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Disclaimer

The opinions and statements contained herein are those of the author only and do not necessarily represent the opinions of the Food and Agriculture Organization of the United Nations

Acronyms

ACH	Accion Contra el Hambre
Al-Sahel	Al-Sahel Company for Institutional Development and Communication
ARIJ	Applied Research Institute Jerusalem
FAO	United Nations Food and Agriculture Organisation
FIVIMS	Food Insecurity and Vulnerability Information and Mapping System
ICRC	International Committee of the Red Cross
JWC	Joint Water Committee
MAS	Palestine Economic Policy Research Institute
MCM	Million Cubic Meters
MoA	Ministry of Agriculture, Palestinian Authority
MoSA	Ministry of Social Affairs, Palestinian Authority
NIS	New Israeli Shekel
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
PA	Palestinian Authority
PARC	Palestinian Agricultural Relief Committees
PCBS	Palestinian Central Bureau of Statistics
PWA	Palestinian Water Authority
TIM	Temporary International Mechanism
UAWC	Union of Agricultural Work Committees
UNRWA	United Nations Relief and Works Agency for Palestinian Refugees in the Near East
WBGS	West Bank and Gaza Strip
WFP	United Nations World Food Programme
WHO	United Nations World Health Organisation

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Executive Summary

The Palestinian economy in the West Bank and Gaza Strip (WBGS) has sustained significant losses as a result of Israeli measures taken in the aftermath of the outbreak of the second *Intifada* in September 2000. These losses were primarily driven by the closure regime, the construction of the Barrier, and, recently, the international economic and political boycott of the PA. Israeli measures on the ground are *de facto* fragmenting the West Bank, while access to the Gaza Strip is severely restricted. Further, the international boycott of the PA and Israel's withholding of PA tax revenue have disempowered Palestinian institutions, undermined services, and allowed important infrastructure to decay. As a result, key food security determinants—such as wage labour, food trade and social security schemes—are under severe threat, and dramatic change is being observed in some areas.

Food security programmes will have limited impact in the context of the structural constraints caused by continuing military occupation. Nonetheless, certain short-term food security measures should have an impact under a crisis scenario. For instance, interventions in the areas of food production for local consumption and income transfers (including food and cash aid, temporary job creation schemes and social hardship cases) have immediate impact on the food security of targeted families. With regard to income transfers and social safety nets, there is a need to enhance the monitoring of poverty as well as social and humanitarian needs. This includes food insecurity while harmonizing beneficiary selection criteria, avoiding gaps and duplications between programmes and improving coherence (i.e., minimizing inclusion and exclusion errors). Careful analysis and planning are critical in order to stabilize and advance the situation to the extent possible given current circumstances. Therefore, the objectives of this study are to:

- Explore recent trends in local agricultural production in order to identify specific problem areas where interventions are needed and specific opportunities for strengthening the agricultural sector's ability to respond to local consumption demands.
- Facilitate targeting by examining vulnerability to food insecurity according to region types and household characteristics.
- Investigate the vulnerability of the food supply chain through in-depth understanding of the role that traders play in the food security system at local levels.
- Shed light on local social safety nets, including Islamic charitable institutions, whose very important role in food security is much overlooked and/or misunderstood by international organizations.
- Humanize the impact of food insecurity on families through extensive in-depth case studies exploring the complexities of Palestinians' lives.
- Suggest concrete recommendations for strategic improvements in the food security sector in WBGS.

This study builds on the findings and recommendations of two previous studies, namely, *Economic Fragmentation and Adaptation in the Rural West Bank* published by UNSCO in

2005; and the *Comprehensive Food Security and Vulnerability Analysis* conducted jointly by FAO and WFP and published in 2007.

The present study focuses exclusively on the West Bank for two reasons. First, food system fragmentation is an important concern in the West Bank, unlike the Gaza Strip, which has not experienced internal food system fragmentation since the withdrawal of the Israeli army and the dismantling of Israeli settlements at the end of 2005. Second, the study team was prevented from accessing the Gaza Strip for security reasons.

The study focuses primarily on urban areas because knowledge about rural food insecurity is robust, and the range of possible food security interventions is fairly well understood. Less is known, however, about food security and insecurity among urban households, which according to the FAO/WFP food security analysis, is increasing. Nonetheless, there is some attention attributed to rural and remote areas in this report.

The methodology used for this study combined an extensive literature review, desk research, and one or two in-person interviews with households in each of the urban centres and remote areas. A workshop was also organized to get key informants' comments about changes in local agricultural production. Additional interviews were conducted with food security professionals.

It was predicted that territorial fragmentation would lead to the appearance of economic islands with high degrees of vulnerability along with susceptibility to trade shocks and local crop failure. Remarkably, this study found that despite the territorial fragmentation due to Israeli measures, this fragmentation did not translate to equivalent fragmentation in food systems as was predicted. Palestinian resilience and local responses are credited for mitigating against a more dramatic humanitarian crisis.

Given that the incidence of food insecurity in the WBGS is a function of economic access rather than a matter of physical availability, this study recommends that food insecurity interventions focus on 1) improving existing local capacity to respond to food insecurity, including strengthening local charitable organizations; and 2) circumventing the collapse of the food supply chain by improving the efficiency of agricultural production, and assisting wholesalers and retailers to maintain the food supply sector. The study concludes with specific recommendations in four critical areas: agricultural production, circumventing the collapse of the food supply chain, supporting social safety nets, and improving the effectiveness of aid targeting.¹ Under normal circumstances recommendations would assume greater involvement of local, national and international actors. However, the PA's political, institutional and fiscal crisis coupled with the continuous Israeli occupation policy and the ambiguity of the international community, has compelled this study to focus on a subset of recommendations. These pertain to the domain of Palestinian as well as aid actors in terms of feasible action.

Agricultural Production

Structural shifts in the Palestinian agricultural sector have resulted in less quantity and variety of local output. Moreover, the ongoing and increasingly restrictive closure regime in the

¹ Recommendations are intended to provide a general framework and the basis for further FAO consultations at the local level.

WBGS makes food distribution challenging. Factors that impact local output and food distribution include market constraints encompassing population growth and urbanization; the Barrier; movement restrictions; depressed wages; and, limited access to water. Production problems include an unfavourable institutional environment; drought and desertification; the increasing cost of agricultural production inputs; and, the fragmentation of agricultural land holdings resulting in depressed agricultural earnings.

These developments should be analyzed and addressed in the context of a clear agricultural strategy that is sufficiently funded to ensure implementation. The existing weak institutional framework and the significant drop in total value added from agricultural production are among the problems that need to be tackled to increase own-production of food as well as exports. To this end, the following should be considered:

- Development of agricultural strategies and policy and improvement of coordination among stakeholders.
- Development of programmes that focus on increasing the value added of agriculture.
- Piloting the production of fruit for the domestic market and for export to Jordan and other neighbouring countries. Currently, most fruit is imported from Israel. Since Israel and the WBGS share similar weather conditions, the production of fruit is likely to be successful.
- Considering increased cultivation of medicinal plants as they do not require large up-front investment and have a reasonably good export potential.
- Organizing grassroots farmers' organizations and specialised farmers' associations, while improving links with marketing companies and channels.
- Promoting investment funds and credit systems (with possibilities for agriculture insurance initiatives).
- Building the capacity for specialized agricultural extension services.

Circumventing the Collapse of the Food Supply Chain to Protect Trade-based Entitlements

Supply chain intermediaries play an integral role in the food security systems in the WBGS. Accordingly, they should be considered when designing intervention programmes that aim to improve the food security situation. This is especially important since the dire economic situation has made many small wholesalers and retailers vulnerable, forcing many of them to close their businesses. Also, most of assistance programmes overlook the need to strengthen this important link in the food supply chain.

Ideally, traders, consumers and the Palestinian economy as a whole would benefit from a national strategy to enhance the competitiveness of local production vis a vis the influx of international and Israeli products. This should include improving the quality of local food to increase competitiveness with Israeli products in the local market, improving cropping patterns to avoid surplus peaks, improving packaging and transportation, and better institutionalising local links between producers and traders. Nonetheless, it should be noted that Palestinian farmers may be competitive solely in high-value foods (e.g., olive oil, fruits,

vegetables and poultry) due to the scarcity of land and water resources. Indeed, any significant expansion in the production of cereals and pulses and competition with international markets is not possible, despite the high transaction costs of imported foods.

Direct support to traders (e.g., credit lines, incentives to promote local produce) should be considered. Laws protecting local production and consumer food safety should be enforced.

In the meantime, providing vulnerable households with vouchers that can be exchanged for food in retail and small wholesale shops is believed to be more effective at countering food supply chain fragmentation than distributing food packages. Also, food vouchers should include rations of fresh vegetables, fruits, and meat, not just dry foods. Voucher programmes should be closely coordinated with local charitable organizations. This may potentially empower local organizations, thus strengthening resources for local resilience.

Supporting Social Safety Nets to Protect Income-based Entitlements

Social safety nets are critical to the protection of a large percentage of Palestinians, but it must be acknowledged that their effectiveness in long-term poverty alleviation is limited. The actual outreach of such programmes (number of poor assisted), as well as the amount of aid (cash, in-kind and services) distributed to the beneficiaries are limited. At the aggregate level, the poverty gap is only partially filled by social safety net programmes.

This study strongly recommends that international organizations working in the field of humanitarian and social assistance continue and expand support to the existing social safety nets. Special attention should be given to local community charitable organizations—they are well-positioned to target vulnerable groups that are often overlooked by larger programmes.

Besides income-based entitlements, health care, education and social services must also be protected. Social safety nets cannot fill the void caused by the collapse of public institutional infrastructure triggered by the international boycott of the PA.

Temporary job creation and cash assistance are essential to provide temporary income support to the unemployed, thus enhancing households' capacity to cope with shocks and stresses. There is also a potential spin-off effect on local economies, especially if jobs are aimed at creating productive assets, such as land reclamation.²

Although not within the scope of this study, a major issue that remains is labour based entitlements. Public employment is a key source of entitlements to food in the West Bank and Gaza Strip. It is important to focus on the fiscal sustainability of this type of employment. For the time being, the private sector is unable to generate enough jobs to absorb the growing labour force. There is a need to promote sustainable solutions such as long-term job creation. Decreased levels of education due to perceptions of its futility, also call into question the type of labour that will be generated.

Improving the Effectiveness of Aid Targeting

Programs targeting food insecure households in different areas should be flexible to respond to distinct and unique needs. Livelihoods assistance (e.g., vocational training, microfinance

² FAO/WFP. (2007). *Comprehensive Food Security and Vulnerability Analysis*.

schemes, and income generating activities) should be provided in all areas to allow households an opportunity to exit the poverty cycle.

Vulnerable households in rural areas: Food security projects such as sheep distribution, beehives distribution, home gardens, roof top gardens, among others, should continue in rural areas. Veterinary services must also be provided. However, the specificities of each area have to be taken into account. For example, desertification of southern areas and lack of water should be dissuasive for sheep breeding unless fodder and water are distributed as well.

Vulnerable households in urban areas: In urban areas, the few strategies for coping should be maximized. These include voucher programs and cash assistance as priority income transfer to food insecure households. As mentioned prior, voucher schemes should encourage and support local food production in rural and peri-urban areas in close proximity in order to minimize transportation limitations and associated costs. Support and coordination with local charitable societies and Zakat committees should take place. At the same time, the closure regime measures that interfere with trade and access to social services must be lifted so that the need for assistance decreases over time.

Vulnerable groups in remote areas: In remote areas, especially those subject to settler or army attacks, food security projects should incorporate protection of civilians in the context of international humanitarian law. Responsibility for such projects may fall disproportionately on those agencies (ICRC, UN, and others) least affected by security and access constraints. Those localities with unsustainable livelihood systems are largely dependent on external assistance and must be guaranteed access by humanitarian organizations. Notably, given the high vulnerability profile of isolated localities in Area C (e.g., Massafer Yatta, Massafer Bani Na'im), these areas should be targeted rather than avoided.

Chapter One: Introduction and Methodology

The situation in the West Bank and Gaza Strip (WBGS) has changed dramatically since the beginning of 2006. Israeli measures on the ground are *de facto* fragmenting the West Bank, while access to the Gaza Strip is severely restricted. Further, the international boycott of the PA and Israel's withholding of PA tax revenue have disempowered Palestinian institutions and allowed important infrastructure to decay. As a result, key food security determinants—such as wage labour, food trade and social security schemes—are under severe threat, and dramatic change is being observed in some areas.

Since Palestinians are heavily dependent on imports for most of their staple foods, trade has traditionally been the backbone of food availability in the WBGS. Commercial food trade is affected by Israeli measures in multiple ways, including through banking restrictions, Palestinians' lack of financial liquidity, restricted access to credit, high transportation and transaction costs, and administrative red tape. Even traditional food trade patterns between cities, villages and rural areas in the same region are undergoing changes in response.

With regard to local food production patterns, the West Bank used to be a united geographical entity with specificities and complementarities. The Jordan Valley mainly produced vegetables; the northern West Bank produced vegetables and olives, while the southern West Bank concentrated on animal production. However, the increase in closure regime measures is disrupting both the specificities and the traditional complementarities of Palestinian agricultural production.

It was predicted that territorial fragmentation would lead to the appearance of economic islands with high degrees of vulnerability (in terms of food security and poor nutrition) along with susceptibility to trade shocks and local crop failure. Remarkably, this study found that despite the territorial fragmentation due to Israeli measures, this fragmentation did not translate to equivalent fragmentation in food systems as was predicted. Palestinian resilience and local responses are credited for mitigating against a more dramatic humanitarian crisis.

This new and complex situation necessitates a new understanding of food security related vulnerabilities in WBGS. Actors in the food security sector need this information to craft a comprehensive response that embraces complementarities among different aid modalities (e.g., food and cash assistance, employment generation schemes, livelihood protection, income generation activities, adaptation of food production systems and social safety nets).

This study builds on the findings and recommendations of two previous studies, namely, *Economic Fragmentation and Adaptation in the Rural West Bank* published by UNSCO in 2005; and the *Comprehensive Food Security and Vulnerability Analysis* conducted jointly by FAO and WFP and published in 2007. The UNSCO study focused on the northern and middle areas of the West Bank and examined the fragmentation of established patterns of economic activity between the West Bank and Israel, between districts within the West Bank, and between urban and rural communities. It found that communities' ability to cope with closure was largely a function of 1) their previously existing level of economic diversity and access to material, financial and human resources, and 2) their degree of dependence on Israeli markets. The study found that economic activity is becoming more localized, resulting in a more decentralized system of production and trade and the emergence of new local centers away from traditional urban centres. The study also found that communities' coping

strategies have been insufficient to recover levels of wealth and employment security enjoyed in previous periods, or to overcome ongoing pressures of fragmentation. The main recommendation was to address the underlying causes of community vulnerability to economic shocks in order to realize the potential for lasting rural economic development.

The *Comprehensive Food Security and Vulnerability Analysis* was conducted in response to major changes in the political and economic situation of the WBGS in 2006. Updated information was needed to inform programmatic planning and policy development as it relates to food security. To this end, the study sheds light on the dimensions of food security, including availability, access, utilisation and the cross-cutting dimension of stability. However, primary focus was on food access, and in particular, economic access, as analysis of the food security situation in the WBGS consistently demonstrates that economic access is the linchpin of food security for Palestinians.

Some key findings of the *Comprehensive Food Security and Vulnerability Analysis* were the following:

- Local production does not and will not provide sufficient staple food commodities for Palestinians in WBGS, and the food supply will always rely on imports and commercial channels.
- Areas that have agricultural potential are affected by closures, but *economic access* to food (not low food availability) continues to be the most significant food security concern, especially given food price increases amidst drastic reduction of livelihoods.
- There are increasingly distinct, and increasingly isolated “economic islands” that are the basis for determination of market catchment areas. To cope with the new situation, traders are stretching their credit lines both with their suppliers and customers and increasingly relying on commodities from within their own governorates or neighbouring governorates. Still, most traders rely on commodities from outside their governorates, especially from Israel.
- Acute food crises have not materialized in the WBGS because strong social ties tend to preclude the possibility of acute household hunger. However, since the *Intifada* in 2000 and especially in 2006, food security in WBGS has declined and dependence on food aid has increased.

Therefore, this study intends to follow up on previous research and focus on information gaps that were identified especially during the course of the *Comprehensive Food Security and Vulnerability Analysis*. Most importantly, this study will:

- Explore recent trends in local agricultural production in order to identify specific problem areas where interventions are needed and specific opportunities for strengthening the sector’s ability to respond to local consumption demands.
- Facilitate targeting by examining vulnerability to food insecurity according to region types and household characteristics.
- Investigate the vulnerability of the food supply chain through in-depth understanding of the role that traders play in the food security system.

- Shed light on local social safety nets, including Islamic charitable institutions, whose critical role in food security is much overlooked and/or misunderstood by international organizations.
- Humanize the impact of food insecurity on families through extensive in-depth case studies exploring the complexities of Palestinians' lives.
- Suggest concrete recommendations for strategic improvements in the food security sector in WBGS.

The present study focuses exclusively on the West Bank for two reasons. First, food system fragmentation is an important concern in the West Bank, unlike the Gaza Strip, which has not experienced internal food system fragmentation since the withdrawal of the Israeli army and the dismantling of Israeli settlements at the end of 2005. Second, the study team was prevented from accessing the Gaza Strip for security reasons.

The study focuses primarily on urban areas because knowledge about rural food insecurity is fairly robust, and the range of possible food security interventions is fairly well understood. Less is known, however, about food security and insecurity among urban households, which according to the FAO/WFP food security analysis, is increasing. Nonetheless, there is some attention to rural and remote areas in this report.

One encouraging finding from previous studies is the major role played by Palestinian resilience in mitigating against humanitarian crisis. Strong social ties and social safety nets have helped Palestinians cope with Israeli measures and economic distress since the PA fiscal crisis. This study looks more deeply into this phenomenon by exploring the role of charitable societies and Zakat committees, institutions that are often left out of food security sector discussions.

Additionally, the report explores food production and food trade patterns in order to better understand how agriculture can act as an economic shock-absorber, especially since the Palestinian economy is so heavily dependent on food imports.

The methodology used for this study combined an extensive literature review, desk research, and one or two in-person interviews with households in each of the urban centres and remote areas as follows: Tubas (2); Jenin (2); Nablus (2); Qalqiliya (2); Azzariya (2); Abu Dis (2); Tuweini (1); Sussya (1); Laseifi (1); Sikka (2); Al-Kum (1); and, Massafer Bani Na'im (1). In-person interviews were also conducted with traders (wholesalers and retailers) in Jenin; Tubas; Salbit; Nablus; Qalqilya; Hebron; and, with charitable societies and Zakat committees in Jenin; Tubas; Salbit; Nablus; Qalqilya; and, Hebron. A workshop was also organized to obtain key informants' comments regarding changes in local agricultural production. Participants in the workshop included people from the Ministry of Agriculture, Ministry of National Economy, Ministry of Planning, Union of Agricultural Work Committees (UAWC), Palestinian Agricultural Relief Committees (PARC), and the Palestinian Olive Oil Council. Additional interviews with UAWC, Oxfam GB, ACH, and CARE International shed light on the reality of the fragmentation on the ground.

Chapter Two: Agricultural Production

2.1. Overview

Agriculture has traditionally played a significant role in the Palestinian economy by contributing to the livelihood of a significant percentage of Palestinian households. After the outbreak of the second *Intifada* in 2000, and as a result of reduced access to Israeli labour markets, the agriculture sector became an increasingly important source of employment within the WBGS, but it is not clear if the increase in informal agriculture is fully reflected in official statistics. According to PCBS, in 2005, the agricultural sector accounted for 14.6% of all employment among economically active persons, a slight decrease from the 2004 figure of 15.9%, but an increase from the 1999 figure of 12.6%. PCBS reported that agriculture contributed nearly 12.5% to the GDP in 2005, up from 10.2% in 1999.³ Agriculture has also provided work for nearly 40% of Palestinians who are employed informally and supported the livelihoods of those farmers who cultivate for their own consumption.⁴

However, agriculture's contribution to the Palestinian economy and its contribution to food security are constrained. Rapid population growth and demographic expansion combined with political and economic deterioration over the past three decades have been reshaping agricultural systems in the WBGS. Overall, there has been a detrimental effect on the degree to which local agricultural production can sustainably contribute to local food availability and provide sustainable livelihoods to farming households and communities. These include, *inter alia*: a slow and gradual shift from open field farming to horticulture; increasing prices of agricultural inputs (especially animal feed); limited and deteriorating water resources as a result of low precipitation rates and creeping desertification; shrinking marketing opportunities due to the Israeli closure regime measures; levelling of significantly large agricultural areas in the Gaza Strip; an unfavourable institutional framework; and, the construction of the Barrier, which has engulfed nearly 10% of the total area of the West Bank.⁵

2.2 Factors Affecting Agricultural Production

2.2.1. Population Growth and Urbanization

The Palestinian population in the WBGS was estimated at 3.75 million on 1 April 2005. The PCBS projections place the rate of growth for the West Bank and Gaza Strip near 5% at present, with growth rates around 4.7% for the West Bank and 5.4% for the Gaza Strip.⁶

Population growth, combined with annexation of Palestinian lands to Israeli settlements, is a direct factor in the decreased ability of local production to meet domestic demand for food. Given the population growth rates, total food supplies must rise by at least 4.7% in order to maintain per capita food consumption at its present relatively low level. This is a very ambitious target especially since rapid urbanization and higher urban land prices tend to cause a switch in the use of land from agriculture purposes to more lucrative commercial purposes.

³ PCBS. *Labour Force Survey Annual Report: 2005*.

⁴ WFP. (June 2006). *Market Assessment: Occupied Palestinian Territory*.

⁵ WFP. (June 2006). *Market Assessment: Occupied Palestinian Territory*.

⁶ PCBS. *Mid-Year Population Projections, 2005*.

