under these lists are to be determined by some agreed estimates of Palestinian market needs. Imports of goods A1 and A2 were not subject to Israeli imports duties but were regulated by Israeli standards and regulations.

7 In monetary policy, the PNA was not allowed to issue its currency, but was allowed establish a monetary authority. This was responsible for the management of banks and control of financial activity in the area.

Moreover, the Economic protocol stipulated that six agricultural items would not be given unrestricted access to Israel until 1998 (article VIII. 10). These included poultry, eggs, cucumbers and tomatoes, the last of which represented 26% of Palestinian exports to Israel in 1986/87.<sup>8</sup> Israel also kept various non-tariff barriers imposed on all entry of Palestinian goods, such as imposing veterinary and sanitary conditions, and requiring from all Palestinian exporters to obtain Israeli certificates that prove the safety of their products (article VIII.3-9). Furthermore, Israel kept the right to inspect all goods or personal its area (article VIII.9). Trucks seeking to enter Israel or to move between the West Bank and the Gaza Strip also needed to obtain security clearance of their owners and their drivers. These regulations compromised *de facto* the freedom of Palestinian agricultural produce to the Israeli market.<sup>9</sup>

### ***Agricultural Reality during the Oslo Years***

The outlet provided by Oslo had mixed effects on Palestinian agriculture. The Palestinian authority did not have the territorial contiguity necessary for large land reform or infrastructural projects. It succeeded, though, in enabling many Palestinian families in area A to register their land and to divide it according to inheritance laws, thereby affirming private property and facilitating investment options. The effects on agricultural redistribution and production, however, are difficult to access, in the absence of any census, and given the limited size of area A (18.8% in the West Bank and 60% in the Gaza Strip). In the West Bank, the land became even more fragmented while in the Gaza Strip, the share of large ownership had already grown in the pre-Oslo years as a result of economic competition that drove small farmers out of the market.

In terms of agricultural production, Palestinian farmers tried to take advantage by the limited opportunity available by increasing investment and productivity. Agricultural cooperatives, which amounted to a total of 113 cooperatives, played an important role in improving credit access to small farmers, providing subsidised inputs as well as developing agricultural infrastructure (see PARC, 2000). Investment in agricultural also increased, as a result of aid from the European union. The EU channelled a total of 341 million euro to the WBGS between 1995-1999.<sup>10</sup> Yet, production continued to shift towards export oriented items and goods of easy access to Israel. This included in particular seasonal vegetables and cut flowers, both heavily irrigated goods. The area of cut flowers more than tripled between 1994 and 1997 (from 202 dunums to 952 dunums) as did their income. The value of vegetables products nearly doubled over the same period (from US \$134,000 to 216,000) (PCBS, 2003). Meanwhile, the production of field crops flattened and the WBGS continued to be an importer of grains. The value added of the agricultural sector as a whole increased, albeit at fluctuating rates.

However, agricultural output and scope for growth have been seriously constrained by Israeli regulation and closure policy. Imposed since 1993, this policy prevented Palestinians goods and people to move in or out of the areas A of the West Bank and Gaza Strip, thereby depriving agriculture of international markets as well as of local markets. Between 1994 and 1999 over 443 days of closure were imposed on the WBGS, thereby causing a fall in output. Output grew biannually, increasing in years with few days of closures (Figure 4).<sup>11</sup> Moreover, security restrictions at check points increased transaction and waiting costs and often led to the degradation of products before reaching their destination. In absolute terms, agricultural output fell by 8% in 1997/98 compared to its level in 1992.<sup>12</sup> Exports fell by 40% between 1994 and 1998, with agricultural goods representing less than

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8 Calculated from ICBS (1989), *Statistical Abstract of Israel*, Table 27.23.

9 According to El-Musa and Jafari (1995: 24), these restrictions meant that only 25% of WBGS vegetable production would have unrestricted access to Israel.