For example, in the Gaza Strip, one of the most densely populated areas in the world and one which has one of the world's highest population growth rates, the land available for agricultural use has decreased by 45% over the ten-year period from 1996-2005.⁷ According to the land use statistics published by PCBS, there were approximately 180,000 dunums⁸ available for agriculture in Gaza in 1996. This figure dropped to approximately 100,000 dunums by 2005. While most of this decrease can be attributed to the Israeli army's destruction of farm assets since 2000, it is also related to population growth in the Gaza Strip.

In addition, the expansion of settlements in the West Bank including East Jerusalem (with a population of approximately 450,000 settlers) places stress on Palestinian access to water resources, reduces available land, and interferes with interaction between Palestinian localities, thus undermining agricultural production.⁹

2.2.2. Agricultural Earnings and Wages

Agricultural wages are lower than wages in any other sector of the Palestinian economy, thus making waged labour in agriculture unappealing for the long-term. Agricultural wages are lowest in the Gaza Strip and the gap between agricultural and other wages is also greater in the Gaza Strip than elsewhere in the WBGS. Further, throughout the WBGS, wages paid to women for agricultural work are significantly lower than those paid to males.

Notably, while OCHA reports that most of the adjustment to closures and curfews has taken place in job loss rather than wage loss,¹⁰ the agricultural sector is an exception. After adjusting the PCBS nominal figures for the year 2000 to real rates, it can be noted that agricultural wages were 84% of the average wage for all employees in the West Bank and 65% of the average wage in the Gaza Strip. Five years later, in 2005, agricultural wages had gone down to 75% of the average in the West Bank and 46% of the average wage in the Gaza Strip. Further, agriculture remains a “shock absorber” during periods of transient unemployment and does not provide favorable conditions for sustainable employment.

2.2.3. Limited Access to Water; Drought, and Desertification

Israelis and Palestinians share the two main sources of water available to farmers in the region—surface water and ground water. Surface water, consisting namely of the Jordan River, is shared geographically; however Palestinian farmers have not been able to tap this water since 1967. The second shared water resource is the large underground mountain aquifer basin, 20% of which is consumed by Palestinians. The aquifer basin is composed of three underground reservoirs or sub-aquifers: the Western Aquifer, the North Eastern Aquifer and the Eastern Aquifer. The first two are geographically shared between Israel and the West Bank, whereas the Eastern Aquifer is completely located beneath the West Bank and is not a shared resource.

⁷ PCBS, *Agricultural Statistics 2004/2005*.

⁸ One dunum = 1000 square metres or 0.1 hectare

⁹ Peace Now. (October 2006). *Breaking the Law in the West Bank—One Violation Leads to Another: Israeli Settlement Building on Private Palestinian Property*.

¹⁰ OCHA. (December 2006). *Humanitarian Monitoring Report*.

While the 1995 Interim Agreement recognized Palestinian water rights, it did not clearly define them. Instead it specified that these rights would be settled in the context of permanent status negotiations. The Oslo Accords were guided by the general principle that any additional water for Palestinian use would be produced from previously unutilised water resources and not by redistribution of existing sources, namely the Eastern Aquifer.¹¹

The Palestinian agricultural sector consumes an estimated 175 MCM³ of water per year, or more than 60% of the total water consumption in the WBGS. About 70% of this water originates from wells and the remaining 30% from springs.¹² Despite its relatively high share of water use, the agricultural sector still suffers from severe water shortages, which are aggravated by uneven per capita allocations between the WBGS and Israel.

The Interim Agreement also set up a permanent Joint Water Committee (JWC), which deals with all water and sewage-related issues in the WBGS. It issues the required well-exploitation permits and any new well drilling and water development require the Committee's approval. The JWC makes decisions by consensus. However, there is no dispute settling mechanism therefore, Israel is effectively able to veto any request by Palestinians to implement new water projects in the West Bank. Thus, Israel has effectively maintained control over water resources in the West Bank. The Palestinian Water Authority (PWA) has been given administrative responsibility nonetheless; overall control of water has remained with Israel.¹³

In fact, the JWC rarely approves drilling of new wells. Even drilling a well in Area A—theoretically under the complete sovereignty of the Palestinian Authority—requires Israel's consent. If Palestinians wish to dig a well in Area C, in addition to the JWC approval, they must also obtain approval from the High Planning Committee of the Israeli Civil Administration.¹⁴ Not only has the JWC consistently refused to allow drilling of any new agricultural wells, they also generally forbid the upkeep and maintenance of old agricultural wells. In total, from 1967 to 2004, Israel issued only 23 new permits for Palestinian wells. Before 1967, there were approximately 320 agricultural wells in the West Bank, yielding a total of 45 MCM of water per year. The current yield of these water wells does not exceed 24 MCM per year.

Unlike their Palestinian neighbours, Israeli settlers do not require the approval of the JWC before sinking wells in the West Bank. Palestinian hydrologists complain that settlers have dug wells so close to existing Palestinian springs and wells that many Palestinian sources have run completely dry.¹⁵ This over-pumping affects the long-term viability of water resources across the whole West Bank.

The bleak water situation is further exacerbated by below-average annual rainfall in the WBGS and the gradual desertification of the eastern slopes of the West Bank—prime grazing areas for herders. The late onset of the rainy season has had severe consequences for herders,

¹¹ Palestinian Hydrology Group. (2006). *Water for Life, 2005*.

¹² Abu-Sada, C. (2006). *Farmers Under Occupation: Palestinian Agriculture at the Crossroads*. Unpublished Research Paper, Oxfam GB.

¹³ Abu-Sada, C. (2006). *Farmers Under Occupation: Palestinian Agriculture at the Crossroads*. Unpublished Research Paper, Oxfam GB.

¹⁴ Palestinian Hydrology Group. (2006). *Water for Life, 2005*.

¹⁵ Interview with Dr. Abdel Rahman Tamimi

affecting approximately 150,000 heads of livestock and 300,000 dunums of land.¹⁶ According to ACH,¹⁷ the drought will cause a significant reduction in the yield of cereals and availability of pastures, which will lead to a 50% reduction in the production and quality of milk and a 10-15% increase in the animal mortality rate. The price of fodder has risen by 35% (one ton of barley was 850 NIS¹⁸ in November 2006 and reached 1,200 NIS at the end of December 2006), while in the same period the per-kilo price of meat has dropped by 15% (from 55 NIS to 40 NIS). Herders, especially the Bedouins near Yatta, are sinking further into poverty and debt. Many fear being forced out of business and not being able to pay off their debts even if they sell all their herds.¹⁹

The water situation in Gaza is even more critical. The Gaza Strip faces a serious lack of water, and serious water quality problems. Currently, groundwater is still the main source of water in the Gaza Strip for both domestic and agricultural use. Already the amount pumped from groundwater is much higher than the natural replenishment of the groundwater aquifer. Rainfall, averaging 330 mm/year, is the main natural water source that replenishes the groundwater aquifer, but it is insufficient to refresh the groundwater system.²⁰

According to the PWA, extraction from the coastal aquifer is almost twice the available recharge, resulting in a decrease of 200-300 mm per year in the water level. In 2002, the available yield of groundwater was about 91 MCM/year while the total extraction for domestic and agricultural use was 153 MCM/year. This includes 5 MCM/year from Mekorot (the Israeli national water company). The result was a negative impact on water quantity and quality. The average total water pumped for domestic use, from 117 municipal water wells, reached 62 MCM/year by the year 2002; and only 18% of these wells meet WHO standards for drinking water given their very high concentrations of nitrate and chloride.²¹ The quality of the aquifers was further deteriorated by seawater intrusion as well as the overuse of agricultural fertilizers and pesticides. Therefore, the overall water deficit is estimated at 50-60 MCM/year.

Mekorot supplies the Gaza Strip with only 5 MCM of water, which leads to the over-exploitation of Palestinian-controlled water resources. Inevitably, population growth will lead to even greater over-pumping over time, and this will be accompanied by groundwater contamination due to inadequate sewerage systems. There are real grounds for concern that Gaza will lose its ground water aquifer if the situation continues to deteriorate. The PWA is under pressure to ensure potable water for domestic use. Already, increasing salinity is preventing many farmers from growing citrus fruit, forcing them to switch to more salt-tolerant vegetables and flowers.

2.2.4 The Barrier

The Barrier has significantly affected agriculture in many areas of the West Bank. The construction of the Barrier is accompanied by the confiscation of land; the destruction of houses, buildings, greenhouses and irrigation infrastructure; the uprooting of fruit trees; the

¹⁶ OCHA. (December 2006). *Humanitarian Monitoring Report*.

¹⁷ ACH. (2006). *Vulnerability and Medium Term Needs Assessment of Families in the South-Western Areas of Hebron Governorate*. Author: Rula Yousef Abu-Safieh.

¹⁸ 1 New Israeli Shekel (NIS) = approximately \$0.240 USD

¹⁹ OCHA. (December 2006). *Humanitarian Monitoring Report*.

²⁰ Palestinian Hydrology Group. (2006). *Water for Life, 2005*.

²¹ Palestinian Hydrology Group. (2006). *Water for Life, 2005*.

dissection of Palestinian towns and villages from the countryside; and the further fragmentation of the Palestinian population into segregated pockets on both sides of the Barrier.

According to the Local Aid Coordination Committee, the land confiscated in the first two phases of construction alone will exceed 570,000 dunums once the Barrier is completed around East Jerusalem and the Ariel settlements. The Barrier stretches some 400 kilometers at a cost of 1.4 million USD per kilometer. It engulfs the richest agricultural farmland in the northwest and the centre of the West Bank. OCHA estimates that only 20% of the Barrier's length runs along the Green Line, thus affecting more than 10% of the area of the West Bank and Jerusalem.²²

Farmers who own land on the Israeli side of the Barrier are obliged to apply for "green permits" to access their land through "agricultural gates." In total, as of October 2005, sixty-five gates had been constructed, of which only 27 are open to Palestinians with the appropriate permit and a further 10 are open on a seasonal basis. Twenty-eight gates are totally closed to Palestinians.²³

Only farmers who can demonstrate proof of land ownership are eligible for permits, and the permit regime is increasingly complicated as the Israeli authorities keep adding new, stringent requirements. Notably, only 5% of permit denials are due to security concerns, while a full 95% are denied for an alleged missing link between farmers and their land. For example, at the beginning of 2004, Israeli authorities requested that those with permits renew their proof of land ownership. In mid-2004, in the Qalqilya and Tulkarem governorates, applicants for permits to access their land had to demonstrate their relationship with the landowner if there was a discrepancy between the name on the deed and the name on the identity card. In 2005, for example, a grandson was refused a permit if he had failed to take certain administrative steps to re-title land before the death of his grandfather.²⁴

Even when granted, the permits do not allow farmers to cross through the gates with tractors or agricultural vehicles. Instead, they must either walk or use a donkey to get to their land and to carry their produce. As Oxfam noted, farmers often complain that Israeli soldiers are whimsical and undependable about opening the gates. Even when they are reliable, gates are generally opened for only 20 minutes to an hour, 2-3 times per day.

Those who can no longer cultivate their land because of restricted access to areas near the Barrier are at risk of having their land confiscated under the Ottoman Land Law (1858), which allows agricultural land to be declared "state land" if uncultivated for three consecutive years. Reportedly, several small farmers in these communities have been forced to abandon their agricultural lands and exit the sector as they were unable to access their lands behind the Barrier. Other means of land confiscation are detailed elsewhere.²⁵

²² OCHA. (January 2006). *Humanitarian Impact of the West Bank Barrier, Special Focus: Crossing the Barrier: Palestinian Access to Agricultural Land*.

²³ OCHA. (2006) *Humanitarian Impact of West Bank Barrier, Special Focus, Crossing the Barrier. Palestinian Access to Agricultural Land*, no. 6.

²⁴ OCHA. (2006) *Humanitarian Impact of West Bank Barrier, Special Focus, Crossing the Barrier. Palestinian Access to Agricultural Land*, no. 6.

²⁵ B'Tselem. (2002). *Land Grab: Israel's Settlement Policy in the West Bank*.

Not only is land and access to land lost due to the construction of the Barrier, but Palestinian water sources are also becoming inaccessible behind the Barrier. It is estimated that over 50 wells have already become inaccessible to Palestinian farmers. According to farmers interviewed as part of a verification assessment conducted jointly by FAO and WFP, the agricultural output of land on the Israeli side of the Barrier has significantly declined. Productivity losses due to the destruction of thousands of dunums of fruit trees, farmers' inability to access land behind the Barrier, and the destruction of many water wells have been compounded by a significant loss of marketing opportunities in Israel and the West Bank due to closure regime measures. The increasing cost of transport and agricultural inputs also contribute to rendering agricultural work "unprofitable."

The Barrier: Further Control of Water Sources in the Western Aquifer Basin ²⁶

The Western Aquifer Basin's annual replenishment capacity is about 380 MCM. Rainfall during the winter season (averaging 500-650 mm annually) is the main source of replenishment for this Basin. The recharge area of the Western Aquifer inside the West Bank is 1,686 Km² (68%). The area outside the Green Line (mainly discharge or extraction) is 780 Km² (32%) along the Green Line.

The constructed part of the Barrier will capture nearly 551 km² of the recharge area of the Basin. In addition, the projected in-depth wall will capture nearly 545 Km² more of the Basin. This will lead to nearly 70% of the total recharge area of the Basin falling under Israeli control in the isolated area between the Barrier and the Green Line. In this way, more than 30 groundwater wells and nearly 15 natural springs will be isolated from their rightful owners.

2.2.5 Movement Restrictions

After the outbreak of the second *Intifada*, the Israeli authorities intensified restrictions on the movement of Palestinians and Palestinian goods within the West Bank, between the West Bank and Gaza, and between the WBGS and Israel. Mobility restrictions are enforced in part through the erection of earth mounds, barbed wire fences, gates, passage terminals, and flying checkpoints. According to OCHA, these physical barriers increased by 25% between 2005 and 2006, when 471 physical obstacles controlled movement in the West Bank. Movement is further complicated by an elaborate permit system for people, vehicles, and the transport of goods.²⁷ In fact, Israeli closure regime measures divide the West Bank into three distinct areas, making inter-regional exchange of goods subject to special permits.

In addition, since 2002, a "back-to-back" transportation system has been implemented for all goods being moved within the WBGS and between the WBGS and Israel. Under this system, goods have to be unloaded from Palestinian vehicles at Israeli military checkpoints, extensively checked, and then re-loaded onto another vehicle on the other side of the checkpoint. Intended to bolster Israel's security, the back-to-back system results in serious time delays and damage to the goods being transported.

The Center for Jewish-Arab Economic Development conducted a survey of Israeli traders who deal with Palestinian farmers. The survey found that respondents believe that back-to-back crossings are not only utilized for security inspections, but also to filter out specific

²⁶ Palestinian Hydrology Group. (2006). *Water for Life*, 2005.

²⁷ OCHA. (December 2006). *Humanitarian Monitoring Report*.

produce during times of intensive competition with Israeli products. They believe that Palestinian produce is only allowed entry to Israel when there is a shortage of that food in the Israeli marketplace.²⁸

Movement restrictions have had a dramatic affect on food distribution systems in the WBGS. Prior to the *Intifada*, six wholesale markets in the WBGS provided wholesale fruits and vegetables to distributors and retailers. Now most of these markets are closed or have significantly reduced the scale of their operations. For example, 2004 annual sales figures for the Nablus market were a mere 5% of 1999 sales figures. The one million NIS per day market in Jalameh near Jenin, which used to be open to both Palestinian and Israeli wholesalers, has been closed since 2001 after the Israeli army incursion into the city. Such market disruptions have resulted in high transportation costs, an artificial shortage in products, and price distortions, leading many small farmers to exit the sector.²⁹

2.2.6 Unfavourable Institutional Environment

In addition to the above highlighted challenges, Palestinian farmers are faced with an unfavourable institutional environment, which includes 1) insufficient financial and technical resources to provide an enabling policy and regulatory framework, and 2) asymmetric trade relations, tariffs, and subsidies.

First, the Ministry of Agriculture has insufficient financial and technical resources to provide an enabling policy and regulatory framework for the development of the Palestinian agricultural sector. Since its establishment in 1995, the MoA has pursued a policy of minimal direct support to farmers as a result of the limited budget it receives (less than 1% of the PA's annual budget). As a result, and unlike its Israeli counterpart, the MoA is incapable of providing any protection to farmers against natural calamities or destruction of agricultural assets due to Israeli incursions. More importantly, the MoA, like other Palestinian ministries, is incapable of regulating the import of Israeli food products into the Palestinian market.

Second, Palestinians are disadvantaged by asymmetric trade relations, tariffs, and subsidies. Although direct support to farmers is minimal, Israel does apply protective tariffs on agricultural products in accordance with the customs union, which is part of the Paris Protocol agreed upon in 1994. Import tariffs for most agricultural products and inputs range from 100-350%. The result is that prices in the WBGS are significantly higher than world market prices for many products and inputs. Clearly, the Paris Protocol significantly increased Palestinian costs.

²⁸ The Center for Jewish-Arab Economic Development. (June 2006). *Study of the Israeli Market for Agricultural Products Produced in the Palestinian Territories*.

²⁹ Abu-Sada, C. (2006). *Farmers Under Occupation, Palestinian Agriculture at the Crossroads*. Unpublished Research Paper, Oxfam GB.

**Subsidies to the Jewish Israeli Agricultural Sector:
An Indirect Blow to Palestinian Farmers in the WBGs³⁰**

When the second *Intifada* began, Israel immediately adopted emergency subsidies for Jewish farmers in the Israeli agricultural sector, reflecting its interventionist approach to agriculture. These subsidies were additional to other forms of subsidy that were already in place. Meanwhile, Palestinian farmers have received little, if any, emergency support for damages and losses caused by Israeli measures, which according to the MoA, reached an excess of one billion US dollars between September 2000 and December 2002. Direct subsidies to Jewish Israeli farmers (which are equally available to Palestinian farmers who are citizens of Israel) have included the following:

- Water subsidies in 2004: 50 million NIS.
- Capital subsidies in 2005: 26 million NIS. These are grants for investment in various areas plus an additional sum, not specified, to subsidize capital investments in cattle farms, plus an additional budget, not specified, for water saving projects.
- Insurance subsidies in 2005: Agricultural insurance against natural damages (27 million NIS) and against natural disasters (43 million NIS). Eighty percent of insurance against natural damage is conducted through the Fund for Insuring Natural Damage Incorporated, a quasi-governmental company jointly owned by the government and the farmers.
- The domestic market in 2004: 90 million NIS. The majority of aid towards growing goods for the local market is facilitated by supporting the farmers who incur major expenses towards “guarding the land” (i.e., maintaining Jewish ownership over land). In addition the government disburses direct subsidies to poultry farmers in the Galilee.
- Extension services in 2005: 143 million NIS. Agricultural training, veterinary care, protection for vegetable growers, fishing, protection of the land, and other services are rendered through governmental bodies and are budgeted for by the state.
- Research and Development in 2005: 186 million NIS. The government subsidises agricultural researchers and the Office of the Chief Scientist and is funding the overhead expenses of the Agriculture Research Administration.
- Exports in 2004: 11 million NIS. Seventy percent of agricultural exports are through 1) Agrexco, which is partly owned by the Israeli government; 2) Tnuva; and, 3) the Councils of Agriculture Production. The government also subsidises the promotion of Israeli agricultural goods in foreign markets and takes part in other export promotion such as sending sample goods and subsidising research to increase exports.
- Other support in 2004. Governmental support was provided to maintain favourable water quotas for Jewish farmers (against the advice of experts). The government provided support for the milk sector, disinfestations and other environmental and public goods projects.

³⁰ Abu-Sada, C. (2006). *Farmers Under Occupation, Palestinian Agriculture at the Crossroads*. Unpublished Research Paper, Oxfam GB.

In addition to price support, the Israeli Ministry of Agriculture operates deficiency payments and investment programmes in support of horticulture, eggs, poultry, and meat production. Israeli farmers often take advantage of these benefits. Other measures consist of specific assistance programmes for cooperative villages under a debt-relief scheme of the Rural Department, expenses of the Agricultural Research Centre, new settlement infrastructure and other services to farmers.

Therefore, while Israeli farm products have free access to the markets of the WBGS, Palestinian agricultural exports to Israel are restricted. According to the World Trade Organization, Israel maintains a relatively large array of trade and trade-related measures intended to support its domestic agricultural sector. These policies have significantly undermined the competitiveness of Palestinian agricultural products. For example, Israel subsidizes vegetables, cut flowers, and citrus—products that Palestinians also export—as well as goose liver and cotton. The MoA estimates that Palestinian companies pay 30% higher transaction costs than Israeli companies for identical export shipments. Thus, Palestinian food products are not competing on a level playing field with their Israeli competitors in domestic markets, Israeli markets, or international markets.

2.2.7 Increasing Cost of Agricultural Production

One of the most important factors that currently exert downward pressure on the potential growth of the Palestinian agricultural sector and its contribution to food security is the rising cost of production. This factor becomes increasingly important when juxtaposed against the lack of protection of farmers and the asymmetric trade relations with Israel, which render Palestinian markets open for Israeli products but not vice versa.

In general, the prices of agricultural inputs have increased steadily between 1999 and 2005, especially for animal feed in both the West Bank and Gaza and for water and electricity only in the West Bank (see Table 2.1). Transport costs have significantly increased over the same period due to the implementation of the back-to-back system and other closure regime measures. The increased price of inputs, however, has been felt most by animal farmers who witnessed an increase of 111% in the cost of feed. This price increase has been further exacerbated by the lack of grazing lands for animals and the desertification of the Eastern Slopes where the majority of animal production is located. In the absence of subsidies for the main agricultural inputs, it is reported that many small farmers have stopped farming for income.

Table 2.1: Percent Change in Cost of Main Agricultural Inputs (1999 vs. 2005)

Cost Item	West Bank		Gaza Strip		WBGS	
	% of Total Cost (2005)	% Increase/Decrease from 1999	% of Total Cost (2005)	% Increase/Decrease from 1999	% of Total Cost (2005)	% Increase/Decrease from 1999
Total	100.0	36.7	100.0	24.7	100.0	34.1
Seeds	2.7	-18.3	5.5	-32.1	3.2	-23.6
Fertilizers	6.1	-8.0	9.2	-18.2	6.7	-11.0
Pesticides	4.9	-8.1	5.7	-11.4	5.1	-8.9

Water & Electricity	4.2	3.5	7.7	-28.7	4.9	-9.3
Mulch	0.4	13.7	1.3	9.2	0.5	11.6
Oil, Lubrication & Fuel	2.4	9.3	1.2	55.5	2.2	13.0
Maintenance & Repair	2.4	27.1	1.4	33.6	2.2	27.9
Feeds	60.1	95.6	53.9	111.2	58.9	98.3
Veterinary Medicine	7.9	4.4	3.3	9.0	7.0	4.9
Purchased Chicks	2.7	-44.9	6.8	-17.5	3.5	-36.8
Other	6.2	-0.8	4.0	3.2	5.7	-0.3

Source: PCBS, *Agricultural Statistics 2004/2005* and *Agricultural Statistics 1999/2000*

2.2.8 Fragmentation of Agricultural Land Holdings³¹

In much of the West Bank, family farms dominate the agricultural holdings, especially in the western hills where 90% of holdings are less than fifty dunums in size. In the western hilly areas, agricultural production potential is solely modest. It focuses on rain fed tree crops, field crops, and livestock. In the Jordan Valley, however, land holdings are relatively large, many with absentee owners who live in Jordan. Most agricultural potential exists in these sparsely populated areas. In the Gaza Strip, a few large farms operated by absentee owners cover half of the area, with the remainder worked as family farms.

Agricultural holdings mainly exist in rural areas (66.1%). Thirty-three percent (33.3%) of agricultural holdings are located in urban areas. The rest are in refugee camps. On a regional level, in the West Bank 71.2% of the agricultural holdings are located in the rural areas, while in the Gaza Strip 72.6% of the holdings are located in urban areas.

Large-scale agriculture development is often constrained by small agricultural holdings, especially in the Gaza Strip. In the WBGS overall, 58.4% of the agricultural holdings are considered “small” with an average area of 1-10 dunums. In the Gaza Strip, small holdings make up 77.5% of the total holdings (average size 8.5 dunums). In the West Bank, 56% of the holdings are small (average size 19.8 dunums).

As shown in Table 2.2 below, PCBS agricultural statistics for various years show that the cultivated area per capita decreased quite significantly between 2000 and 2005. In general, the relatively small size of agricultural land holdings is considered one of the major factors rendering private investment in agriculture unprofitable and leading to a decrease in cultivation. Limited profitability of agriculture is worsened by some of the above-mentioned factors, particularly limited water resources and the unfavourable institutional framework.

Table 2.2: Changes in Cultivated Areas Between 2000 and 2005

Year	Total Cultivated Area (in dunums)	Population	Cultivated Area Per Capita (m ²)
2000	1,836,789	3,149,447	580
2001	1,815,547	3,275,389	550
2002	1,851,070	3,394,046	550
2003	1,815,019	3,514,868	520

³¹ This section draws on statistics from PCBS *Agricultural Statistics*, various years.

2004	1,823,670	3,637,529	500
2005	1,833,350	3,762,005	490

Source: PCBS, *Agricultural Statistics 2004/2005* and *Agricultural Statistics 1999/2000*

About 51% of sheep and goat holdings in the WBGS are considered small holdings with an average 1-19 heads each. Only 27.4% of the sheep holdings have more than 40 heads, and only 33.8% of goat holdings have more than 20 heads. Cattle holdings are also relatively small, with 71.1% of the total cattle holdings ranging between 1-3 heads. Only 11.9% of the cattle holdings are more than 10 heads.

2.3 Trends in Agricultural Production³²

Agricultural production is key to food security in at least two ways: first as a source of production for local consumption, and second as a source of income generation both for local workers and export. Therefore, agricultural production trends provide insight into dynamics that affect both food availability and economic accessibility.

Agricultural production in the WBGS varies from one year to the next due to fluctuations in weather patterns and the bi-seasonal nature of olive production, which is the largest contributor to agricultural production in value terms. However, a review of many of the indicators in agricultural production between 1999 and 2006 reveals that production trends and crop patterns tend to be fairly consistent despite the seasonal and annual fluctuations.

In conclusion, Palestinian agricultural production has increased, however not enough to decrease dependence on imports from Israel and abroad. There is an increase in higher-productivity irrigated agriculture, but the gains are compromised by losses due to destruction of trees and confiscation of agricultural land and water resources due to Israeli military activities, including the construction of the Barrier and expansion of settlements. The differences in food production between the West Bank and Gaza Strip are significant, and these differences are not balanced out by trade, as trade between the two regions has severely decreased since the *Intifada*.

Recommendations for programming include: 1) increased focus on irrigated agriculture to reap higher productivity potential, which must accompany an integrated approach to improving the quantity and quality of available water resources; 2) better planning of crop diversification, both irrigated and rain fed, so that agricultural land is used to produce food that meets local consumption demands, especially considering that income generation from exports are unreliable due to the closure regime measures.

2.3.1 Plant Production

The area used for plant production remained relatively constant between 1999 and 2005. It ranged from 1,836,789 dunums (1999/2000) to 1,851,070 dunums (2001/2002) over the six-year period. Most recent figures from 2004/2005, show that plant production was at 1,833,350 dunums. Over 90% of this area is used to produce food crops, and olives account for more than one-half of the total production in high production years.

³² Ibid.

Table 2.3: Changes in Use of Agriculture Land in WBS 1999/2000 to 2004/2005

Indicator	1999/2000	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005
Total Cultivated Area	1,836,789	1,815,547	1,851,070	1,815,019	1,823,670	1,833,350
Area of Fruit Trees	1,192,658	1,174,458	1,181,239	1,158,050	1,152,692	1,147,525
Area of Vegetables	173,862	173,417	174,016	173,595	179,468	179,139
Area of Field Crops	469,682	467,122	495,297	482,848	491,178	506,686
Area of Cut Flowers	587	550	518	526	332	334

Area in dunums.

Source: PCBS, *Agricultural Statistics 2004/2005*

Table 2.3 above indicates that the total cultivated area in the WBS did not change significantly between 1999 (pre-*Intifada*) and 2005. However, the total area cultivated with fruit trees decreased by about 4% over the same period, which was accompanied with an increase of 6.5% in field crops and an increase of 3% in vegetables over the same period. For more detailed information, Annex D illustrates changes in the area used for plant production between 1999 and 2005 by type of crop, region, and governorate. Annex E illustrates the changes in the number of cattle, sheep, goats, and poultry in the WBS between 1999 and 2005 by region & governorate.

The following sections summarize the changes that occurred in plant production between 1999 and 2005 according to crop type:

Vegetables

According to the MoA, in 2005 the agricultural sector saturated the local demand for staple vegetables such as tomato, cucumber, squash, eggplant, beans, peppers, cabbage and cauliflower; and, production surpluses were exported to the Israeli markets. However, the local production of other staple vegetables such as potato, onion, watermelon and garlic is insufficient to meet Palestinian consumption requirements.

Increasing the area of vegetable cultivation is one way to increase output. However, it is also important to improve productivity, for example, by increasing irrigation, which results in higher yields. Table 2.4 below illustrates the areas in which there was an increase or decrease in irrigated vegetables.

Table 2.4: Main Changes in Areas of Irrigated Vegetables 1999 vs. 2005 by Governorate

Governorate	Increase in Irrigated Vegetables				Governorate	Decrease in Irrigated Vegetables			
	Area	Share of Total Area 1999	Share of Total Area 2005	% Increase in Area		Area	Share of Total Area 1999	Share of Total Area 2005	% Decrease in Area
Jenin	5,857	10.7	14.4	42.4	Tubas	3,531	13.7	10.4	20.0
Ramallah	573	0.3	0.7	145.4	Tulkarem	6,180	8.8	3.8	54.3
Salfit	1116	0.1	0.9	820.6	Nabus	937	3.3	2.5	21.9
Jericho	2,260	22.8	23.2	7.7	Qalqilya	1,170	4.5	3.4	20.1
Jerusalem	89	0.0	0.07	1780.0	Gaza	2,524	4.7	2.6	42.0
Bethlehem	94	1.1	1.1	6.70	Deir Al-Balah	727	7.6	6.7	7.4

Hebron	2,488	0.8	2.5	256.0					
North Gaza	3,077	5.3	7.3	44.6					
Khan Yunis	6,537	4.9	9.4	103.0					
Rafah	337	11.3	11.1	3.1					
Total	22,428	57.4	70.8	30.5	Total	15,069	42.6	29.2	11.7

Area in dunums.

Source: PCBS, *Agricultural Statistics 2004/2005* and *Agricultural Statistics 1999/2000*

The net increase in the areas cultivated with irrigated vegetables between 1999 and 2005 was largely due to significant increases in the governorates of Khan Yunis, Jenin, North Gaza, Hebron, Jericho, and Salfit. According to MoA experts, these increases are largely due to the digging of “unlicensed” wells (mainly in Jenin, North Gaza, and Khan Yunis), as well as land reclamation and construction of large water harvesting cisterns mainly in Hebron, Salfit, and Ramallah. The decreases were largely focused in the areas that have been directly affected by the construction of the Barrier and Israeli military operations that resulted in the destruction of agricultural assets.

The areas cultivated with rainfed vegetables decreased in all governorates, with the exception of Tubas, Tulkarem, Ramallah, Hebron, and Rafah. As Table 2.5 below shows, the overall decrease in areas of rain fed vegetables in 2005 is largely due to decreases in Jenin and Bethlehem, which have shifted to irrigated cultivation of vegetables.

Table 2.5: Main Changes in Areas of Rainfed Vegetables 1999 vs. 2005 by Governorate

Governorate	Increase in Area of Rainfed Vegetables	Governorate	Decrease in Area of Rainfed Vegetables
Tubas	3,512	Jenin	7,719
Tulkarem	512	Nablus	906
Ramallah	3,326	Qalqilya	121
Hebron	2,891	Salfit	859
Rafah	120	Jerusalem	398
		Bethlehem	1,552
		North Gaza	108
		Gaza	240
		Deir Al-Balah	110
		Khan Yunis	460
Total	10,361	Total	12,473

Area in dunums.

Source: PCBS, *Agricultural Statistics 2004/2005* and *Agricultural Statistics 1999/2000*

A large percentage of vegetables are consumed within the areas in which they are produced. Internal agricultural trade has shrunk between 1999 and 2004 by 26.3% according to PCBS statistics.³³ This may partly explain why some of the governorates that lost significant areas of irrigated vegetables have become more food insecure than they were in 1999. For example, Tubas, Tulkarem, Nablus and Qalqilya have less vegetable production in 2005 than they had in 1999 and were found to be among the most food insecure areas of the West Bank in the last food security assessment conducted by FAO/WFP. Other reasons contributing to food

³³ PCBS, *Internal Trade Statistics 1999* and *Internal Trade Statistics 2004*.

insecurity include a decrease in (public and private sector) employment and a decline in purchasing power.

Fruit Trees

As noted above, the total area cultivated with fruit trees decreased by some 4% between 1999 and 2005. Most of this loss can be attributed to the uprooting of fruit trees in the seam areas in the Gaza Strip and in areas that lost land due to the construction of the Barrier. The largest absolute losses were documented in the governorates of Jenin, Qalqilya, North Gaza, Nablus, and Gaza. These losses were offset somewhat by a significant increase in areas of fruit tree cultivation in the Hebron and Ramallah-El-Bireh governorates, where 9,878 and 2,053 dunums of fruit trees were added respectively. Table 2.6 below summarizes the changes that occurred between 1999 and 2005 in areas cultivated with fruit trees.

Table 2.6: Main Changes in Areas of Fruit Trees 1999 vs. 2005 by Governorate

Governorate	Increase in Rainfed Vegetables				Governorate	Decrease in Rainfed Vegetables			
	Area (dunums)	Share of Total Area 1999	Share of Total Area 2005	% Increase in Area		Area (dunums)	Share of Total Area 1999	Share of Total Area 2005	% Decrease in Area
Tubas	26	1.2	1.3	0.2	Jenin	18,948	18.2	17.2	9.1
Salfit	1,235	6.7	7.1	1.6	Tulkarem	673	11.6	12.0	0.5
Ramallah	2,053	13.7	14.5	1.3	Nablus	8015	18.1	18.1	3.9
Jericho	1,190	0.5	0.4	20.9	Qalqilya	11,859	6.0	5.1	17.4
Jerusalem	1,244	1.4	1.5	8.0	Bethlehem	556	4.0	4.1	1.2
Hebron	9,878	12.8	14.2	6.7	North Gaza	10,773	1.2	0.2	80.6
Khan Yunis	781	1.1	1.2	6.2	Gaza	6,083	1.9	1.4	28.5
Rafah	250	0.5	0.5	4.3	Deir Al-Balah	2,472	1.3	1.1	16.8
Total	16,657	37.9	40.7		Total	59,379	62.1	59.3	

Area in dunums.

Source: PCBS, *Agricultural Statistics 2004/2005* and *Agricultural Statistics 1999/2000*

It is noteworthy that the relative contribution of the different governorates to the total area used for fruit tree cultivation in the WBS did not exhibit any significant changes between 1999 and 2005. The highest area with fruit remains in the Nablus governorate and accounts for 17.7%, and the lowest is in North Gaza governorate accounting for 0.4%.

Olive production comprises most of the fruit production in the West Bank, and continues to make up 81.4% of the area cultivated with fruit trees in the WBS, followed by grapes (6.6%), almonds (3.7%), and citrus (2.4%). Olive plantations are concentrated in Nablus, Jenin, Ramallah-El-Bireh. Tulkarm, and Salfit, whereas grape vines are concentrated in Hebron, and Bethlehem. Almond trees are concentrated in Tulkarm, Jenin, and Hebron, and citrus trees are concentrated in Gaza, Tulkarm and Deir Al-Balah.

About 82.1% of the area cultivated with fruit trees in the Gaza Strip is irrigated, whereas 98.1% of the area cultivated with fruit trees in the West Bank is rain fed.

Field Crops

Overall, there were no significant changes in field crop production between 1999 and 2005. In 2005, about 507,000 dunums were used for field crop production, 93.3% of which were rainfed, while only 6.7% were irrigated. Wheat cultivation comprised 42.2% of the total area producing field crops. The largest areas for wheat production are located in Jenin, Hebron and Tubas.

Most of the year-to-year variation in areas cultivated with field crops is due to differences in the weather patterns during the cultivation season. Due to inadequate rainfall in 1998/99, the area harvested was 13% less than it was the following agricultural year. Weather patterns were quite favourable to agricultural production in 2004/05.

It is noteworthy, however, that the increase in the production of field crops is largely due to the increase in the areas dedicated to tobacco and forage crops (e.g., barley, clover, vetch), while areas cultivated with wheat crops decreased from 216,672 dunums to 213,986 dunums over the period 1999-2005. More specifically, the net gain in area dedicated to different tobacco crops was 5,910 dunums between 1999 and 2005, and the net gain in area cultivated with forages for animals was 25,219 dunums over the same period. This improves income from agricultural exports but undermines food security by reducing production for local consumption. For example, the area cultivated with chickpeas and lentils (a main source of protein), dropped by 525 dunums and 3,435 dunums respectively over the same period.

2.3.2 Animal Production³⁴

There has been significant growth in animal production in the WBGS between 1999 and 2005. This is believed to be largely due to an increase in household animal rearing as a counterbalance to the loss of employment opportunities in Israel. The growth in livestock production provides an opportunity to reduce the existing production-consumption gap in the majority of the main livestock commodities. In fact, PCBS statistics confirm that the largest areas in the WBGS cultivated with barley are found in Hebron (13%), which is also where the largest concentration of farm animals is found. Whether planned or not, this shows good coordination between agricultural sub-sectors. Still, there is a clear shortage in fish, due both to denial of access to the sea in Gaza and to over fishing the small areas in which fishing is permitted. The following points summarize the basic changes in animal production between 1999 and 2005.

Cattle

The total number of cattle in the WBGS has increased. During the agricultural year 2004/2005 there were 33,746 heads (up from 23,688 in 1999), of which 27,534 are in the West Bank (up from 20,051 in 1999), and only 6,212 in the Gaza Strip (up from 3,637 in 1999). Geographic distribution has remained constant, that is, cattle production is still most widespread in Hebron, Nablus, and Jenin respectively.

Sheep and Goats

³⁴ This section draws on statistics from PCBS *Agricultural Statistics*, various years.

The total number of sheep has increased sharply in the WBGS. During the agricultural year 2004/2005 the number of heads reached 803,165 (compared to 566,409 in 1999). Of these, 742,499 were in the West Bank (up from 530,980 in 1999) and 60,666 were in the Gaza Strip (up from 35,429 in 1999). PCBS estimates that 26.4% of sheep production is found in Hebron, Jenin, Nablus and Bethlehem as it has been in the past. An estimated 371,198 goats were found in the WBGS in 2005 (compared to 308,845 in 1999), most of which (97.3%) were in the West Bank governorates of Hebron, Bethlehem, Ramallah-El-Bireh, and Jenin.

Poultry

The total number of broiler chickens during the agricultural year 2004/2005 was 40.6 million birds (compared to 43.4 million in 1999). In that year, 60.6% of Palestinian broiler production was found in the West Bank (compared to 70.8% in 1999), and 39.4% in the Gaza Strip (compared to 29.2% in 1999). There were 8.94 million broilers (22%) in Hebron followed by large bird counts in Khan Yunis and Tulkarm.

In 2005, there were 2.56 million layer birds (compared to 2.52 million in 1999), including 1.9 million birds in the West Bank (compared to 1.7 million in 1999) and 0.75 million birds in the Gaza Strip (compared to 0.82 million in 1999). Seventeen percent (17.4%) of Palestinian layer bird production in 2005 was found in Ramallah-El-Bireh governorate, followed by Gaza and Hebron governorates respectively. Notably, these figures reflect the poultry situation prior to the outbreak of Avian Influenza, which had a dramatic, but relatively short, impact on some poultry farmers and on the sector as a whole. While the outbreak was contained, the threat of Avian Influenza remains, and there is still only minimal infrastructure for responding should there be another outbreak.

Beehives

The total number of beehives in the WBGS reached 64,685 including 60,914 modern beehives and 3,771 traditional beehives. Nearly thirteen percent (12.8%) of the total number of beehives are found in the Jenin governorate, followed by the Northern Gaza and Tulkarm governorates. Although there has been an increase, honey production is still insufficient to meet local demand.

Chapter Three: The Impact of Fragmentation on Food Security

3.1 Palestinian vs. Israeli Definitions and Classifications of Palestinian Localities

PCBS defines the Jerusalem governorate in two parts.³⁵ Notably, both Jerusalem 1 and 2 have been affected by the Israeli closure regime and settlement policy. Due to construction of the Barrier in these areas, many places are or will be totally surrounded by the Barrier.

Jerusalem 1: Includes those parts of Jerusalem that were annexed forcefully by Israel following its occupation of the West Bank in 1967. These parts include Beit Hanina, Shu'fat Refugee Camp, Shu'fat, Al-'Isawiya, Sheikh Jarrah, Wadi Al-Joz, Bab Al-Sahira, As-Suwwana, At-Tur, Jerusalem ("Al -Quds"), Ash-Shayyah, Ras Al-Amud, Silwan, Ath-Thuri, Jabal Al-Mukabbir, As-Sawahira Al-Gharbiya, Beit Safafa, Sharafat, Sur Bahir, and Um Tuba.

Jerusalem 2: Includes the remaining parts of the governorate, namely Rafat, Kafr 'Aqab, Mikhmas, Qalandiya Refugee Camp, Jaba' (Tajammu' Badawi), Qalandiya, Beit Duqqu, Jaba', Al-Judeira, Ar-Ram, Dahiyat al-Bareed, Beit 'Anan, Al-Jib, Bir Nabala, Beit Ijza, Al-Qubeiba, Kharayib Umm al-Lahim, Biddu, An-Nabi Samwil, Hizma, Beit Hanina al Balad, Qatanna, Beit Surik, Beit Iksa, 'Anata, Al-Ka'abina (Tajammu' Badawi), Az-Za'ayem, Al-'Eizariya, Abu Dis, 'Arab al Jahalin, As-Sawahira Ash-Sharqiyeh and, Ash-Sheik Sa'd.

PCBS defines "locality" as a permanently inhabited place, which has an independent municipal administration or a permanently inhabited, separated place not included within the formal boundaries of another locality. According to PCBS definitions, even remote and isolated areas that are permanently inhabited and have either a village council or another administrative institution are considered localities.

PCBS considers any area populated by 10,000 persons or more to be "urban." Centres of districts or governorates are considered "urban" regardless of their size. Communities with populations ranging from 4,000 to 9,999 persons are also considered "urban" provided they have at least four of the following elements: 1) a public electricity network; 2) a public water network; 3) a post office; 4) a health centre with a full-time physician, or, 5) a school offering a general secondary education certificate.

PCBS defines "rural" as any community whose population is less than 4,000 persons or whose population varies from 4,000 to 9,999 persons but lacks four of the following elements: 1) a public electricity network; 2) a public water network; 3) a post office; 4) a health centre with a full-time physician; or, 5) a school offering a general secondary education certificate.

In contrast, the Israeli Central Bureau of Statistics³⁶ has adopted different definitions:

An urban settlement is defined as a settlement that has 2,000 or more inhabitants while a rural settlement has fewer than 2,000 inhabitants (which also includes agricultural localities).

³⁵ PCBS. (2006). *Guidebook of Statistical Definitions and Glossary*.

³⁶ PCBS. (2006). *Guidebook of Statistical Definitions and Glossary*.

However, in reality, neither nomenclature adequately expresses the unique and complex food security characteristics of various areas. For example, some localities still rely on agriculture and have the ability to move agricultural products in, out and through their localities. Jenin and Tubas, for example, fall into this category (see Table 3.1 below). Some other localities experience severe mobility restrictions and therefore can no longer rely on agriculture (e.g., Nablus and Qalqilya). In other words, food security is less a function of urban/rural differences and more directly related to the impact of Israeli security measures. This fact (illustrated on OCHA's territorial fragmentation map in Annex B), is crucial to effective food security response programming.