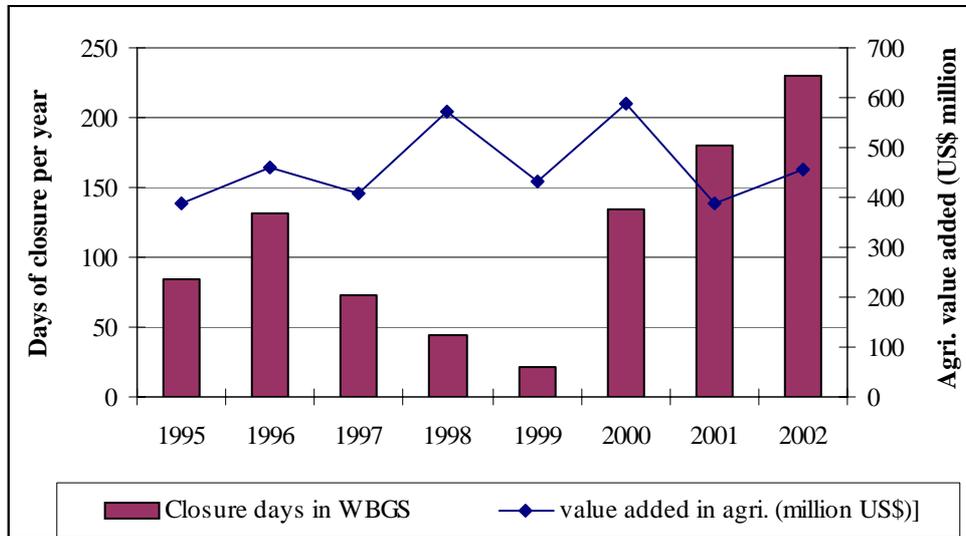
10 [http://europa.eu.int/comm/europeaid/projects/med/bilateral/w\\_b\\_gaza\\_en.htm](http://europa.eu.int/comm/europeaid/projects/med/bilateral/w_b_gaza_en.htm)

11 1998 and 2000 figures referring to output before the Al-Aqsa Intifada.

12 Agricultural output between 1992 and 1997/8 fell from 1,135,400 tons to 1,029,627 tons (Farsakh, 2005, 330).

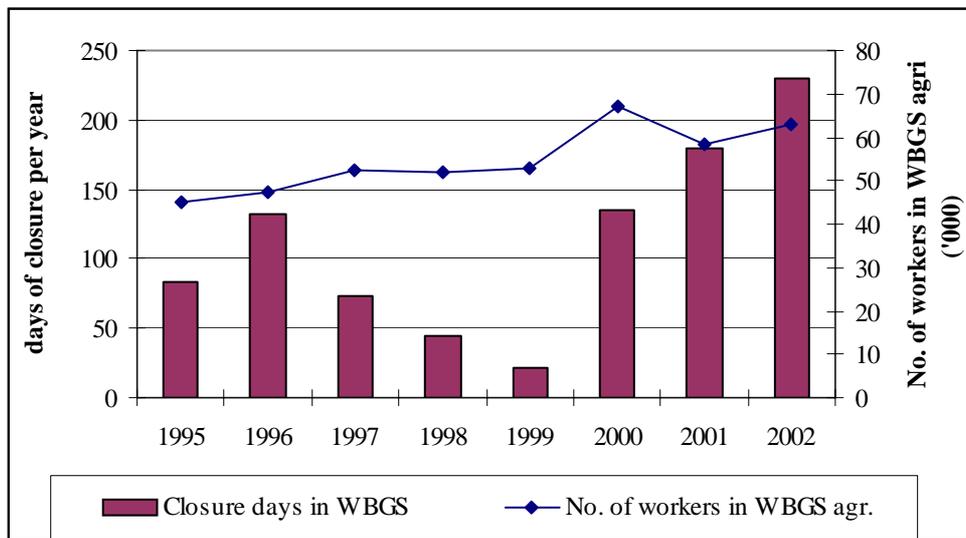
15% of total exports in 1998 (UNSCO 2000a). Agricultural trade between the Gaza Strip and the West Bank also fell. In 1997, Gaza's sales to the West Bank were one third of their 1993 levels.<sup>13</sup>

**Figure 4. Agricultural Output and Israeli Closures, 1995-2002.**



Source: Farsakh (2005)

**Figure 5. Palestinian Employment in WBGS Agriculture and Israeli Closure, 1995-2002**



Source: Farsakh (2005)

These developments had direct effect on agricultural employment. Between 1993 and 2000 agriculture absorbed 11,900 workers in the West Bank compared with 20,300 in the Gaza Strip. The increase in employment took place irrespectively of the rise or fall of days of closure (Figure 5), but this increase was not simply due to agricultural growth. It was rather a function of restrictions put on Palestinians', and especially Gaza Strip inhabitants', access to the Israeli labour market. The closure and permits policy that were strictly applied to Gaza Strip workers meant that less than 15,000 workers were

<sup>13</sup> Gaza Strip's total exports to the West Bank remained at \$22.7million between 1994 and 1996, while exports from West Bank to Gaza Strip fell from \$27.3 to \$16.3million over the same period (UNSCO 1998).

employed in Israeli economy, compared with 40,000 in 1987 (Farsakh, 2005, 325). Many who did, were hired in one of the 17 Israeli settlements established in the Gaza Strip or in the Eretz industrial zone.