More specifically, the Taba Agreement was signed in September 1995, one year after the Oslo Agreements. It was intended as an interim agreement to prepare for the second step of Palestinian autonomy. It created three administrative zones in the WBGS: Areas A, B and C.³⁷ The three zones were redefined in the Sharm El-Sheikh Agreement of 1999. By the time of the Camp David Peace Summit in July 2000, 59% of the West Bank was categorized as Area C under complete Israeli control, including the majority of Palestinian farmland. Israel held control over the security of an additional 23.8% of the West Bank (Area B). As a result, by the time the second *Intifada* broke out in September 2000, Israel had effective control over 82.8% of the West Bank, leaving the PA in full control of only 17.2% of the West Bank. In 2002, Israel regained *de facto* control of all zones and began to build the Barrier.

Based on information gathered in field research, localities were categorized into three groups according to their openness and ability to rely on agriculture. As shown in Table 3.1 below, interviews were conducted in areas that are more and less affected.

Table 3.1: Specificities of Localities Where Interviews Were Conducted

Group	Specificities	Localities
One	More or less open. Access between the urban area and the surrounding villages. Continued reliance on agriculture.	Jenin, Tubas, Tulkarem, Ramallah
Two	Totally closed by checkpoints. Severed from urban centres or from their villages. Reliance on private sector/informal sector/ assistance.	Nablus, Qalqilya, Massafar Yatta, Massafar Bani Na'im, Jericho, Jerusalem
Three	Partially closed. Reliance on agriculture and private sector/ informal sector/ assistance, among others.	West Hebron Governorate, Hebron, Bethlehem, Salfit

The following section draws on insight gained from the field interviews to explore vulnerabilities and specificities of urban, rural and remote areas, food supply chain fragmentation as well as the role of social safety nets and charitable societies in alleviating poverty and food insecurity.

³⁷ **Area A** signified total Palestinian jurisdiction over civil matters and security. The main towns and cities of Tulkarem, Jenin, Nablus, Qalqilya, Ramallah-El-Bireh and Bethlehem were categorized as Area A. **Area B** signified Palestinian civil jurisdiction with joint Israeli-Palestinian control over internal security. The majority of the 450 Palestinian villages were categorized as Area B. **Area C** signified complete Israeli control. Most agricultural land was categorized as Area C.

3.2 Vulnerable Groups

According to a recent study commissioned by FAO and WFP,³⁸ the factors that have a direct impact on the level of food accessibility—or lack thereof—can be divided into three main highly inter-dependent categories, including 1) political factors, 2) economic factors and, 3) demographic and social factors. The major factors are political (closures, the Barrier and the PA financial crisis) and economic (market prices, unemployment, poverty, and the agriculture sector problems). Demographic and social factors (household size, educational level, relationship of different household members to the labour force, and household social habits) are believed to be cross-cutting factors that may potentially exacerbate food insecurity.

In addition to these factors, other studies³⁹ identified factors leading to food insecurity in the WBGS as closures and movement restrictions; high levels of unemployment and poverty; lack of control over and access to limited and deteriorating natural resources; the Barrier; degraded lands; limited attention to agricultural development; suspension of donor funding to the PA; suspension of transfer of clearance revenues by Israel; the outbreak of Avian Influenza; weak policy and law enforcement; lack of sovereignty and control over border crossings; and, asymmetric economic agreements between Israel and the PA. Increasing fighting among Palestinians is also of major concern, notably because it affects access for humanitarian actors, especially in the Gaza Strip.

By far, the greatest problem confronting food insecure households is the affordability of food. Food is available but food insecure households do not have economic access to it. Palestinian families use various coping measures to secure food and deal with the general economic hardships they face, namely:⁴⁰

- decrease in the quality and quantity of food consumed. They may eat fewer meals per day; purchase lower quality foods; decrease consumption of fruits, vegetables, and fresh meats; reduce the variety of foods purchased; and, reduce the amount of food purchased.
- substitute fresh meat with cheaper frozen meats and artificial meat flavours.
- increase dependency on food aid and assistance programmes.
- substitute baby formula with cheaper whole-fat powdered milk and regular foods.
- borrow from family and friends and rely on credit from local merchants.
- sell productive and unproductive assets (mainly land and jewellery).
- decrease expenditures on health and education.⁴¹

Vulnerable groups include the “chronic poor” (e.g., households with ill members, female-headed households, large families with unskilled breadwinners, the unskilled long-term

38 Al-Sahel for Institutional Development. (October 2006). *Rapid Qualitative Verification Assessment of Food Insecurity Factors in the oPt*, a report commissioned by WFP/FAO.

39 FAO/WFP. (2003). *Food Security Assessment*; FAO/WFP. (2007). *Comprehensive Food Security and Vulnerability Analysis*, West Bank and Gaza; and WFP. (2006). *Market Assessment*.

40 Al-Sahel for Institutional Development. (October 2006). *Rapid Qualitative Verification Assessment of Food Insecurity Factors in the oPt*, a report commissioned by FAO/WFP.

41 It is important to note that during interviews conducted in the Gaza Strip, many people questioned the purpose of attending university given the lack of professional opportunities in Gaza.

unemployed) and the “new poor.” The main attributes of the vulnerable groups are as follows:

Chronic Poor

According to UNRWA and the Ministry of Social Affairs (MoSA), this group includes households without an able-bodied male who is capable of working; and, these households have a high proportion of women, children and the elderly. The livelihoods of the chronic poor have not changed dramatically, but have steadily deteriorated. Those who do not receive assistance or food aid from any of the national welfare institutions or humanitarian organizations are especially vulnerable. Households in this category either have very few coping mechanisms or have already exhausted whatever coping mechanisms they once had. Their diet may be restricted to one meal per day, without meat, vegetables or fruit. It is worth noting that the local Palestinian community tends to know who these families are, and they place a priority on assisting them.

New Poor

This is a very diverse group comprised of, *inter alia*: 1) people who have lost assets such as farmers whose land was confiscated, and people whose homes or businesses were demolished; 2) farmers and Bedouins who have lost access to markets and therefore their source of income; 3) sheep herders whose movement has been severely restricted as a result of the construction of the Barrier and who are unable to access grazing areas behind the Barrier; 4) families who are living in the southern part of the West Bank and are confronted by violent settlers and the desertification of their lands; 5) waged workers who have lost their jobs as result of closures, including those who work in agriculture and construction; 6) employees of the PA whose salaries have been suspended since early 2006; 7) fisherfolk who have been denied access to the sea and who are essentially unemployed; and, 8) households in villages “locked in” by security zones and have become *de facto* remote areas (e.g., villages close to settlements, communities between the Barrier and Jerusalem villages).

While vulnerable groups often face the same difficulties in securing food and may use similar coping strategies, food security interventions must take into consideration the fact that each different area has particularities in the causes and impact of food insecurity that render standard programming problematic. The following sections highlight some of these particularities.

3.2.1 Specific Factors Affecting Urban Food Security

Urban households may be more vulnerable than households in rural areas for a variety of reasons including: 1) lack of land resources and productive assets, 2) higher cost of living, and 3) shrinking work opportunities. Unlike the average rural household, most urban households do not own land and therefore cannot cultivate food or raise animals for their own consumption. Also, since land prices are more than ten times higher than in rural areas, many urban households do not own their homes and have to bear the burden of paying rent. In addition, most vulnerable urban households have fewer options for acquiring necessities than do rural households. For example, urban households must purchase water while in rural areas it may be possible to use a cistern or well. Additionally, according to traders, urban economies have shrunk more than rural economies. Vulnerable groups in urban areas have

fewer opportunities to resort to work in agriculture and petty trade than vulnerable groups in rural areas.

This does not mean that vulnerable urban households necessarily face more severe conditions than rural ones. Rather, it highlights the fact that urban households may have fewer options for coping with their situation of vulnerability. It underscores the need to consider customized food security interventions that respond to the specific conditions of urban households. Spatial allocations of agricultural initiatives in inter and intra-urban areas must also be considered and enhanced even at the master city plan level. The shortage of funds for awareness campaigns and institutional mobilization towards enhancing the utilization of free agricultural spaces within urban boundaries must be included.

Rented House

Abu Eyad and Um Eyad live in the Old City of Nablus with their three sons and one daughter. Abu Eyad has a fourth grade education, and Um Eyad finished high school. The family resides in a modestly furnished house spanning 80 square meters. It consists of two bedrooms, one bathroom, a kitchen with an old refrigerator, an old television, a heater, and a damaged washing machine. It is very dark and cold. The walls are damaged by humidity and the roof leaks. The monthly rent is 700 NIS despite the house's poor condition. The house is connected to electricity and water networks; and the family has accumulated approximately 3,000 NIS in debt to the utility companies.

Worker in a Local Factory

Abu Ayman lives in the city of Hebron with his wife, a daughter and three sons. He is also responsible for his mother and sister who live in the same 50 square meter house. Abu Ayman works as a factory worker in Hebron and earns 1,500 NIS per month. According to Abu Ayman, his salary was sufficient to meet the family's needs in the past, however, the family's expenses have increased in recent years, and his salary no longer lasts past the first ten days of the month.

Former Labourer in Israel

Abu Ziad lives in the city of Jenin with his wife and seven children. Abu Ziad was working in Israel as a labourer prior to the *Intifada*, earning approximately 4,000 NIS/month. Abu Ziad has been unemployed for 6 years; he cannot enter Israel and cannot find any work in the West Bank. Without any income, the family's main food intake is bread and olive oil, and they frequently forgo medicine when their children are sick. The family is in debt to the grocers for 1,500 NIS, owe 600 Jordanian dinars,⁴² in university tuition and are in debt to utility companies for 1,500 NIS, as well as rent.

Loss of Business

⁴² 1 Jordanian dinar = approximately \$1.41 USD.

Abu Ramzi, who lives in Nablus city, used to own a store in the Old City where he made shoes. During the Israeli invasion in April 2002, hundreds of Israeli tanks, armored vehicles and bulldozers entered Nablus and caused great destruction. Abu Ramzi's store was demolished, a loss worth more than 100,000 NIS, including machines, goods, raw materials, and the debt he owed. Abu Ramzi now earns around 500 NIS per month by making and selling shoes from one of the two bedrooms in his house.

3.2.2 Specific Factors Affecting Rural Food Security

It is commonly assumed that the poorest Palestinian households are located in rural areas, thus, research on food security in the WBS has tended to focus on rural households. The specific factors affecting food security in rural areas include:

- Loss of access to land and water resources is jeopardising both food production and income generation in areas particularly affected by the closure regime: However, most rural households own land adjacent to their homes that can be used for home gardening or animal breeding, assuming that adequate resources are available. Moreover, most rural households have at least basic farming knowledge and experience.
- Weak food supply chains: Unlike urban areas, where there are multiple wholesalers and retailers, rural areas usually rely heavily on a limited number of retailers to distribute staple foods. These retailers generally operate small shops and have very limited capital resources. Field interviews showed that retailers in rural areas are especially vulnerable to their customers' lack of financial liquidity and, thus, may not be able to withstand their customers' non-payment of debt for a prolonged period. This weakness could affect food availability should local businesses collapse.
- Minimal services: Rural areas generally suffer from a limited availability of social services, and rural households may be less able to access the services of social assistance programmes that do exist.
- Limited coping strategies: A number of coping strategies that are available to vulnerable households in urban areas are generally not available to rural areas. For example, cultural and traditional norms that disfavour women's employment are more prevalent in rural areas in comparison to urban areas. The sale of assets (especially land) in rural areas is more difficult than in urban areas. Moreover, since most welfare programmes are administered from urban centres, access to welfare programmes is more difficult for rural households than it is for urban households.

3.2.3 Specific Factors Affecting Food Security in Remote Areas

Some areas in the West Bank are totally surrounded and/or isolated from other Palestinian communities by the Israeli closure regime. Isolation makes it harder to achieve economic self-sufficiency or access assistance; and, it undermines people's resilience. Maintenance of Palestinian health, education and land, among other entitlements is threatened. Moreover, assaults by the army and Israeli settlers make protection of Palestinian civilians necessary, particularly in isolated localities in Area C.

Another effect of the Israeli closure regime is to actually cut Palestinians off from their social network. Urban centres have been severed from the rural areas and villages to which they were traditionally connected. Villages have been isolated from the governorate to which they belong and have been left to fend for themselves. Urban areas that used to rely predominantly on the Israeli and the Palestinian labour markets and charitable assistance from abroad are less able to tap into these resources. Some areas rely on subsistence agriculture, unreliable income from the informal sector, and assistance. In short, isolated and enclosed areas are undergoing severe hardships because they are disconnected partially or totally from their previous economic and social centres. This section will explore different specific causes of isolation and their impact on Palestinian households.

3.2.3.1 The Barrier and Jerusalem Villages

The construction of the Barrier has greatly affected the western side of the West Bank, destroying the agricultural lands of the “agricultural basket of Palestine,” cutting off access to water sources, and preventing farmers from reaching their land. This phenomenon has been well documented and monitored by the international and local communities.⁴³ However, the impact of the construction of the Barrier on the Jerusalem population is less known.

The Barrier has dramatically affected those villages that traditionally received health care, education, employment and social needs from Jerusalem, but who can no longer reach Jerusalem because of the Barrier. Such villages include Al-‘Azzariyya, Abu Dis, Ar-Ram, Bir Nabala, Az-Zayem, and others. Indeed, people with Jerusalem identity cards are attempting to relocate to the Israeli side of the Barrier in order to safeguard their entitlements. Those with West Bank identity cards will be left in these villages without any sources of income.

Example of Az-Zayem

Az-Zayem is completely surrounded by the Barrier. Two checkpoints exist—one provides entry/exit in the direction of Jerusalem and the other in the direction of the West Bank. Both checkpoints are staffed by Israeli soldiers. According to the mayor of Az-Zayem: “Our centre was Jerusalem. Since they completed the Wall one year ago, Az-Zayem has lost almost half of its population. People with Jerusalem identity cards have left, and the people that still live here cannot find a job anywhere. There are no shops anymore. They have all closed down.”

Example of Abu Dis

According to the mayor, Abu Dis was historically connected to Jerusalem, and it does not have the infrastructure to survive independently. For example, Abu Dis does not have its own hospital. In the past, they relied on Makassad Hospital in Jerusalem, but they can no longer reach it due to the Barrier. There is a small clinic that treats approximately 85 sick people per

⁴³ International NGOs (e.g., CARE, Save the Children), UN agencies (especially OCHA & UNSCO), the ICRC, numerous Palestinian NGOS (PINGO, Stop the Wall, etc.), and Israeli NGOs (e.g., B’tselem, ICADH) are monitoring and publicizing the impact of the Barrier on the Palestinian population.

day. It is staffed by one doctor and two nurses and is visited once a week by a professional from the Ministry of Health.⁴⁴ In the past, the clinic received some medicines from CARE International with USAID funding, however, this project has recently concluded. The Gulf states have promised funding for a hospital but the project has not yet been initiated. One organization started a food security project that involved beekeeping. However, according to the mayor, people did not know how to care for bees and they have all died. The municipality would like to open a small poultry farm in Abu Dis to create jobs, increase the availability of chicken and eggs, and reduce prices of the latter. To date, they lack the resources to implement the initiative.

3.2.3.2 Regions Physically Isolated from the Rest of the West Bank

Isolation due to the lack of infrastructure

Bedouin communities rely on livestock farming, their key assets include animals, water, and other material assets. Bedouins sell and exchange agricultural produce to maintain their market-based economy. Living in remote areas, they have limited access to health care, electricity, water, educational services, markets, and other essential infrastructure. Distance translates into high prices for essential services and high transportation costs to reach such services.⁴⁵ Restricted access to land has been particularly challenging for Bedouin communities. As an WFP/UNRWA study delineates, “Restrictions imposed by the occupying power and the expansion of Jewish settlements in the West Bank result in environmental degradation of the little land available that can be used for grazing. As a result, Bedouins end up relying on borrowed or purchased assets, such as animal fodder and water.”⁴⁶

Climatic conditions over the last two years have worsened the situation for many Bedouins. As a result of Bedouins’ reliance on livestock farming and lack of income diversification, they are highly vulnerable to shocks.⁴⁷ Some of the main factors affecting the Bedouins’ livelihoods were identified as lack of mobility, the high price of animal fodder, a decrease in the market value of Bedouin products, exhausted coping strategies, high cost of/limited access to veterinary services, high cost of/limited access to prenatal health care, increasing transportation costs, unsupportive government policies, and loss of secondary income sources. Since most Bedouin communities live in areas classified as Area C (e.g., the Eastern Slopes, the Jordan Valley and the areas south of Hebron), the PA has no jurisdiction to intervene to improve their living conditions. According to the WFP/UNRWA study, the role of the PA has also been negative in some cases, especially by restricting agricultural licenses and allowing the market to be flooded with large quantities of imported meat.

Massafer Bani Na’im

Sixty to seventy Bedouin families originally from the Beer As-Saba region are living in Massafer Bani Na’im east of Hebron City. Some of them have refugee cards and are receiving some food from UNRWA on a quarterly basis. Each family pays 60-70 Jordanian dinars per year for rent. They have no electricity and no generator.

⁴⁴ Medecins du Monde evaluated health services in Abu Dis and found that only primary health is available. The ICRC also discussed the problem of the access to health care in Abu Dis in their report, *Declining governmental Health Services, Provision in the West Bank*, 15 November 2006.

⁴⁵ WFP/UNRWA. (October 2005). *The Livelihoods of Bedouin Communities in the West Bank*.

⁴⁶ WFP/UNRWA. (October 2005). *The Livelihoods of Bedouin Communities in the West Bank*.

⁴⁷ WFP/UNRWA. (October 2005). *The Livelihoods of Bedouin Communities in the West Bank*.

Abu Saqqar's family owns 350 sheep and has no other source of income. They sell cheese and lambs in Hebron however are not able to earn more than 1,500 Jordanian dinars annually. The drought and the increase of fodder prices has made their situation even more difficult.

They go to Bani Na'im to purchase food on a weekly basis. Their main meal is rice and lentils, and they eat some vegetables every ten days or so. They do not eat fruit. They kill approximately one sheep per month for their own consumption but need to eat it quickly as there is no electricity for refrigeration. If they have some money, they cook with gas, if not, they use firewood or dung.

Bani Na'im is approximately 10 kilometers from Massafer Bani Na'im. As there is no road, travel is difficult. There are clinics in Bani Na'im but the only hospital is in Hebron. Abu Saqqar relays, "If we get sick, we will die before reaching the hospital anyway....No Bedouin child can go to school because it's too far."

The family is more than 7,000 Jordanian dinars in debt for fodder and their own food consumption. Abu Saqqar explains, "Before the *Intifada*, the situation was much better than now. A drought has struck the region for the last two years now and we are expecting a third year of drought."

The family's regular costs include:

- Five tons of fodder for each 100 heads annually. Each ton costs 215 Jordanian dinars. If they pay cash, prices are reduced by 17%.

- Medicine for the sheep, which cost 5 NIS per sheep per year.

- Every two days, the family needs to transport 4 cubic meters of water by truck from Bani Na'im. Each cubic meter costs 30 NIS.

- Each year, a new tent is built, which costs 4,000 NIS, and a new nylon tent is built for the sheep (7 NIS/meter of nylon).

- A veterinarian visits twice a month to examine the animals.

Isolation due to the Israeli closure system

Approximately 6,000 people live between a long "small" wall and the Barrier in the Massafer Yatta area. They live under constant threat of settler violence. Many interviewees fear that the objective of building of the Barrier is simply to expel them to expand Israeli settlements.

The entire region of Jinba is closed to farmers (no access to land and no access to water). Due to isolation from traditional networks, there is lack of access to medical and educational services and physical accessibility to food is hindered.

The western side of the Hebron governorate is in a less difficult situation than the Eastern Slopes of the Massafer Yatta area, however, the construction of the Barrier and the closure policy has had a drastic effect on the economy of those villages. In the past, residents of these areas were mainly reliant on jobs in Israel, but they can no longer get work permits (see case studies from field interviews in Annex C).

Massafer Yatta

Massafer Yatta includes 19 hamlets in is an area spanning over 35,000 dunums in the semi-arid area south of Hebron district. Due to its climatic conditions and corresponding meagre vegetation, the region is sparsely populated. There are 19 hamlets.⁴⁸ The majority of these families live in tents and caves and their livelihood is primarily based on animal husbandry. Their life styles resemble that of Bedouins, but they differ from Bedouins in that they have property rights to the land that they are living on, and they supplement their income with rain fed agriculture. Due to the climatic conditions, agricultural activity is less significant to the families of Massafer Yatta than animal rearing.

The Massafer Yatta area lacks basic services. There are two schools in the area that together can only accommodate around 156 students. Harassment by Israeli soldiers and settlers endangers children who are trying to reach school. The students who cannot reach or find places in schools in Massafer Yatta attend school in Yatta. Since transportation is expensive, many students live in Yatta and return home only on weekends or during vacations.

There is no clinic in the area of Massafer Yatta. The Palestine Red Crescent Society serves the area with mobile clinics. There is no water network so people rely on rainwater. The limited rainwater they harvest must also supply their livestock. The lack of sufficient rainwater in the last two years has exacerbated the water problem and is an increasing burden on households' expenses.

The lack of essential services in Massafer Yatta is not new, but became problematic when its residents could no longer access Yatta due to mobility restrictions (earth walls, trenches, roadblocks, checkpoints, settlers). These restrictions call into question the viability of Massafer Yatta, placing tremendous pressure on the residents to move closer to essential services.

The settlements that are severing Massafer Yatta from Yatta are Karmiel, Maon, Havot Maon, Avi Gael, Mitzpe Yair, Soussya, Nof Neisher, and Beit Yattir (Metsadot Yehuda).⁴⁹

Tuweini

Tuweini is home to approximately 20 families totalling 160-170 individuals. Surrounding Tuweini are 50-60 dunums of agricultural land. Nearly all the people in the area work on this land since they can no longer access labour opportunities in Israel. Nearby are five of the most violent Israeli settlements in the West Bank.⁵⁰ When the 8 km road between the Palestinian villages of Karmel and Yatta is closed, Tuweini families have to go through Jinba to enter Yatta, which is a 35 km trip. During the war in Lebanon, the road was blocked for an extended period.

A lot of the food consumed in Tuweini is being produced or raised in the village. People use to purchase large quantities of food but cannot afford to do so anymore. There is only one

⁴⁸ According to ICRC sources.

⁴⁹ ICRC sources.

⁵⁰ According to ICRC. These settlers are known to shoot at people, poison herds, poison water sources, etc.

shop in the whole neighbourhood; it serves Tuweini and 15 other villages. The shop owner explains, “Everything works on credit now. I give credit to my customers; my supplier gives me credit; and so on.”

The shop owner supports his wife, 7 daughters, 2 sons, and 2 parents who live together in one house. Breakfast is generally oil and dried herbs. There is only one cooked meal per day, which is most often rice and lentils. The family receives assistance (flour, chickpeas, sugar, oil, salt) from the WFP through Catholic Relief Services. Although they raise animals, they cannot afford to eat chicken or meat, or even frozen meat. They do not have electricity; a generator functions for only two hours at night.

The shopkeeper’s daughters attend the Open University in Yatta. They have to walk 3 km to Karmel and take a taxi to reach Yatta, which costs 4.5 NIS each way. Each university credit hour costs 12 Jordanian dinars. They sell animals to pay the tuition fees.

Lassifa

Lassifa consists of families who are spread around the area of Imneizel (the name refers both to a Palestinian village and a nearby Jewish settlement). Imneizel is located in the Hebron district, north-west of the Beit Yattir settlement. A terminal has been constructed making a *de facto* border between the West Bank and Israel, isolating thousands of dunums of Palestinian land. Lassifa is completely isolated between the terminal, settlements and the Barrier. Both the village and the settlement are in the West Bank but the Barrier will be further constructed to locate the settlement in the seam zone on the Israeli side, whereas the Palestinian village of Imneizel will remain on the West Bank side.

Nine families (an estimated 130 inhabitants) are living in this enclosed area. There is no electricity, no generator and no running water, but they do have access to wells. Without basic infrastructure, they cannot produce anything. They must purchase all their necessities, which requires cash. They mainly eat lentil soup, rice, tomatoes, and potatoes. They had sheep in the past, but they sold them because there was no water available to sustain them. Most Lassifa residents work in agriculture nearby since they are unable to work in Israel. Unfortunately, the drought is endangering their livelihoods.

The only road that accesses Lassifa passes through the Beit Yattir checkpoint. Residents are not issued permits to move freely. They must coordinate with the ICRC to get through the checkpoint. During Ramadan, the checkpoint closed for six days while Rukaya, a Lassifa resident, was in Yatta to shop for food with her husband. The grand-mother, Hajja Habssa (85 years old) and the young children (2.5 years and 4 years old) remained alone for six days until the army re-opened the checkpoint and allowed the couple to return to their home.

Soussya

Seventeen families (almost 170 people) live in Soussya. Soussya does not have any agricultural lands, and there is no water anymore. Hajja Sara, who is 60 years old, is a widow. She lives with her son and daughter-in-law, and her 60 sheep in five tents.

Hajja Sara and her family used to live in Khirbet Soussya but were expelled by the army in 1984. In 1996, they were expelled from their new home, and this time, 20 animals were killed as well. Two years ago her husband fell ill and the ambulance was not able reach their home because there was no road. The family had to transport him by donkey to the road where he could reach the ambulance. Unfortunately, he died.

Hajja Sara and her family do not have electricity. The family uses a small oil lamp for light. They have to transport water by truck, which costs 200 NIS for a tank with 4 cubic meters. They need two-three tanks per month. They produce cheese and yogurt, but only for household consumption. Other products must be purchased in Yatta. The only way to reach Yatta (two other roads have been closed by the army) is to go through the hills by foot or by donkey for a distance of 9 kilometers. Since the roads are regularly closed, the family maintains some food stocks. Hajja Sara owns land a distance away but the army does not allow her to access it. According to Hajj Sara, the situation was much better before the second *Intifada*.

In conclusion, these remote and isolated areas merit special attention from local and international organizations and as they are lacking access to income, basic infrastructure, and essential services such as health care and education. They are also exposed to stress and suffering because of settler attacks or harassment from the Israeli army. Further, desertification of the areas where they live is likely to exacerbate their difficulties significantly over time.

3.3 Vulnerability of Food Supply Intermediaries

In conjunction with the recent FAO/WFP *Comprehensive Food Security and Vulnerability Analysis*, MAS Institute conducted research to examine traders' behaviour and food prices in the WBGS.⁵¹ The survey focused on the impact of movement restrictions on Palestinian wholesalers and retailers. One of the main findings was that traders are greatly affected by the closure regime and its restrictive measures; restrictions translate into higher transportation costs, among other ramifications. The findings also showed that while wholesalers have extended credit to retailers, retailers have extended even more credit to their customers.

Notably, while most imported products enter Palestinian markets through wholesalers who are also importers, the MAS study did not address import-relevant factors and consequent additional costs that cause a ripple affect through the supply chain. Therefore, additional field interviews were conducted for this study. The interviews sought to understand market dynamics from traders' perspectives, and in particular, how the food distribution system affects prices, terms of payment, level of tolerated debt, and other relevant factors. These field interviews provided quantitative and qualitative insight into the impact of the current political and economic situation on supply chain intermediaries including a better understanding of system vulnerabilities that could affect food availability.

⁵¹ Al-Botmeh, Samia and Taylor, Katherine. (December 2006). *A Situation Analysis of Traders and Behaviour of Food Prices in the Context of Food Security in the West Bank and Gaza Strip*. Commissioned by WFP.

3.3.1 Determinants of Food Supply Systems

Food distribution in the WBGS does not follow a single standardized pattern. Many factors affect the supply routes of food products to household consumers, including type of food category, source of food products, distribution conditions required for some types of food products, regulations and levels of enforcement, financial capacity of the different intermediaries, and political and security measures. More specifically, the factors that affect supply routes include:

- Type of food category: Agricultural products are dispersed through different distributors than those who distribute dried food products, canned goods, etc.
- Source of food products: Imported foods are always distributed through big wholesalers with a well-established position in the market. On the other hand, retailers may acquire locally sourced products through wholesalers, regional agents, or directly from the producers.
- Distribution conditions required for some types of food products: Food that requires refrigeration (for example, frozen meat) is distributed through wholesalers with the proper infrastructure who may specialize in that type of food distribution.
- Regulations and levels of enforcement: Palestinian law requires that food be acquired through registered Palestinian distributors. However, since there is minimal, if any, enforcement of this law, some distributors buy directly from Israeli sources.
- Financial capacity of the different intermediaries: There is a small group of large wholesalers in each region who, due to their financial capacity, are able to capture the lion's share of the wholesale market. These are the players who can secure the required capital to pay for large imports, have the flexibility to extend credit to their customers, absorb shocks resulting from unpredictable security measures, and tolerate bad debt, while continuing to supply products to the retailers.
- Political and security measures: Long-term Israeli measures have not only increased costs, but have also, to various degrees, affected distribution links. For example, because of the long closure imposed on Nablus city, the wholesale vegetable market for the Nablus district has been moved to Beita, a village a few kilometers away. Some small districts like Salfit now have more trade with Ramallah district than with Nablus. Another example is trade between the West Bank and Gaza, which has declined significantly during the *Intifada*.

3.3.2 Distribution Channels in the West Bank

There is a select group of large-scale wholesalers who also act as importers of products from Israel and abroad. Given the large scale of their operations, they tend to work across the West Bank or at least in multiple districts (and some also work in the Gaza Strip, though less so than before the *Intifada*). They channel imported products through their regular distribution networks including smaller wholesalers and/or to retailers who work in specific districts or sub-regions. The large wholesalers usually have their own vehicles to deliver products to their clients (smaller wholesalers and/or retailers). Accordingly, retailers do not generally have to deal with the repercussions of movement restrictions apart from having to handle the

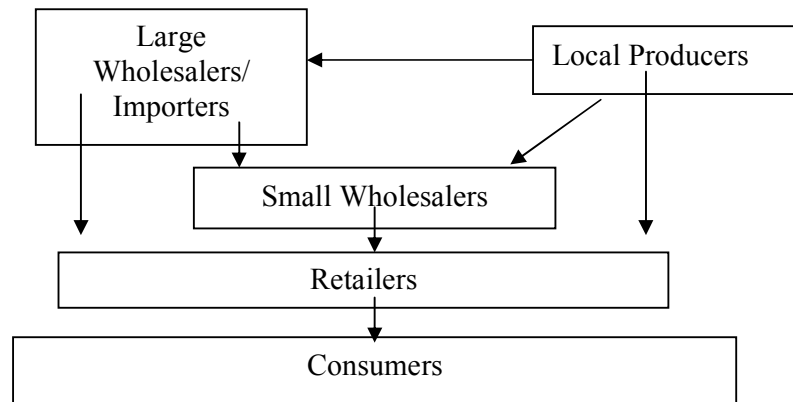
cost of these restrictions, which are incorporated in the wholesale price. Some retailers, however, do pick up their purchases directly from wholesalers' warehouses.

Generally, there are no exclusive agents for products imported from Israel or abroad. Even smaller wholesalers or retailers could buy directly from the Israeli wholesalers or their agents. However, they would not be able to negotiate prices as low as the large wholesalers who use large purchasing power, quantity ordering, and payment in cash to negotiate lower prices.

Locally produced food follows similar distribution channels with slight variations for certain types of products. For example, food that requires transportation in refrigerated vehicles is more likely to be distributed directly to retailers by the producer or through designated regional distributors. In smaller towns, wholesalers work on a smaller scale. They rely on larger urban-based wholesalers/importers for imported and locally produced products.⁵²

The following chart shows the structure of the distribution channels of food commodities:

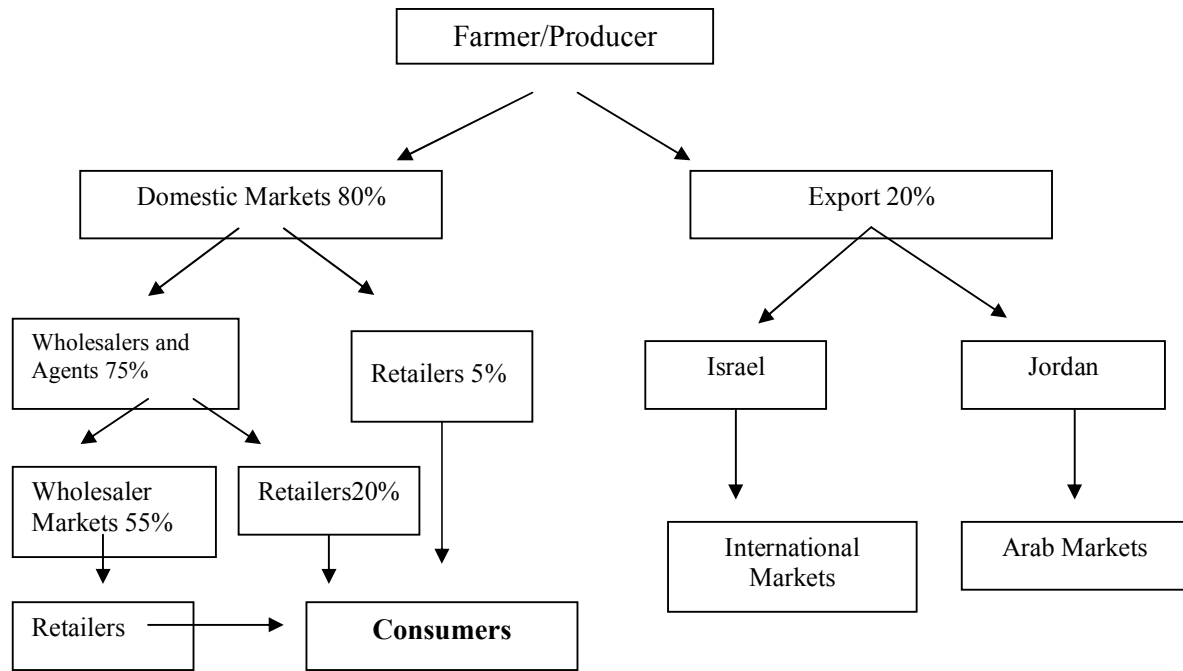
Figure 3.1: Structure of Distribution Channels of Food Commodities



The distribution of local agricultural products is slightly different, as shown below:

⁵² King, Alexandra. (17 June 2002). *Urban Food Economy/Market Study in the West Bank*. The Food Economy Group for ICRC & British Red Cross.

Figure 3.2: Structure of Distribution Channels of Local Agricultural Products



Source: ARIJ/ACH. (2006). *The Palestinian Agricultural Marketing System Status, Challenges and the Impact of Commercial Restrictions on Products and Socioeconomic Conditions*.

A recent study by ARIJ/ACH⁵³ described the multiple mechanisms through which local agricultural products may be distributed. Farmers may sell to wholesalers or retailers, or agents acting on their behalf, or they may sell directly to consumers. There are also central markets distributed throughout the main centres of the WBGS that are managed by the municipalities or the private sector. Israeli agricultural products enter these local markets directly with no need for intermediaries. The above-described mechanisms of food distribution have remained relatively constant despite increased restrictions on the movement of people and products since the *Intifada*.

Those who distribute products that are perishable or require refrigeration or other special treatment are more vulnerable to restrictions or stagnancy in the distribution channels than others. One of the major frozen meat distributors in Nablus city explained that “Once the expiry dates come close, we do our best to sell at any price to avoid the loss of the whole product.” He added that even when he sells to retailers at a discount, the retailers do not reduce prices to customers. They maintain their prices and reap more profit.

3.3.3 Payment Terms

⁵³ ARIJ/ACH. (July 2006). *The Palestinian Agricultural Marketing System Status, Challenges and the Impact of Commercial Restrictions on Products and Socioeconomic Conditions*.

Payment terms and financial liquidity help determine which traders are able to work at each level in the food sector. The ability to order in large quantities and to pay in cash enables large wholesalers to secure better deals that, in turn, help them cushion against unfavourable conditions. In the past, imports from Israel could be partially paid on credit while imports from abroad were paid in advance. Now, wholesalers pay a substantial part of their orders in cash or short-time post-dated checks. The wholesalers who have long-term relations with Israeli suppliers are better able to purchase on credit.

One wholesaler in Jenin district explained that imported products are often paid for with an advanced payment (Letter of Credit or “LC”), which essentially serves as cash. However, other wholesalers confirmed that most (90%) of their purchases are in cash, which enables them to obtain an additional discount. Also, since they have financial capacity, they are able to sell on credit to their guaranteed customers. Another wholesaler in Nablus said that he could purchase from Israeli sources on credit for up to 30 days depending on his long-term relationship with his sources. These wholesalers reported that they can purchase on credit for up to 60 days from local sources.

One large-scale wholesaler in Hebron said that in several cases small-scale wholesalers had sought his help to rescue imported products they had imported directly from abroad when they got stuck at Israeli ports for various reasons (e.g., health inspection, security check, and Israeli labour strikes that sometimes resulted in shipments being redirected to Egyptian or other regional ports). These small wholesalers had invested their cash in the advance payment to purchase the products from the source as well as to pay for shipping costs. Although they had been aware of clearance fees and taxes, they were unprepared for the additional costs including a daily rate of 25 USD per container or 125 USD per refrigerated container. Since these small-scale wholesalers imported relatively small quantities, these additional costs comprised a high percentage of the total cost, reducing their profit margins.

Payment terms in the local market depend on the relationship between the supplier and customer and the customer’s credibility. Post-dating checks for two weeks to two months is common, and large bills may be paid in several checks post-dated with consecutive dates. With regard to agricultural products, traders usually pay producers in advance, but no other players in the supply chain of agricultural products receive advance payments. There is no difference in terms of payment according to type of product or season.⁵⁴

3.3.3.1 Wholesalers and Bad Debts

A major problem facing food distribution chain intermediaries is the ripple effect of customers’ inability to repay debt. Field interviews confirmed that since the *Intifada* and especially in 2006, more households are purchasing from retailers on credit. As a result, retailers are then less likely to have liquid cash to repay their debts to wholesalers, and so on.

One wholesaler in Nablus city said that large-scale wholesalers need about 1,500,000 - 2,000,000 USD of revolving capital to run a wholesale business. The wholesaler said he has about 1,000,000 USD that he considers bad debt. Once an Israeli source experiences a problem with a Palestinian trader, they tighten payment conditions; and even banks have limited their willingness to cover the accounts of wholesalers. He indicated that several

⁵⁴ ARIJ. (2006). *The Palestinian Agricultural Marketing System Status, Challenges and the Impact of Commercial Restrictions on Products and Socioeconomic Conditions*.

wholesalers have been forced out of the wholesale market because they could not secure enough money to continue financing their business operations.

The small-scale wholesalers experience the same problems, but on a smaller scale. One wholesaler in Tubas city who distributes to retailers in Tubas district explained that retailers owe him about 120,000 USD. Since he cannot afford to loan any more money, he requires that retailers pay cash for any new purchases. Once they pay off old debts he can extend new credit in the same amount.

A wholesaler located in Jenin who distributes throughout the West Bank explained how he tries to minimize the problem of bad debt by conducting a financial and credibility check and categorizing his customers accordingly. Some retailers are expected to pay cash upon receipt of products; others are approved to pay by check. Due to this wholesaler's selectivity, he has not had a problem with bad debt.

3.3.3.2 Price Escalation

According to the wholesalers interviewed, price escalation results from the following factors:

Transportation from the point of origin to the Israeli port

For example, one wholesaler from Hebron said that sea shipment for one container (between 16-18 tons) costs about 1,000 USD from Taiwan to the Israeli port.

Israeli protection tax

Israeli protection taxes are placed on all products that compete with products made in Israel, even if the products are intended for sale in the WBGS. For example, the tax on dairy products reaches up to 212% on milk. Hummus is produced by Israeli kibbutzim and farms, thus, it is protected. A wholesaler in Hebron said he must pay 1 NIS per kilogram as a protection tax on imported hummus.

Clearance

Palestinian wholesalers hire the services of Israeli clearance companies, which charge 200 - 300 USD per file. Each file covers a shipment from a particular country, therefore the cost of clearance is a percentage calculated on the volume and value of the shipment.

Custom fees

Custom fees vary according to the type of product being imported. For example, a wholesaler in Hebron indicated that customs fees on tuna are 35% of the product's value. A wholesaler in Jenin indicated that customs fees reach up to 50% of the value of certain kinds of products.

Security check fees

These fees, payable to Israeli vendors, are utilized to check the security of imported products.

Transportation from the Israel port to West Bank destinations

Delivery of products from the Israeli port to crossing points of the West Bank is conducted by Israeli-plated vehicles. Subsequently, the wholesaler must arrange for transportation from the crossing point to the wholesaler's warehouse or store. Before the *Intifada*, the transportation cost of one container was about 200 USD. Now it costs about 715 USD.

Value Added Tax (VAT)

Currently VAT is 14.5% over the selling price.

Profit margin

Profit margins vary depending on product type. For example, according to one wholesaler, his margin on sugar and drinks ranges from 1-3%. On corn oil, milk, and flour it ranges from 2.5-5%. The profit margins for canned goods, biscuits, and dry produce is about 10%. Another wholesaler indicated that overall, large-scale wholesalers (importers) obtain a profit margin of 2-3% on products of local origin and 8-10% on imported products, while the retailers' profit margin is generally 15-20%.

All Palestinian importers pay the taxes, customs, duties and fees that are due according to Israeli regulations, which in turn escalate the prices of imported food products. Price escalation levels are different from product to product depending on Israeli restrictions and protection measures. Powdered milk is an extreme case. One wholesaler explained that the price of powdered milk in Europe is about 800 USD per ton, while the wholesale price in Palestine is 10,000 USD per ton. The same wholesaler indicated that the protection tax on hummus is 150%, on corn oil 10%, and on canned sardines 132%. There is no protection tax on sugar and rice.

A wholesaler in Hebron city who imports tuna from Taiwan explained the necessary procedures as follows: 1) obtain a health certificate issued from Israeli Ministry of Health; 2) implement Palestinian standards (e.g., printing the information in Arabic on the cans); 3) activate the Letter of Credit; 4) have the producer ship the products; 5) hire an Israeli clearance company when the product has arrived at the Israeli port; 6) wait while products are stored in the bonded area for at least 15 days during health inspections and security checks; 7) hire an Israeli transport company to deliver the products to the crossing point with the West Bank; and, 8) use wholesaler's own vehicles to transport products to their stores.

In the case of tuna, one carton (48 cans, 270 gm per can) is purchased from the point of origin at 21 USD per carton. Israeli customs at the port is 35%, and there is another tax of 0.7 USD per kilogram according to the weight of the product. Health tests to issue the required certificate cost 397 USD per test. Transport fees (by sea) cost 1,000 USD per 18-ton container. A second 100 USD health test is required when products reach the port. Fees for storage in the bonded area are 25 USD per day. Clearance fees cost 200 - 300 USD per file. Transportation from the port to the stores costs 400 USD per container. Then a profit margin of 5-6% is added, from which administrative costs such as salaries, rent, utilities and local transportation are paid. The carton is sold to smaller wholesalers at 35 - 40 USD each, which is 80% more than the purchasing price from the point of origin. By the time it reaches the consumer, the price is approximately 100% over the cost at point of origin.

3.3.4 Impact of Food Assistance on Smaller Wholesalers

As discussed below in the section on safety nets, organizations and programmes provide support in various forms, such as food aid, cash assistance, and other modalities. Usually wholesalers bid for contracts to provide food packages. Large-scale wholesalers are more likely to win these bids. When there is big distribution of food packages, it tends to have a negative impact on smaller wholesalers or retailers. Some beneficiaries approach smaller wholesalers or retailers to sell items they received in food aid packages.