The increase in agricultural employment has been hailed as a positive development, as it fosters Palestinian bond to the land. It is seen to play a major role in reducing dependence on Israeli labour market, increasing output as well as easing unemployment which ranged between 15-35% in the Gaza Strip compared with 9-23% in the West Bank, as the latter continued to be able to access Israel (PCBS, 2002). Palestinian agriculture remained important to women, as nearly a third of all active women are employed in it compared with 9-12% of all men (PCBS 2003). Meanwhile, the number of agricultural engineers continued to grow, improving thereby the chance of enhancing agricultural productivity. A total of 1241 agricultural engineer were censused in 2000, two third of which were in the Gaza Strip (PCBS, 2003). However, the capacity of agriculture to grow and absorb the ever-growing Palestinian labour force remained tied with access to outside markets, including Israel. While in absolute number agriculture continued to absorb labour, in relative terms the share of agriculture in total employment fluctuated in relation to Israeli closure policies.<sup>14</sup> Agricultural employment grew by over 36% between 1995 and 2000 while real wages rose by less than 20% over the same period.<sup>15</sup> Although the increase in wages is not insignificant, wages in agriculture remained the lowest wages in the economy, nearly 70% of the average wage in the WBGS and half of those paid in Israel.<sup>16</sup> It is not clear how far agriculture helped to alleviate poverty, that hit most strongly the refugee population.<sup>17</sup>

During the Oslo years, the agricultural sector became a reservoir of labour, absorbing those who could not find a job elsewhere. Agricultural growth remained determined by Israeli closure policy that further cut the WBGS into unconnected areas, as well as by restriction to outside market, on water and land resources. The cost of agricultural inputs continued to increase during the Oslo years and represented nearly two third of agricultural value added (Farsakh, 2005, 184).

### **Al Aqsa Intifada and the Bantustanisation of the WBGS**

The failure of the final status talks in Camp David in 2000 and the eruption of Al-Aqsa intifada, did not improve the conditions of the Palestinian rural sector. It rather locked it in its role as a labour reservoir, as Israeli policy confirmed a process of Bantustanisation of the WBGS (Farsakh, 2004, 2005). This is a process by which the Palestinian territories have been transformed into *de facto* population reserves encircled by Israeli settlements and the 'security wall'. Like in South Africa, Palestinians were locked up in fragmented parts of the West Bank that represented less than 59% of the West Bank, unable to exit their designated area without the possession of a permit issued by the Israeli authority. During the Intifada, Israel enhanced the restriction on Palestinian mobility while at the same time further expropriated their land.

In April 2002 Israel declared that the WBGS would be cut into 8 main areas out of which Palestinians cannot exit without holding a permit (ARIJ, 2002, 4). The Gaza Strip was cut into 4 unconnected parts. Over 225 checkpoints were installed all over the West Bank, making people's mobility to other Palestinian areas, let alone Israel impossible. Unemployment reached over 45% in the West Bank and Gaza Strip, while poverty was reported to have reached 60% of the Palestinian population. By the end of 2002, Real Gross National Income has shrunk by 38% from its 1999 levels (World Bank, 2003, 3). Meanwhile, settlements expansion went on unabated as more than 2500 new houses were built and 52 new settlement outposts constructed between September 2000 and January

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14 The share of agriculture in total WBGS employment fell from 17.7% in 1995 to 12.1% in 1999 (Farsakh, 2005, 160).

15 Calculated from Table 2 and from PCBS (1997, 2000), *Labour Force Survey*, Tables 39 and 40.

16 Calculated from PCBS (1997, 1998, 1999), *Labour Force Survey*, Tables 39-41.

17 Poverty (defined as persons earning less than 2.1 US dollars per day) increased in the Oslo years, touching 37% of people in the Gaza Strip and 15% of people in the West Bank in 1998 (World Bank 2001, 31).