One wholesaler in Hebron said that when food packages are distributed in Hebron, sales of similar items are stagnant for a period. He said, “Some food aid recipients offer to sell some of the food they received. I, or other traders, buy the products at very low prices. Our business is to sell to people, not to buy from them, and once I buy from them, I have to stock the products for a longer period of time.” This wholesaler suggested using a coupon mechanism. This would allow beneficiaries to buy their food from retailers, who in turn would buy from wholesalers. In this way, various distribution intermediaries would share the benefits of aid. The current mechanism benefits only the big wholesalers who win the bid to provide food aid, while negatively affecting the smaller wholesalers and the retailers.

3.3.5 Conclusion

Despite Israeli measures that complicate the movement of people and products in the West Bank, the wholesale food sector maintains supplies of food products to local markets. Although consumers tend to reduce their consumption in general when their income decreases, this decrease in consumption mainly affects consumption priorities. Different coping strategies are triggered and the demand for food products (especially staples) tends to be less affected. Given the dependability of consumer demand, traders are willing to supply products, even though conditions make business more complicated, costly, and risky. Some smaller wholesalers have left the market because they could not tolerate the additional costs and bad debt. Most of the larger wholesale businesses capitalize on their accumulated long-term experience and contacts, thus maintaining their capacity to continue trading under volatile circumstances. It is not clear, however, how long these traders can withstand these tough conditions before they exit the market. One wholesaler estimated that in the past year bad debts increased by about 50%. This is a consequence of the decline in consumers’ purchasing power, and increased use of borrowing from retailers as a household coping strategy, which then pressures retailers to delay payments to their suppliers.

The extent of Palestinian traders’ dependence on Israel limits their ability to adapt to increasingly costly Israeli measures. Unfortunately, the Paris Protocols did not release Palestinian trade from Israeli control and, in fact, many Israeli requirements have a disproportionately negative impact on Palestinian business.⁵⁵ Palestinians must work through Israelis to import food products and they are subject to Israeli requirements—even when these support the Israeli economy at the expense of the Palestinian economy.

Since the beginning of the *Intifada*, and after the construction of the Barrier, additional security and political measures have been imposed, which in turn contribute to rising costs. The burden of these costs are either transmitted to consumers by increasing the prices, or absorbed by the supply chain through declining profit margins.

⁵⁵ Paltrade. (August 2005). *Trade Impediments*, volume 1, issue 5.

Since supply chain intermediaries play an integral role in the food security system of the WBGS, they should be considered major stakeholders in the design of any interventions aiming to improve food security. Field interviews showed that most of assistance programmes ignore the central role of traders, and may cause additional and unnecessary pressure on smaller wholesalers and retailers.

Finally, it is significant that the food sector has been able to ensure the physical accessibility of food products despite the severe conditions prevailing in the Palestinian situations.

3.4 Social Safety Nets

Since the beginning of 2006, a combination of factors have severely undermined the ability of the PA and other actors (e.g., international agencies and charities) to deliver social assistance. The victory of Hamas in the Palestinian Legislative Council elections in January 2006 and the subsequent boycott of the PA by Israel and the international community have had a dramatic impact on all Palestinian institutions. Since early 2006, the PA has been unable to pay the salaries of approximately 160,000 employees (who support an estimated one-quarter of the population of the WBGS).⁵⁶ Simultaneously, Israel intensified closure regime measures in the WBGS. As a result, the services provided by PA institutions, including education, health and social services, have been severely destabilised.⁵⁷

As a response to this crisis, the Quartet endorsed the Temporary International Mechanism (TIM), designed by the European Union with the aim of providing alternative ways of support to the most important functions of the PA.⁵⁸ Thirty-two million USD were also received from Arab donors via the accounts of the Office of the President.⁵⁹

The TIM Continues to Prevent the Collapse of Government Services⁶⁰

The TIM was established by the European Commission at the initiative of Commissioner Benita Ferrero-Waldner. It was initially endorsed by the Quartet on 17 June 2006 for a three month duration, however, has been extended until the end of March 2007. All TIM activities are carried out in partnership with the Office of the President of the PA.

TIM provides direct support to employees of the PA who deliver essential social services. The TIM also supports vulnerable Palestinians who have witnessed a steep and sudden decline in their purchasing power. Beneficiaries of the TIM allowances have not been paid regularly by the PA since February 2006.

The TIM has made five payments of social allowances to some Palestinian public service providers and pensioners since it became operational. Eligible beneficiaries have received an allowance of NIS 1,500 (€270) paid directly to their bank accounts. This allowance is intended to reach more than 80% of civilian employees on the payroll of the PA. Payments are made using contributions from the European Commission, Spain and the United Kingdom.

⁵⁶ OCHA. (May 2006), *Consolidated Appeal Process (CAP) Revision*.

⁵⁷ FIVIMS briefing paper.

⁵⁸ Quartet Statement, 17 June 2006.

⁵⁹ IMF. (17 December 2006). "West Bank and Gaza." Internal document.

⁶⁰ TIM, Press release, 2nd February 2007.

In 2006, the European Union, through its Member States and the European Commission, allocated €651 million to the Palestinians through a wide range of programmes that have been implemented by different organisations. This marks a 27% increase in the level of assistance compared to 2005. The TIM has helped to avoid a widespread humanitarian crisis.

Although it appears that the amount of assistance disbursed in 2006 helped to avert a widespread humanitarian crisis, there are still pockets of very poor households that are not receiving any kind of assistance from international sources. This section of the report describes the role of charitable societies and Zakat committees in alleviating poverty and suffering of these hard-to-reach households. It is a role that is often underestimated or misunderstood by the international community.

Social safety nets are deeply rooted in Palestinian cultural values and religious obligations that promote solidarity and social bonds. These social safety nets have been reinforced over time through their ability to provide some assistance in the absence of a Palestinian state. They have continued to play a critical role in the absence of formal effective governmental schemes after the establishment of the PA (for example, the lack of a social security system). Finally these nets were strengthened by the role some of them play in the constituency-building strategies of political factions.

Social safety nets help strengthen the resilience of vulnerable groups, and help them cope with the economic deterioration since the PA fiscal crisis. They are diverse in terms of their institutional setting and relationship to authorities. That is, some are supervised by various PA ministries, others are run by non-governmental organizations, and others by international organizations.

3.4.1 Governmental and International Organizations' Programmes

The following table provides a brief description of programmes that are run or supervised by governmental bodies:

Table 3.2: Summary of Governmental Social Assistance Programmes

Type of programme		Package of assistance	Number of covered households	Current Status
Relief-type programmes	Social Hardship Cases Programme (MoSA)	-cash payment -in-kind assistance -health insurance -exemption from education tuition fees (up to 12th grade)	47,000	None of the beneficiaries has received any aid since February 2006.
	Social Protection Programme (MoSA)	Support scale ranges from 228 NIS/person/month up to a maximum of 1,000 NIS/household/month	Targets "the poorest of the poor" i.e. the poorest 10-15% of households (45,000-55,000 families)	Pilot phase scheduled for August/September 2006. (with approximately 3,500 households), but process was interrupted by PA labour strike.
Programmes with a development	Employment and Social Protection	Targets underprivileged groups in terms of access to labour market or resources	N.A.	Not activated yet due to lack of funding.

dimension	Fund (MoL)			
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Source: FAO. (September 2006). *Social Safety Nets and Social Support Programmes in Their Relation to Food Security In The West Bank and Gaza Strip*, Working Paper 2.

Other governmental emergency and assistance programmes include emergency employment creation programmes and rehabilitation and re-training programmes, the largest of which is the Ex-Detainees Rehabilitation Programme and the Ministry of Labour's vocational training and employment programmes.

As illustrated in Table 3.2 above, most of the programmes that require governmental involvement were suspended in 2006 following the PA fiscal crisis. This increased the pressure on other types of safety nets that did not suffer a suspension of funding. Table 3.3 below provides examples of some safety net programmes run by international organizations, most of which are relief-oriented, that is, they are aimed at meeting the basic needs of the poor and the new poor.

Table 3.3: Examples of Some International Organizations' Programmes

Organization		Package of assistance	Number of covered households (2006)
UNRWA	Regular programme	-food aid -small cash payment -shelter rehabilitation	86,000 in Gaza; 42,600 in West Bank
	Emergency programme	-Food packages every 60 days in Gaza, and every 90 days in West Bank -228 NIS/person/month up to a max. of 1,000 NIS/household/month	75,500 in Gaza; 82,500 in West Bank
		Cash: \$235 once in Gaza (plus \$100 for rent for those whose houses were demolished). \$250 once in the West Bank	44,400 in Gaza; 58,279 in West Bank
World Food Programme		Relief and rehabilitation programme	Scaled up to reach 600,000 non-refugees persons
International Committee of the Red Cross		Cash assistance and other type of aid	N.A.
CARE International	Emergency intervention (10 months)	Distribution of fresh food (tomatoes, potatoes, cucumbers, eggplants and squash)	65,616 individuals

Source: FAO. (September 2006). *Social Safety Nets and Social Support Programmes in Their Relation to Food Security In The West Bank and Gaza Strip*, Working Paper 2.

Although coordination is not completely efficient, international NGOs have more or less divided the West Bank into geographical areas to avoid the overlapping of efforts. CARE International works mainly in the Jenin area and the Gaza Strip. ACH is involved in the Tubas governorate. Oxfam GB works in the western part of the Hebron governorate as well as in Gaza. Comitato Internazionale Per Lo Sviluppo dei Popoli (CISP) is mainly involved with Bedouin communities. Premiere Urgence deals with the Qalqilya area.

3.4.2 Local Organizations

According to a poll conducted by Birzeit University in September 2006, 20% of assistance delivered was provided by Palestinian NGOs and local charitable institutions. Charities constitute between 10-40% of all NGOs in the WBGS. They reach tens of thousands of people directly, and hundreds of thousands indirectly. Their work is mostly carried out in isolated and rural communities, refugee camps, and in communities now cut off from services by the Barrier, although many are located in regional centres. 61

The role of Palestinian NGOs and community-based organizations in providing social assistance is highly variable. The last NGO census was completed by MAS in 1997 and is currently being updated, thus no solid data exists. However, field interviews conducted for this study suggest that the role of local organizations in providing social assistance has increased since the beginning of the *Intifada*. They engage in a wide range of activities. For example, Abna' Al-Balad society in Nablus city conducts youth and cultural activities and provides assistance to poor households, while the Human Relief Society in Hebron city places emphasis on supporting families who are caring for orphans. A third example is the Disabled Rehabilitation Society in Qalqilya, which focuses on the rehabilitation of disabled people. They also help families that are poor or have members who are disabled or orphaned.

Most of the charitable societies that provide food aid do so through coupon/voucher schemes. The schemes include fresh bread distribution and food packages available at local shops. In field interviews across the West Bank, these coupon/voucher schemes were widely praised by aid workers and charitable societies for their positive impact on the local economy. Coupons and vouchers help local retailers and enhance the local economy. Also, unlike food packages that provide commodities like sugar, oil and flour, coupons, vouchers provide recipients with the opportunity to obtain fresh food.

Evidence suggests that local organizations are best positioned to smoothly implement coupon and voucher programmes. Local organizations have stronger ties with their communities, are more knowledgeable about issues on the ground, and have relationships with members of the community. Some also have extensive experience providing social assistance. Zakat committees, for example, have some standard programmes that are offered throughout the WBGS. These include vouchers, assistance for orphans along with food and cash distribution.

The following case studies give snapshots of the nature of charitable societies and their relief activities:

Abna' Al-Balad Society

Established in the year 2002 in Nablus city, the Abna' Al-Balad Society was established through the initiative of a group of social activists. The general assembly consists of 75 members. All of the board members are volunteers. Abna' Al-Balad is an independent society that runs assistance and social activities for city inhabitants who suffer from Israeli measures or the general economic deterioration.

In 2006, the Society provided several types of assistance to poor households including:

- Ongoing distribution of vouchers for fresh bread in conjunction with local bakeries.

⁶¹ TIM, Press release, 2nd February 2007.

- In June they distributed 400 food packages (each approximately a 30 USD value).
- In Ramadan they distributed about 500 food packages (each an estimated 35 USD value).
- Ninety food packages were distributed to needy students at Al-Najah University (each approximately a 17 USD value).
- They provided about 50,000 USD in tuition assistance to needy university students.
- For Eid Al Adha they distributed 280 kilograms of lamb meat.
- On various occasions, they provided assistance to individuals, especially for health care, in coordination with health institutions in the city.

The Society maintains a list of 480 households, 80% of which are from Nablus city. They provide some help for these families every six months. Their main sources of funds are from Islamic Relief, Orphan Canada, local institutions and businesses, and the governorate office.

The Society estimates that it is the fifth largest local organization that provides assistance to vulnerable households in Nablus city. They rank the organizations by size as follows:

- 1) The Zakat committee, which has an annual budget of more than 1.4 million USD.
- 2) The Charitable Solidarity Society, an Islamic society that manages three private schools.
- 3) Al-Lod Society, which focuses on refugees, especially those who originate from Al-Lod.
- 4) The Popular Services Committees, which is supervised by the district governorate office.

Human Relief Society

Headquartered in Nazareth, inside the Green Line, the Human Relief Society has branches in all districts of the West Bank. Their main programme links households in WBGS that care for orphans with “adoptive families” from the Palestinian community inside the Green Line. Adoptive families provide monthly cash assistance ranging from \$30-\$50 for each orphan in a household plus other cash assistance in Ramadan. Food packages are distributed 2-3 times per year, and meat is distributed during Eid Al-Adha. The Hebron branch supports 1,500 households (approximately 10,500 people), all of whom house orphans. There are other societies that channel assistance from Palestinians inside the Green Line to needy households in WBGS.

Tubas Charitable Society

The Tubas Charitable Society is a women’s organization that focuses on providing vocational training for women and managing children’s kindergartens. They are involved in distributing

food coupons, food packages and school bags. Last year they distributed around 1,000 food packages, 100 coupons (worth \$30 each), and about \$1,900 in assistance to 28 households during Ramadan. Their sources of support are the Ministry of Social Affairs, Orphan Canada, and Islamic Relief. Notably, the Tubas Zakat Committee is a much larger organization with an annual operating budget of \$600,000 USD.

Disabled Rehabilitation Society

Established in 1992 in Qalqilya city, the Disabled Rehabilitation Society provides services to people with disabilities. It has established a factory with a budget of 400,000 USD to produce prosthetic limbs. They provide a range of assistance to families that are poor, have disabled members or house orphans. The following are among their assistance programmes:

- Adoption of 700 orphans' families. "Adoptive families" from Arab countries (especially from the Gulf) send cash assistance every three months, the average value being about 66.50 USD per household caring for orphans.

- Distribution of 700 food packages, the value of each is approximately 35 USD.

- Distribution of meat to 3,000 households for Eid Al-Adha.

- Distribution of medical equipment and supplies needed by people with disabilities, such as wheelchairs and oxygen.

- Distribution of bread to 800 households. Each household receives 2 kg. of bread daily from local bakeries for one month. Another 800 households are selected for the next month.

The society has 9 employees and 6 more are employed in the factory. They have an annual running budget of 352,000 USD. They finance their production activities and assistance programmes from non-governmental contributions from Arab and European countries.

What is an Islamic Charitable Institution?⁶²

The aim of Islamic charitable institutions is to assist the most needy Palestinian individuals and families. Run as non-profit organisations, they are independent from governmental authority and rely on donations or voluntary assistance to carry out their work. Islamic charitable institutions include the committee offices of Az-Zakat. The Zakat and other charities operate under the supervision of the PA Ministry of Waqf (Islamic endowment) and Islamic Affairs. Each active charity must be registered with the PA Ministry of Interior; they are issued a one-year license that is renewable at the recommendation of the supervising ministry, either the Ministry of Religious Affairs, the Ministry of Agriculture, or the Ministry of Social Affairs.

⁶² OCHA. (November 2006). *Special Focus*.

Annual financial reports must be submitted to both the Ministry of Internal Affairs and the supervising ministry, and are scrutinised before a license is renewed. Charitable institutions are required to hold elections for the Board of Members every two years. In the West Bank, most present themselves as religious associations, for example the Az-Zakat Committee, Religious Charitable Association, Islamic Club, Al-Bir Wa'el Ihsan and The Islamic Society for Orphan Sponsorship, Yatta. In Muslim societies, the application of the term "Islamic" generally denotes positive characteristics, such as honesty, social justice, righteousness and promotes a sense of legitimacy. Another principal of these institutions is that participation in, and benefit from them, is open to all, regardless of socio-economic, religious or political background.

Local Islamic institutions have broad networks, deep involvement in their communities, and are well-funded. This positions them to provide assistance efficiently and effectively. For example, there are an estimated 81 Zakat committees spread throughout the WBGS (67 in the West Bank and 14 in the Gaza Strip) and their numbers are increasing.⁶³

However, between May and August 2006, thirty-seven charitable institutions in the West Bank were targeted in IDF raids, searches and attacks. Zakat committee representatives say that the seizure of computers and administrative records by the IDF has led to delays in the provision of vital services. They now have to reconstruct lists of beneficiaries, adding unnecessary work and diverting resources. After close scrutiny, several of the Zakat committee offices were closed by Israel. As a result more than 4,450 orphans, 157 widows and 3,000 destitute families who used to rely on assistance provided by the offices are no longer receiving help. The IDF stated that these organisations were closed down or raided to prevent militant attacks on Israeli citizens. Israel claims Muslim charities are being used as a front for militant activities.⁶⁴

Although the Zakat committees are supervised by the Ministry of Waqf and Islamic Affairs, they operate relatively independently. The majority of the committee members work on a voluntary basis; there are paid administrative staff to run operations. Almost all of the active Zakat committees have orphan adoption programmes, and almost 18,000 orphans benefit from these programmes.⁶⁵ The value of cash assistance provided for orphan families is approximately \$25-30 USD monthly, paid on a quarterly basis. Interviews with some of the Zakat committees showed that support for orphans depends primarily on donors from Arab countries, especially from the Gulf. The Zakat committees receive local funding including from businesses. In addition to the orphans programme, the Zakat committees provide food aid, health care through their health centres, donations of school bags, and some active committees also provide tuition support for needy students.

Zakat Committee in Hebron

Established in 1986, the committee has a relatively well-established organizational system with 11 full-time employees including 2 social researchers. The committee raises 40-50% of their budget locally, including from merchants and businesses in the city; the supervising committee raises the rest of the budget from outside the country. The

⁶³ FAO. (September 2006). *Social Safety Nets and Social Support Programmes in Their Relation to Food Security In The West Bank And Gaza Strip*, Working Paper 2.

⁶⁴ OCHA. (November 2006). *Special Focus*.

⁶⁵ OCHA. (November 2006). *Special Focus*.

committee has coupon/voucher programs plus diverse assistance programmes including:

- Assistance for poor households. They support 3,000 orphans' families, most of whom live in rural regions in the Hebron district.

- Assistance for poor students. They help fund university tuition in addition to distribution of school bags for pupils.

- Health assistance. They have a medical center in which they provide health services at discounted rates or at no charge. People with chronic diseases receive free medications. They secure health insurance for poor households.

- They provided about 5,000 meals during Ramadan.

- They distributed meat worth \$62,000 USD during Eid Al Adha.

- Urgent assistance. They provide cash assistance in emergencies. They also provide \$400-500 to cover expenses in the case of a death in the family, or they contribute toward costs of medical care in an emergency.

- Distribution of clothes. Last year they distributed clothes collected from local merchants worth \$140,000 to poor households.

- The Committee budget, which was about \$110,000 in 1987, reached \$2,308,000 USD in 2006, demonstrating the fast pace of growth of the Committee's role and activities.

These examples highlight the key role that Zakat committees and other charitable societies play in providing a social safety net to the poorest and most vulnerable Palestinians. They help to explain the enduring Palestinian resilience that is so notable given the drastic deterioration of socio-economic and political conditions, particularly among vulnerable groups that are not always well targeted by governmental or international programmes.

A notable advantage that Zakat committees and local charitable organizations have is their grounding in local communities. As such, they are more accessible to target groups and more able to assess household conditions. Unfortunately, interviews with the Zakat committees and charitable societies suggests a poor level of coordination between the parties operating in the same district. Information is not openly shared, which may lead to some overlapping of efforts. Despite the potential for overlap, it does not appear that any families are receiving more than minimal support for basic needs.

Local organizations rely primarily on funding from Arab and/or Islamic sources. Therefore, they were not significantly influenced by the measures imposed on the PA after the Hamas legislative victory (though they may be affected by post-election banking restrictions). Overall, local systems are remarkably sustainable. They deserve more recognition for the critical role they play in promoting food security.

Chapter Four: Conclusions and Recommendations⁶⁶

Food security measures will have limited impact in the context of continuing military occupation. Nonetheless, certain short-term food security measures should have an impact under a crisis scenario. For instance, interventions in the areas of food production for local consumption and income transfers (including food and cash aid, temporary job creation schemes and social hardship cases) have immediate impact on the food security of targeted families. With regard to income transfers and social safety nets, there is a need to enhance the monitoring of poverty as well as social and humanitarian needs. This includes food insecurity while harmonizing beneficiary selection criteria, avoiding gaps and duplications between programmes and improving coherence (i.e., minimizing inclusion and exclusion errors). Careful analysis and planning is critical in order to stabilize and advance the situation to the extent possible given current circumstances.

As noted, the Palestinian economy has sustained significant losses as a result of Israeli measures taken in the aftermath of the outbreak of the second *Intifada* in September 2000. These losses were largely driven by the closure regime, construction of the Barrier, and, recently, the international economic and political boycott of the PA. Worsening economic and security conditions will continue to exacerbate food security challenges.

Given that the incidence of food insecurity in the WBGS is a function of economic access rather than a matter of physical availability, this study recommends that food insecurity interventions focus on 1) improving existing local capacity to respond to food insecurity, including by strengthening local charitable organizations; and, 2) circumventing the collapse of the food supply chain by improving the efficiency of agricultural production, and assisting wholesalers and retailers to maintain the food supply sector. Under normal circumstances recommendations would assume greater involvement of local, national and international actors. However, the PA's political, institutional and fiscal crisis coupled with the continuous Israeli occupation policy and the ambiguity of the international community, has compelled this study to focus on a subset of recommendations. These pertain to the domain of Palestinian as well as aid actors in terms of feasible action.

Municipalities must take a central role in coordinating among charitable associations, grassroots associations, and Zakat committees at the local level. These local organizations are best positioned to understand local needs and target beneficiaries. Nonetheless, they require coordination. Municipalities should build capacity to oversee this work, which will be difficult given the international boycott of municipalities that started in 2005 and municipal fiscal pressures caused by their constituents' inability to pay their utility bills. However, it is imperative to long-term national growth that local institutions, including municipalities, be empowered so they can contribute to a national strategy. Since mobility restrictions make it impossible for all stakeholders to meet in a central location, international organizations will need to pursue decentralized consultation and coordination in order to fully involve local actors.

Other reports have hypothesized about possible future scenarios and their implications for water management and agricultural diversification; revitalization of agricultural production

⁶⁶ Recommendations are intended to provide a general framework and the basis for further FAO consultations at the local level.

and marketing; livestock production; and sector coordination, institutional strengthening and capacity building.⁶⁷ The recommendations in this report are based on the most likely scenario given the information that is known at present. That is, 1) the continuing deterioration of the political, economic and security situation with disproportionate impact on populations in remote areas, those near settlements and the Barrier, and those living in areas targeted for annexation; and, 2) the continued decline in local institutional response capacity due to the international economic and political boycott of the PA.

4.1 Agricultural Production

Structural shifts in the Palestinian agricultural sector have resulted in less quantity and variety of local output; and the ongoing and increasingly restrictive closure regime in the WBGS makes food distribution challenging. Analysis of agricultural statistics reveals that minimal changes have taken place in terms of the total cultivated area between 1999 (pre-intifada) and 2005, while animal production witnessed a significant growth (42.5% growth in cattle, 42% growth in sheep, 20% growth in goats, 41% growth in beehive, and a 5% reduction in poultry). This coincided with a noticeable growth in forage crops and a significant reduction in agricultural value added as a result of an increase in the cost of agricultural production in general, and animal feed in particular.

These developments should be analyzed and addressed in the context of a clear agricultural strategy that is sufficiently funded to ensure implementation. The existing weak institutional framework and the significant drop in total value added from agricultural production are among the problems that need to be tackled to increase own-production of food (as well as exports). There is broad consensus among international and local stakeholders in the food security sector that there is a need to strengthen marketing and diversify production for local markets to meet community needs.⁶⁸ Towards this objective, this study recommends that international development and humanitarian assistance programmes assume the following:

Develop agricultural strategies and policies and improve coordination among stakeholders

For the past four years, agricultural sector development in the WBGS has been taking place in the absence of a clear strategic framework or policy direction. The sector also suffers from a lack of coordination and cooperation among the various institutional stakeholders including PA bodies, Palestinian NGOs, international NGOs, and foreign governmental bodies.

Previous strategic plans for the agricultural sector have been developed in the absence of real local ownership. This may be due in great part to the fact that the national strategy was developed in English, and further because the agricultural sector lacked funding to implement the strategy. Future efforts should aim to develop a clear and coordinated framework with active participation of all stakeholders. Documents should be developed in Arabic and translated into English.

Also, the Ministry of Agriculture is caught in an ambiguous position; there is lack of clarity between its normative and regulatory functions on the one hand and its role in project implementation on the ground. The MoA should limit its focus to strategy and policy making,

⁶⁷ See Martin, Piedad. (January 2007). *A Review of the Palestinian Agricultural Sector* (draft version). Spanish Cooperation in Jerusalem and Consulate General of Spain in Jerusalem with ARIJ.

⁶⁸ Martin, Piedad. (January 2007). *A Review of the Palestinian Agricultural Sector* (draft version). Spanish Cooperation in Jerusalem and Consulate General of Spain in Jerusalem with ARIJ.

leaving the private sector and NGOs to implement projects (thus avoiding competition for donor funds). Essential infrastructure must be built in other spheres as well. For example, the Ministry of Trade, the Ministry of Health, and the Ministry of the National Economy must be given the means to enforce relevant legislation affecting food production, distribution and safety.

Develop programmes that focus on increasing the value added of agriculture

Increasing the value added of agricultural production through production efficiency gains will increase income derived from agricultural activities and may have a positive multiplier effect on the local economy. Some options for increasing agricultural value added include:

- Continued focus on the cultivation of high value crops for export and increasing diversification of those crops in recognition of the fact that the closure regime ultimately determines export potential. Crop timing may also help to balance price swings caused by production peaks. Also, processing of local production (food drying, processing) can increase the value of locally produced food during times of surplus.
- Supporting the cultivation of forage crops, especially in the Eastern Slopes where the largest concentration of animal production is located and early signs of desertification is found.
- Rangeland development, whereby marginal lands are developed to become prime grazing areas for sheep herders.
- Increasing the area cultivated with irrigated vegetables as they have higher productivity and profitability, while simultaneously focusing on efficient irrigation techniques such as drip irrigation, water harvesting, and water re-use.
- Developing local post-harvesting mechanisms, including the establishment of regional refrigeration and storage facilities, with a special focus on developing milk processing techniques as 50% of domestic milk consumption is imported from Israel.
- Focusing on increasing the quality of fruit production, especially olive oil; i.e., vertical expansion of fruit production rather than horizontal expansion.
- Piloting the production of fruit for the domestic market and for export to Jordan and other neighbouring countries. Currently, most fruit is imported from Israel. Since weather conditions in the WBGS are similar to those in Israel, the production of fruit is likely to be successful.
- Considering increased cultivation of medicinal plants as they do not require large up-front investment and have a reasonably good export potential.
- Improving national and regional coordination and planning of agricultural production. At present, Palestinian farmers are producing certain crops for export to Israel without knowing whether these are destined for the processing industry or for fresh consumption. There is a great difference in price and in the expected quality depending on the product's final destination. If the farmers were better organized they

would be in a better position to engage in advanced planning. They would be better informed and in a better position to negotiate with Israeli buyers.

Build the capacity for specialized agricultural extension services

Developing the agricultural sector towards efficiency gains and specialized agricultural production requires upgrading the capacity of agricultural extension agents. There is a need for specialized, Arabic-speaking technical experts that can intervene and train farmers.

4.2 Circumventing the Collapse of the Supply Side

Supply chain intermediaries play an integral role in the food security systems in the WBGS. Accordingly, they should be considered when designing intervention programmes that aim to improve the food security situation. This is especially important since the dire economic situation has made many small wholesalers and retailers vulnerable, forcing many of them to close their businesses. Also, most of assistance programmes overlook the need to strengthen this important link in the food supply chain.

Ideally, traders, consumers and the Palestinian economy as a whole would benefit from a national strategy to enhance the competitiveness of local production vis a vis the influx of international and Israeli products. This should include improving the quality of local food to increase competitiveness with Israeli products in the local market, improving cropping patterns to avoid surplus peaks, improving packaging and transportation, and better institutionalising local links between producers and traders. Since access to food is highly dependent on imported food, measures towards the enhancement of local production economy need to be phased appropriately in order to avoid disruption. Nonetheless, vital concerns surrounding such initiatives given the current context are relevant. Most noteworthy is the Israeli March/April 2006 decision to enforce a complete closure on Gaza, halting all exports and imports, impacting the economy and increasing food insecurity markedly due to the lack of staple food commodities. Although the West Bank has more permeability in terms of overall accessibility, the ramifications of such actions indicates the fragility and extreme dependence of the Palestinian food supply chain on Israeli imports and permissibility regarding access.

In the meantime, providing vulnerable households with vouchers that can be exchanged for food in retail and small wholesale shops is believed to be more effective at countering food supply chain fragmentation than distributing food packages. Also, food vouchers should include rations of fresh vegetables, fruits, and meat, not just dry foods. To maximize the effect of the food voucher programmes on the local economy, buying from poor farmers and distribution within the community should be encouraged as is the case in CARE's fresh food distribution in Gaza. However, this approach requires detailed procedures and close management by the implementing organizations. To maximize effectiveness and reduce possible security problems that may emerge as a result of discontent among groups, voucher programmes should be closely coordinated with local charitable organizations. This may potentially empower local organizations, thus strengthening resources for local resilience.

Direct support to traders (e.g., credit lines, incentives for promoting local produce) should also be considered along with enforcement of laws that protect local production.

4.3 Supporting Social Safety Nets

Social safety nets are critical for the protection of a large percentage of Palestinians, but it must be acknowledged that their effectiveness in long-term poverty alleviation is limited. The actual outreach of such programmes (number of poor assisted), as well as the amount of aid (cash, in-kind and services) distributed to the beneficiaries are limited. At the aggregate level, the poverty gap is only partially filled by social safety net programmes.

This study strongly recommends that international organizations working in the field of humanitarian and social assistance continue and expand support to the existing social safety nets. Special attention should be given to local community charitable organizations. These organizations are well-positioned to target vulnerable groups that are often overlooked by larger programmes.

Besides income-based entitlements, health care, education and social services must also be protected. Social safety nets cannot fill the void caused by the collapse of public institutional infrastructure triggered by the international boycott of the PA.

Temporary job creation and cash assistance are essential to provide temporary income support to the unemployed, thus enhancing households' capacity to cope with shocks and stresses. There is also a potential spin-off effect on local economies, especially if jobs are aimed at creating productive assets, such as land reclamation.⁶⁹

Although not within the scope of this study, a major issue that remains is labour based entitlements. Public employment is a key source of entitlements to food in the West Bank and Gaza Strip. It is important to focus on the fiscal sustainability of this type of employment. For the time being, the private sector is unable to generate enough jobs to absorb the growing labour force., There is a need to promote sustainable solutions such as long-term job creation. Decreased levels of education due to perceptions of its futility, also call into question the type of labour that will be generated.

⁶⁹ FAO/WFP. (2007). *Comprehensive Food Security and Vulnerability Analysis*.

4.4 Recommendations for More Effective Targeting

While the attributes of vulnerable households in rural, urban and remote areas are relatively similar, there are differences among these types of areas in terms of the primary causes of their vulnerability and the resources available to help them cope. Programs targeting food insecure households in different areas should be flexible to respond to distinct and unique needs such as those outlined below

Vulnerable households in rural areas

Food security projects such as sheep distribution, beehives distribution, home gardens, roof top gardens, among others, should continue in rural areas. However, the specificities of each area have to be taken into account. For example, desertification of southern areas and lack of water should be dissuasive for sheep breeding unless fodder and water are distributed as well.

Vulnerable households in urban areas

In urban areas, the few strategies for coping should be maximized. These include voucher programs and cash assistance. As mentioned earlier, voucher schemes should encourage and support local food production as well as support and coordinate with local charitable societies and Zakat committees.

At the same time, the closure regime measures that interfere with trade and access to social services must be lifted so that the need for assistance decreases over time.

Vulnerable groups in remote areas

In remote areas, especially those subject to settler or army attacks, food security projects should incorporate protection of civilians in the context of international humanitarian law. Responsibility for such projects may fall disproportionately on those agencies (ICRC, UN, and others) least affected by security and access constraints. Those localities with unsustainable livelihood systems are largely dependent on external assistance and must be guaranteed access by humanitarian organizations.

Household economy and self-subsistence should be encouraged and improved. Bedouins, in particular, should be provided with fodder to maintain the size of their flocks and decrease their level of debt. Families housed in tents and corrugated tin should be offered an opportunity for re-housing in more substantive structures should they request such a change. Livelihoods should be diversified to decrease dependency on herding. However, given the likely continued importance of livestock to Bedouin livelihoods, new breeds should be introduced to improve the performance of meat and milk production.⁷⁰

Notably, given the high vulnerability profile of isolated localities in Area C (e.g., Massafer Yatta and Massafer Bani Na'im), these areas should be targeted rather than avoided.

Moreover, local and international stakeholders must pay special attention to areas that are not remote, however, are vulnerable to isolation through annexation, settlement activity, or building of the Barrier. The Jordan Valley is of particular concern. In the event that it

⁷⁰ OCHA Hebron Field Office. (December 2006). *Bedouin Minorities in Hebron and South Bethlehem*.

undergoes further isolation, it may affect the food security status of local population, adjacent populations who farm their land in the Jordan Valley, and the rest of the WBGS that depends partly on food produced in that region.

Cash assistance

Cash in the hands of vulnerable groups will lead to positive economic ripple effects. Cash assistance is very important to vulnerable groups because it gives them flexibility to cover critical non-food needs, which are not covered in food packages. One charitable society in Nablus, for example, covered poor families' utility bills, thus helping the families and the municipality.

In rural areas, projects should continue with an integrated approach considering medium and long-term sustainability issues of these projects. Small and medium enterprises should also be encouraged.

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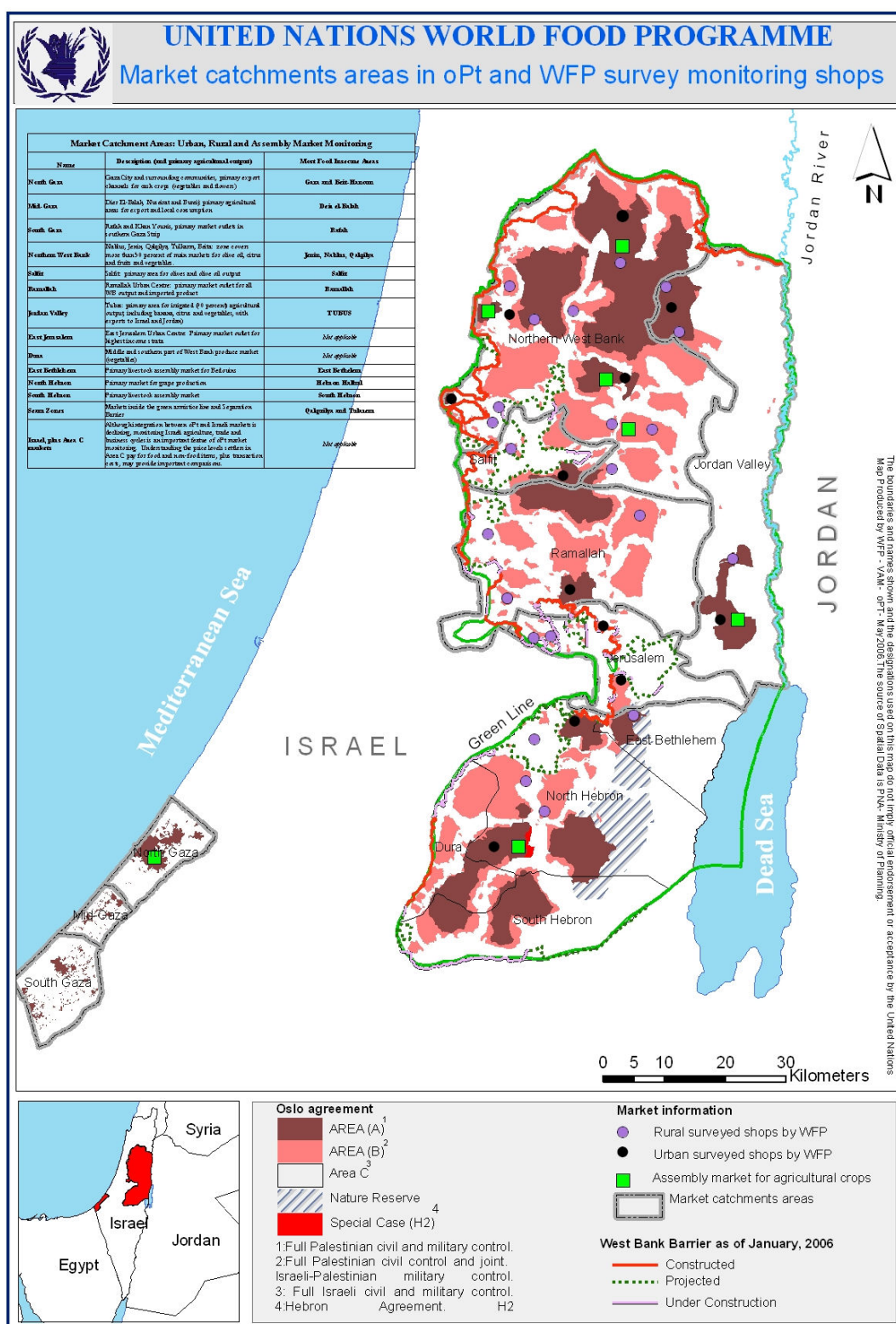
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Annex A: Map of Market Catchment Areas



Annex B: Map of Territorial Fragmentation of the West Bank

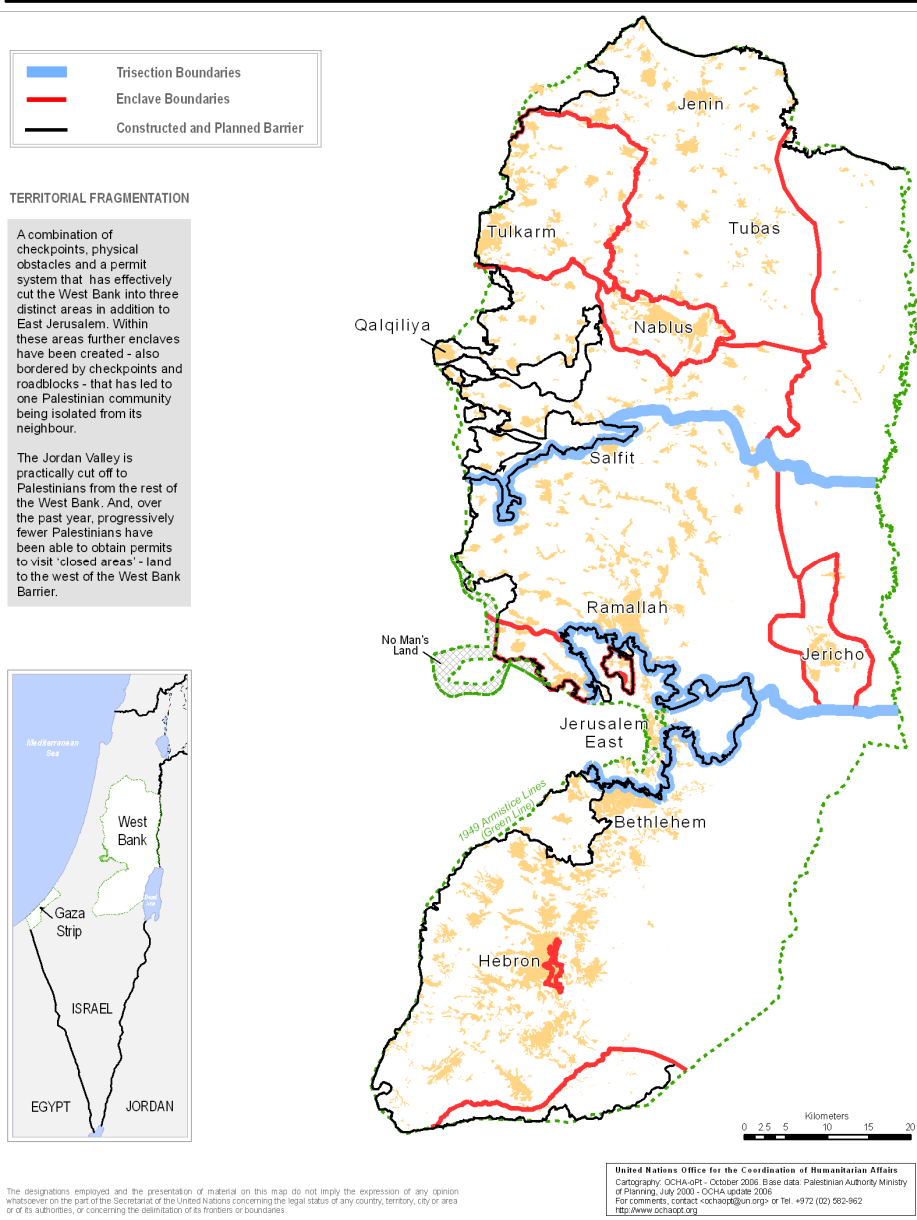


UN Office for the Coordination of Humanitarian Affairs

Territorial Fragmentation of the West Bank

2007 CAP - Consolidated Appeals Process

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Annex C: Case Studies from Field Interviews

A total of eight household case studies were conducted in four cities in the West Bank, two each in Jenin, Tubas, Nablus and Hebron. The purpose was to understand the perspectives of urban families dealing with food insecurity regarding the factors that affect food insecurity and the coping strategies they use to deal with food insecurity.

The following table summarizes the characteristics of the households interviewed:

Characteristics of Households Interviewed

Characteristics	Cities	Families
Household's main provider worked in Israel until the <i>Intifada</i> in September 2000 and has been jobless since, due to high unemployment	Jenin, Tubas	Abu Ziad's family; Abu Median's family
Household is headed by a woman because the man left the family for a second wife	Tubas	Um Summer's family
Household is large (7-10 people) and main provider has an income insufficient to meet the family's needs	Hebron	Abu Ayman's family; Abu Hamza's family
Household's main provider has stopped working due to health problems	Jenin, Nablus	Abu Nidal's family; Abu Iyad's family
Household's main provider lost his business during the Israeli invasion in 2002	Nablus (Old City)	Abu Ramzi's family

Factors Affecting Food Insecurity

1. Closures and Movement Restrictions

Thousands of Palestinian workers lost their jobs in Israel after the Israeli authorities closed the crossing points between the West Bank and Israel and Israel stopped issuing work permits.

The Case of Abu Ziad's Family –
Household Headed by a Labourer Who Used to Work in Israel

Abu Ziad lives in the city of Jenin with his wife, Um Zian, and their seven children. He worked as a labourer in Israel before the start of the *Intifada* in September 2000. Their monthly income was approximately 4,000 NIS/month. For the last six years, Abu Ziad has been unemployed because he cannot access work in Israel, and has been unable to find work in the West Bank.