2003 (FMEP, 2002). Furthermore, in June 2002 Israel started to build the separation wall between it and the West Bank. This wall is not built along the 1967 borders but within the West Bank, going as deep as 6km into certain areas. So far 120 km of the wall has been constructed, cutting 14,000 Palestinian families from their land and other Palestinian areas (Pengon, 2003). Upon termination, the wall is expected to be between 360 and 700 km long, cutting the West Bank into three unconnected areas, and keeping the Palestinians in control of less than of 40% of the West Bank. Mobility out of these areas will be determined by Israel alone.

Palestinian agriculture proved to be resilient but its ability to resist these developments has been limited. Agricultural employment increased again, and output was helped with a particularly good rainy season in 2000/2002. Labour wages and productivity though remained low. Israel, meanwhile, uprooted over 390,000 trees and confiscated 14,860 dunums for the construction of the wall by April 2003. The construction of the wall has so far trapped 16 villages, or 11,500 people, cutting into their most fertile land. It is estimated that upon completion of the first phase of the wall, in the northern part of the West Bank 120,000 dunums would be confiscated, i.e. 2% of the total WB land. So far over 6500 jobs have been lost as a result of these measures. Upon full completion of the wall, at least 10% of the West Bank would be confiscated by Israel, and Palestinians would lose access to 36 groundwater wells that discharge a total of 6.7 mcm per year (Pengon, 2003).

## Conclusion

The political economy of land and conflict in the West Bank and Gaza Strip has led to major changes in the Palestinian rural structure. Over the past three decade, the Palestinian rural sector has seen its agricultural productivity grow in the 1970s and early 1980s, and stagnate in the 1990s. It also saw its land size diminish and become more fragmented, mainly as a result of Israeli settlement policies. Output per dunum increased, though, as a result of improved irrigation techniques. Meanwhile, the rural sector's employment structure changed. Its labour absorption dropped up until 1987, but it increased afterwards, although at low productivity. It became increasingly wage labour dependent, especially in the Gaza Strip. The role of agriculture as a labour absorber remained however limited, as it would be unable to absorb a Palestinian labour force growing at more than 4.4% per annum since 1999, one of the highest rates in the world today (IMF, 2003, 24). The rural sector became above all dependent on Israel, both as a market for input and output, as well as for labour and credit. It failed to be oriented to internal and international markets, or to maintain a consistent sustainable growth that is not prone to Israeli closure and permit policies.

The pattern of Palestinian rural transformation has been a result of the way Israeli occupation determined the Israeli-Palestinian struggle over land resources, water and agricultural policy. It has been a outcome of Israel's attempt to maintain control over the largest amount of land as well as of Israeli imposed market regulation that sought to protect Israeli agricultural, rather than improve redistributive and production pattern. The Palestinians were encountered with unequal competition with Israeli goods while having limited, if any, access to financial resources and markets. They tried resisting the politics of expropriation as manifested in the construction of settlements and expropriation of land, by intensifying family labour, working the land albeit at low wages, and finding alternative forms of finance. Yet, their resistance has not been capable of stopping the fragmentation of Palestinian land. The Oslo years, while offering a window of opportunity, have demonstrated that without having full sovereignty over the land, the Palestinian rural sector would be unable to be anything than a reservoir of low productivity labour.

Palestinians rural sector faces today a number of challenges. It needs to increase its labour productivity as well as reduce its dependence on Israel. It needs above all to stop the 'bantustanisation' process it has been undergoing, as a result of the territorial fragmentation that the Oslo years institutionalised and the Israeli permit and closure policies have maintained. The scope for sustainable agricultural change though would require a number of prerequisites, first among which is defining

Palestinian sovereignty over the land, and protecting its contiguity. Moreover, agriculture will need more investment and credit, as well as further participation of the rural population. Access to internal and international markets is also primordial. In this regard, the EU has an important role to play, not simply as an emergency aid donor, but also as an accessible market for Palestinian agricultural products. It has also a central role to play for ensuring the establishment of a viable and contiguous Palestinian state. Until these prerequisites are met, the rural sector is likely to remain a fragmented labour reservoir, waiting for a political as well as an economic solution.

Leila Farsakh  
Center for International Studies  
Massachusetts Institute of Technology  
292 Main St.  
Cambridge  
MA 02139  
USA

Lfarsakh@mit.edu

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