Um Ziad relays, “Before the *Intifada*, the refrigerator was full. We had fresh meat, fresh fish, and all kinds of fruits and vegetables. We even had sweets and snacks. Abu Ziad was working in Israel, so he used to buy everything for the children.”

Um Ziad says that now their refrigerator is empty and there is nothing in the kitchen. The family has not eaten fish, yogurt, cheese, red meat or even fruit, for a long time. Their main meal is bread and olive oil. They cannot even buy medicine when their children are sick.

Since the family has no income, they must borrow for their necessities. They owe 1,500 NIS for groceries, 600 JD for university fees, 1,500 NIS for utility bills, as well as rent.

The Case of Abu Median’s Family –
Household Headed by a Labourer Who Used to Work in Israel

Abu Median and Um Median live in the city of Tubas with their three sons and two daughters. Abu Median worked as a day labourer in Israel and earned approximately 3,000 NIS/month before the *Intifada* started in September 2000. Once the Israelis closed the crossing points into Israel and revoked all work permits, Abu Median tried to find work in the West Bank but was unsuccessful.

Um Median says that before the *Intifada*, the family’s condition was stable. Abu Median had been able to buy almost everything required in the house. She conveys, “We used to eat red meat once a week, chicken twice a week and fish once every two weeks. There were sweets, fruits and vegetables in the house. The children used to drink milk, eat yogurt, and drink juice. The refrigerator was full.”

Now, she says, the family does not eat red meat at all except when they receive gifts from relatives, for example, during the Ramadan feast. They have not had fish in a very long time. Um Median cooks a half of a chicken once a week, which is split among the seven members of the family. They have fruit about once a month and vegetables when they are inexpensive.

The family is indebted to the electrical company for about 3,500 NIS and they owe 2,500 NIS for groceries.

2. Departure of the Head of Household

One factor causing food insecurity among the families interviewed was the departure of the husband, the sole provider, leaving the family without any source of income and unable to meet its food requirements.

The Case of Um Summer’s Family

Um Summer lives in the city of Tubas with her three daughters in a single room dwelling. Her husband left the family seven years ago, and he now lives with his second wife in Howara, in the Nablus governorate. The father has not helped the family at all nor shown any care for his daughters.

Um Summer says the family was in poor condition even before her husband left as he was lazy and did not like to work. Sometimes, however, he did work and earn some money to buy food for the children. She says, “At least you could find something to eat in the house. The

refrigerator wasn't empty. My husband used to buy red meat once a month and chicken once a week. We used to eat fish, fruit and vegetables from time to time, and my daughters drank milk."

Now, Um Summer and her daughters live under very difficult circumstances. They have no income and are dependent on irregular charity and loans. Sometimes the neighbours bring her flour, bread or lentils. "We only eat red meat on occasions, like when someone sends it to us during a feast. We can't even buy frozen meat. We haven't eaten fish for seven years, and we don't have yogurt or milk anymore."

They have not paid their electricity bills and have accumulated a 7,000 NIS debt to the grocer. Um Summer's brothers are poor, unemployed and unable to assist her. One year ago, Um Summer started working for the charitable association of Tubas where she earned 300 NIS/month. She says, "Now I can at least buy bread for my daughters."

3. Low Income, Large Household

Some of the households interviewed are forced to reduce the amount of food purchased and consumed simply because their income is insufficient to support the number of household members.

The Case of Abu Ayman's Family — Factory Worker in Hebron

Abu Ayman lives in the city of Hebron with his wife, daughter and three sons. He is also responsible for his mother and sister who live in the same house. The 50-square meter house consists of two bedrooms, a kitchen, and a bathroom, which is part of the kitchen. Abu Ayman sleeps in one bedroom with his wife and children; his mother and sister sleep in the other bedroom.

Abu Ayman earns approximately 1,500 NIS/month as a factory worker in Hebron. He says that in the past his salary was sufficient to meet the family's basic needs, but since he had more children and things became more expensive, his salary no longer lasts even the first 10 days of the month.

Abu Ayman suffers from a disk problem. The doctor suggested that he find a less physically taxing job to avoid deterioration, but he refuses to leave his job for fear of being unemployed.

Abu Ayman is in debt to the water and electricity companies, the grocer and various friends.

Even in the past, Abu Ayman's financial condition was precarious. He says he always earned a humble salary, but at least he bought red meat at the beginning of the month, fresh fruit twice a month, chicken twice a week, frozen fish once a week, vegetables once a week, and milk and eggs on a daily basis.

Now Abu Ayman's salary is insufficient to satisfy the family's needs. They no longer eat red meat at all. They eat frozen meat and vegetables twice a month, 1 and a half chickens weekly and fruit at the beginning of the month. The children rarely consume milk or yogurt.

The Case of Abu Hamza's Family —
Factory Worker in Hebron

Abu Hamza and Um Hamza live in the city of Hebron. They have five boys and four girls. The girls were married at a very early age (15 years old). Only the five boys are currently part of the household. The oldest son is married and lives with his wife in his parents' home.

Six years ago the family was living in a small rented house. Abu Hamza obtained a loan and his wife sold her land and her gold dowry to build a new house for the family. The house included a room that was rented to students for 600 NIS/month, which provided additional income. They were able to buy red meat monthly, chicken on a weekly basis, fruit twice a month and there were always vegetables available.

Unfortunately, the Israeli army accused Abu Hamza of hiding wanted people in his home, which made him an accessory to the *Intifada*. As punishment, they demolished the family's new house, and since then they have been living with a relative until they are able to build a new home.

Abu Hamza's income as a factory worker in Hebron is 1,300 NIS/month. He is now in debt to the bank, the water and electricity companies, and relatives. His oldest son is unemployed and unable to contribute to the family's upkeep. To alleviate the family's stress, he has started cleaning cars on the streets of Hebron. Despite this, there is not enough money in the family to provide for its needs.

4: Illness of the Head of Household

Health problems among household members, and specially the illness of the head of the household, contribute to food insecurity. Among the families interviewed, this was particularly apparent in a family's situation in Jenin.

The Case of the Abu Nidal's Family –
Illness of Head of Household

Abu Nidal and Um Nidal live in the city of Jenin with their son and seven daughters. The eldest two daughters married approximately 3 years ago an early age (15 years old) to husbands in their forties, because Abu Nidal wanted to alleviate the family's economic distress. The married daughters live in Jenin and the rest of the family live in their grandfather's house.

Abu Nidal was working when he had a heart attack six years ago. He had open heart surgery, which cost more than 30,000 NIS. He was forced to close his workshop because he could not pay the rent and bills, nor could he continue to engage in extensive physical labour. Additionally, his health is suffering as he cannot afford to take the required medication (costing an average of 17 NIS each) on a daily basis as prescribed. He has now developed diabetes.

Abu Nidal has been unemployed for six years and relies on some assistance from his family and loans. He is in debt for the amount of 20,000 NIS to relatives as well as the water and electricity companies. One month ago, Abu Nidal began helping his brother in his supermarket, earning about 20 NIS/day.

Abu Nidal recalls that when he was working his children were able to request whatever they wanted and he was able to provide for them. He used to buy two – three kilograms of fresh red meat twice a week, fresh fish at least once a week, a variety of fruit, sweets, snacks, and all the vegetables they desired. However, after his disease, becoming indebt and unemployed, he is only able to provide basic food such as lentils for his family. The family mixes olive oil with corn oil since olive oil is expensive and consume za'tar, dry beans, flour, sugar, rice and bread. The family cannot afford to buy any kind of fruit because flour is a priority, and they only buy vegetables seasonally when the price is very low. Neither yogurt nor milk is available to the family, except when provided by a relative for the children.

Um Nidal adds “The family has not consumed red meat for two years. At times Abu Nidal buys frozen meatwhen I cook it I have to leave the kitchen because I can't stand the smell. But what can one do? You have to feed your children with any kind of meat.”

5: The Israeli Invasion in 2002

On the night of April 3, 2002 hundreds of Israeli tanks, armored vehicles and bulldozers entered the city of Nablus. The invasion resulted in the deaths of 71 people including five children and the injury of many more. The large-scale damage and destruction to the city's infrastructure as well as to its irreplaceable cultural heritage centered in the Old City (Casbah) was less quantifiable. Field interviews conducted by FAO in the Old City of Nablus provided insight regarding how the Israeli invasion contributed to the loss of households' livelihoods.

The Case of Abu Ramzi's Family – Loss of Business

The Abu Ramzi family live in the Old City of Nablus. Prior to the Israeli invasion in 2002, the family was doing well. Abu Ramzi was the owner of a shoe-making store in the Old City of Nablus and his family resided in a large, comfortable house. His wife and seven children were never in need and would consume red meat, chicken, fruit, vegetables and dairy products on a regular basis. A drastic change took hold once the Israelis brutally entered their city with hundreds of tanks, armoured vehicles and bulldozed Abu Ramzi's business, forced the family to abandon their house and demolished it.

The destruction of Abu Ramzi's store cost him over 100,000 NIS, including the loss of machinery, goods and raw materials. The family now resides in a 50 square meter rented house with two bedrooms and one bathroom. A gas stove has been placed between the two rooms as the house does not have a kitchen. Abu Ramzi uses one of the bedrooms as a store to make shoes. The entire family sleeps in the other bedroom. With an income of approximately 500 NIS monthly Abu Ramzi is confronting a harsh financial crisis and has accumulated an overwhelming debt exceeding 100,000 NIS to merchants, grocery shops, water and electricity companies.

Before the invasion the Abu Ramzi family was in good condition. Their fridge was always full. Now Um Ramzi says, “We used to help poor people. Now we need help. At times the children have nothing to eat. My little children, especially Donia and Nesma haven't had milk for three years except when we receive some help.” Commenting on their living

situation Abu Ramzi says, “We don’t even live like humans. Take a look. We really live in a grave.”

The Case of the Abu Eiad Family

The Abu Eiad family live in the Old City of Nablus. The family has four children including three sons and one daughter and resides in an 80 square meter house. Rent costs 700 NIS a month and the house consists of two bedrooms, one bathroom and a kitchen.

Abu Eiad used to be a painter working in Nablus. However, during the Israeli invasion in April 2002, an Israeli soldier blew up the door of his house, injuring Abu Eiad’s hand. As a result, he is unable to move his hand normally or engage in any extensive labour. After his injury he has been unable to find suitable employment. His wife comments that when he does get a job it might be once every ten days. The family’s financial condition before Abu Eiad’s injury was stable. A monthly income of 2,500 NIS permitted them to meet expenses and basic needs. The family used to consume chicken, red meat, fruit and vegetables. When asked about the family’s food consumption, Um Eiad opens her fridge and says, “Come and see for yourself. The fridge is empty.”

Now they are in debt, owing money to the landlord, the water and electricity companies, the grocer as well as to friends and relatives.

Households’ Coping Strategies

The households in the eight case studies utilize the following strategies to attempt to manage their inability to secure their livelihoods:

1: Purchasing food on credit:

Without exception, all the families use this strategy to secure their basic needs regarding food.

2: Relying on less preferred and less expensive food:

All of the families substitute the type of food they were accustomed to with less preferred and less expensive food. For example, frozen meat is used as a substitute for fresh meat and there is an increased reliance on basic foods such as lentils, bread and corn oil in order to satisfy their needs.

3: Decreasing the amount of food consumed by the household:

The families have reduced the amount of food consumed to cope with their financial condition.

4: Restricting consumption by adults to provide food for children:

In some cases, such as the case of the Abu Ziad family, the father would refrain from eating in order to provide more food for his children’s consumption. Um Ziad comments,

“Sometimes we purchase two or four eggs for supper or for breakfast and Abu Ziad doesn’t eat with us claiming he is full and doesn’t want to eat.... And believe me, we have spent the whole month eating olive oil and bread.”

5: Reducing the number of meals consumed daily:

Families have reduced the number of meals consumed from three meals a day to one meal a day particularly the Abu Median and Abu Ziad families.

Comments from the Abu Median family:

Um Median comments, “Now, the number of meals, the portion size and the frequency of food consumed have all been reduced. Many meals consist solely of bread and tea. At times we eat corn oil sandwiches, rice with tomatoes and even onion with bread.” Um Median cooks twice a week and says, “When I find something to cook, I cook lentils or fried chips and, when it is available, half a chicken. If we are out of cooking gas we will not cook for over a week. Sometimes we can’t find anything to eat at all.”

Comments from the Abu Ramzi family:

Um Ramzi comments, “The family now depends heavily on basic foods to meet our nutrition needs, particularly bread, lentils, flour, rice, sugar, fried potatoes or cheap vegetables. Our basic drink is tea with sugar. We have cut the number of meals to one meal and many meals consist solely of bread with sugar, bread with corn oil, za’tar, dry beans and tomato sauce.” Um Ramzi cooks twice a week if cooking gas is available. If not, they spend days without cooking anything. Occasionally, the family consumes chicken and red meat when they receive help or when the grocer accepts to increase Abu Ramzi’s debt.

6: Early marriage:

It was found that early marriage has been used as a coping mechanism due to financial constraints among some families such as the Abu Nidal family.

Comments from the Abu Nidal family:

Um Nidal comments, “The two oldest daughters in the family were married when they were about fifteen years old to 40 year old husbands because their father wanted to alleviate the family’s financial distress by reducing the family members which would enable us to increase our food consumption. As a mother, the most tragic thing that happened to me has been the marriage of my daughters. Believe me, I would have preferred that they died rather than getting married this way. I believe that we sold our daughters to be able to have more food on the table and to get the dowry (property and/or money brought by a groom to his wife).”

7: Debt:

All of the households in the case studies used debt as a solution for their financial hardships and all are indebted to relatives, the water and electricity companies and groceries.

8: Sale of personal property:

The sale of jewelry took place in all households in the case studies. The sale of lands occurred in one case, (the Abu Hamza case) because all of the other households did not own land to sell.

9: Decrease in health expenditure:

In all of the cases studies, households were forced to cut expenditure on health to save money for food consumption. At times family members who were ill could not afford medication and did not visit a doctor until there was an emergency.

The Case of Abu Ziad's Family

Abu Ziad was working in Israel as a labourer prior to the start of the Palestinian uprising in September 2000. Until the year 2001 the family income was approximately 4,000 NIS monthly. Abu Ziad has been unemployed for six years because he cannot access the job market in Israel and cannot find any employment in the West Bank.

Abu Ziad is the sole bread winner in a family afflicted with serious health conditions. He has disk problems, high blood pressure, and diabetes and cannot practice any kind of intensive labour. Um Ziad has one kidney, chronic headache and diabetes. Their 22 year old daughter, Bardees has suffered from heart disease since she was a child. She currently has kidney failure and a thyroid tumor. Their sons also have major health issues. Hadi suffers from Mediterranean fever. Tariq who is two years old is already below the average height and weight for his age and Zaid, the oldest son, has asthma. Salam who is four years old has anemia, and Mahmoud who is 19 years old is also sick.

The Abu Ziad family is insured through Al-Aqsa insurance, which is the PA public insurance. The insurance only covers a minimal percentage of the treatment expenses. Commenting on their financial situation, Um Ziad relays, "The economic crisis affects all of us. For example, when Abu-Ziad was working in Israel we used to take Bardees to Rambam hospital in Haifa. We paid about 30,000 NIS to treat her. Her condition was not that bad seven years ago. Now we cannot even buy medicine for her. On top of this Bardees should undergo surgery urgently to remove the tumor in her thyroid which costs about 70,000 NIS. Of course we cannot afford the surgery. If you look at Bardees who is 22 years old, you might think that she is a twelve year old. Hadi on the other hand must take his medication every day. He has been out of medication since last month because we cannot afford to buy medicine for him. It is impossible for us to treat all of our sick family when we cannot even feed them. Salam suffers from anemia because we cannot feed him with the appropriate food and Tariq who has problems with height and weight hasn't had milk to drink for at least a year. In the meantime, I cannot bear to see my daughter Bardees die in front of my eyes while I am unable to do anything. I feel a part of me dies everyday."

The main findings in the study concerning urban and rural areas are the following:

1: Food insecurity in households in urban areas are worst than those in rural areas and in refuge camps.

Based on the case studies conducted in the cities, food insecurity in these households was worst than in rural areas or refugee camps as households in urban areas have less coping mechanisms. For example, in the last 16 case studies that were conducted, it was found that

some households were living solely on fried corn oil for weeks or months at times. Households spent the whole week eating bread alone and if they could not find anything to eat, they did not eat. This is primarily due to the cost in living differences between rural and urban areas and the fact that most poor families in the city have no lands to depend on, unlike poor families in the villages.

Comments from Um Summer's family:

It was found that Um Summer's family was barely able to meet their basic nutritional needs, depending solely on bread for breakfast, lunch and supper. At times they eat lentils if they can afford it. Um Summer says, "Some times we eat only bread for the whole week, and if we find corn oil we eat bread with corn oil." The family tries to purchase a chicken and cook it for their daughters every two months and to consume two or three eggs every two weeks, when possible.

2: The role of charitable organizations and UNRWA are limited or totally unavailable in the cities.

It was determined that the households visited did not receive any assistance from charitable organizations or from UNRWA. Irregular assistance took place on occasions such as Ramadan or Al-Eid as well as sporadic assistance from relatives. Assistance from UNRWA was not provided because the residents of the cities are not refugees and thus not eligible for such assistance.

Although the social safety nets have been weakened in WBGS as a result of the general economic conditions, the social safety nets in rural areas remain stronger than in the cities. This is attributed to the close relationships between relatives in the villages in contrast to the cities due to the cultures and environment that exist in villages.

Annex D: Changes in Area Used for Plant Production Between 1999 and 2005, by Type of Crop, Region, and Governorate

Region/Governorate	Area of Vegetables 99	Area of Vegetables 05	Increase (+) / Decrease (-)	Area of Fruit Trees 99	Area of Fruit Trees 05	Increase (+) / Decrease (-)	Area of Field Crops 99	Area of Field Crops 05	Increase (+) / Decrease (-)
Palestinian Territory	173,862	179,139	+	1,192,658	1,147,525	-	469,682	506,686	+
West Bank	126,539	125,914	-	1,116,626	1,089,955	-	416,690	448,975	+
Jenin	34,094	32,232	-	218,441	194,439	-	108,965	132,217	+
Tubas	20,335	20,316	-	14,988	15,236	+	47,432	47,680	+
Tulkarm	12,408	6,770	-	135,443	134,366	-	8,378	11,265	+
Nablus	6,260	4,417	-	210,817	202,555	-	44,536	34,638	-
Qalqilya	6,531	5,240	-	69,352	58,920	-	7,188	3,342	-
Salfit	1,416	1,673	+	79,345	80,816	+	7,212	4,026	-
Ramallah and El-Bireh	3,425	7,324	+	157,481	162,779	+	29,598	40,687	+
Jericho and Al-Aghwar	29,366	31,626	+	5,696	6,856	+	6,097	6,270	+
Jerusalem	799	490	-	16,453	17,389	+	4,749	3,105	+
Bethlehem	3,921	2,463	-	47,079	47,269	+	18,905	19,096	+
Hebron	7,984	13,363	+	161,531	169,330	+	133,630	146,649	+
Gaza Strip	47,323	53,225	+	76,032	57,570	-	52,992	57,711	+
North Gaza	7,232	10,201	+	14,194	4,878	-	5,042	6,390	+
Gaza	6,426	3,662	-	24,952	16,612	-	4,010	3,418	-
Deir Al-Balah	9,927	9,090	-	15,491	14,032	-	5,450	5,620	+
Khan Yunis	9,106	15,183	+	14,452	14,854	+	28,590	30,783	+
Rafah	14,632	15,089	+	6,943	7,194	+	9,900	11,500	+

Area in dunums

Source: PCBS, *Agricultural Statistics 2004/2005* and *Agricultural Statistics 1999/2000*

Annex E: Number of Cattle, Sheep, Goats, and Poultry in the WBGs 1999 vs. 2005 by Region & Governorate

Region/Governorate	Cattle		Sheep		Goats		Poultry (1000)			
	1999	2005	1999	2005	1999	2005	Broilers 99	Broilers 05	Layers 99	Layers 05
Palestinian Territory	23,688	33,746	566,409	803,165	308,845	371,198	43,457	40,641	2,518	2,556
West Bank	20,051	27,534	530,980	742,499	293,758	361,243	30,754	24,625	1,699	1,809
Jenin	2,544	3,915	61,929	107,171	26,673	50,402	6,174	3,717	90	133
Tubas	1,567	2,393	47,684	54,595	8,507	4,714	1,402	380	24	22
Tulkarm	1,840	1,169	14,696	25,073	4,397	6,077	3,290	4,159	350	332
Nablus	4,725	5,490	65,184	96,667	26,241	31,959	2,036	3,344	33	52
Qalqiliya	1,979	1,424	20,822	25,723	13,890	6,653	2,138	391	207	253
Salfit	388	392	3933	10,604	4,985	12,181	562	822	60	38
Ramallah and El-Bireh	465	461	45338	61,338	38,734	52,150	4,109	1,739	488	446
Jericho and Al-Aghwar	802	875	35688	36,585	26,432	34,223	533	216	8	4
Jerusalem	298	660	30807	45,859	22,633	27,419	528	41	28	67
Bethlehem	87	163	43293	66,694	47,311	53,273	1,455	876	68	98
Hebron	5,356	10,592	161,606	212,190	73,955	82,192	8,527	8,940	343	364
Gaza Strip	3,637	6,212	35,429	60,666	15,087	9,955	12,703	16,016	819	747
North Gaza	908	2,530	5,733	17,500	2,867	1,350	1,000	1,826	135	119
Gaza	644	1,255	8,932	8,500	4,465	2,500	3,264	2,146	507	400
Deir Al-Balah	870	1,266	9,282	15,036	2,015	1,169	1,550	3,780	57	67
Khan Yunis	837	850	5474	11,580	2,736	2,820	5,538	4,853	74	104
Rafah	378	311	6008	8,050	3,004	2,116	1,351	3,411	46	57

Area in dunums

Source: PCBS, Agricultural Statistics 2004/2005 and Agricultural Statistics 1999/2000

