

**Emergency Food Security Needs Assessment  
2004 Update Assessment**

**WFP oPt/occupied Palestinian territories  
VAM/M&E Unit  
June, 2004**

<b>1.</b>	<b>EXECUTIVE SUMMARY.....</b>	<b>3</b>
<b>2.</b>	<b>SUMMARY OF METHODOLOGY.....</b>	<b>4</b>
I.	HYPOTHESIS.....	4
II.	METHODOLOGY .....	4
III.	LIMITATIONS OF DATA .....	6
IV.	CONCLUSIONS.....	6
<b>3.</b>	<b>ECONOMIC ENVIRONMENT AND FOOD AVAILABILITY .....</b>	<b>6</b>
I.	MACROECONOMIC POLICY SITUATION .....	6
II.	IMPACT OF SHOCK ON MARKETS AND AVAILABILITY OF FOOD .....	7
<b>4.</b>	<b>THE HEALTH AND NUTRITION SITUATION .....</b>	<b>7</b>
<b>5.</b>	<b>CONTEXTUAL INFORMATION.....</b>	<b>7</b>
<b>6.</b>	<b>FOOD / LIVELIHOOD SECURITY &amp; ECONOMIC SITUATION OF HOUSEHOLDS.....</b>	<b>8</b>
<b>7.</b>	<b>INSTITUTIONAL ARRANGEMENTS .....</b>	<b>9</b>
<b>8.</b>	<b>ADDITIONAL CONSIDERATIONS FOR REFUGEES.....</b>	<b>10</b>
<b>9.</b>	<b>CONCLUSIONS AND RESPONSE OPTIONS.....</b>	<b>10</b>
<b>10.</b>	<b>RECOMMENDATIONS.....</b>	<b>12</b>
I.	MEASURES AND ACTIONS REQUIRED.....	12
II.	INDICATORS TO BE MONITORED .....	13
<b>11.</b>	<b>ANNEXES.....</b>	<b>13</b>
I.	“PAIR-WISE RANKING” METHODOLOGY .....	13
II.	LIVELIHOOD ZONING METHODOLOGY .....	16
III.	WEST BANK “PAIR-WISE” FOOD INSECURITY MAP, 2004.....	18
IV.	GAZA STRIP “PAIR-WISE” FOOD INSECURITY MAP, 2004.....	19

## 1. Executive Summary

In the spring of 2003, FAO and WFP conducted a Food Security Assessment for the occupied Palestinian territories. That study constitutes the baseline for food security in the oPt. Within the FAO Food Security Assessment, WFP has been mainly responsible for (i) conceptualizing and carrying out the Pair-Wise comparison, thanks to which the Mission was able to determine the size (percentage population) and the geographic distribution of the food insecure Palestinians, and (ii) supporting the fieldwork of the vulnerability profiling, thanks to which the Mission was able to determine “who” are the food insecure and groups-at-risk.

As a result, WFP launched in July 2003 an Emergency Operation, EMOP 10190.1, to the benefit of 530,000 non-refugee Palestinians.

One year later, the WFP-VAM unit undertook an update of the findings of the FAO Food Security Assessment, measuring them against the 2003 baseline. The Pair-Wise comparison exercise was repeated on the same 96 geographic units – clusters; using the same clusters, an analysis of the livelihoods of beneficiaries was conducted (livelihood zoning); the vulnerability profiles were reviewed and re-prioritized. Coupled with the above, a thorough examination of existing literature, an analysis of secondary data and of the latest surveys regarding nutrition, poverty, coping strategies and perceptions of the Palestinian population on international aid were conducted.

The findings are as follows:

- In spite of a general easing of closures and an improvement of the economic situation towards the end of 2003, the overall percentage of food insecure population has only slightly declined, from 40% to 38%;
- the size of the groups-at-risk has also slightly declined, from 31% of the overall Palestinian population to 26%;
- Regarding the spatial distribution of food insecurity, half of the Governorates of the West Bank and Gaza have remained at the same levels, one fourth have declined, becoming more food insecure, one fourth have improved, meaning a reduction of the percentage food insecure population.
- Out of a total 752,000 food insecure non-refugees, 480,000 are in need of food aid, the remaining having significant opportunities to find employment opportunities, or to receive other types of assistance;
- Two vulnerable profiles (New Poor traders and New Poor employees) have been found to be substantially less food insecure than the others, and therefore excluded from the WFP caseload;
- The Hardship Social Cases, the malnourished enrolled in the Supplementary Feeding Programme and beneficiaries of the Institutional Feeding Programme remain the most food insecure, and therefore of first priority for receiving WFP assistance;

- A substantial shift towards development-gearred activities, Food-For-Work and Food-For-Training has to be made for all New Poor Daily Wage Earners, Fishermen, Bedouins, which constitute the majority of WFP caseload.

WFP is therefore asking for approval of EMOP 10190.2, with a caseload of 480,000 beneficiaries for the duration of one year starting September 1<sup>st</sup>, 2004.

## **2. Summary of Methodology**

### **i.Hypothesis**

During the first quarter of 2004, WFP's VAM unit carried out an update to a food security baseline assessment conducted by FAO in spring 2003. As the purpose of the key informant based 2004 assessment update was to capture change over the last 12-month period the methodology employed during the update remained identical to that used in the baseline assessment. This key informant based approach has the advantage of capturing food security status on the ground as observed by experienced and knowledgeable relief and development workers, community leaders, businessmen and government representatives.

### **ii.Methodology**

Covering the entire West Bank and Gaza Strip, 113 key informants were interviewed for the purpose of gaining a better understanding of: 1) the size of oPt's food insecure population, 2) it's geographic distribution, and 3) the relative food security and vulnerability status of various livelihoods and vulnerable groups.

The participatory key informant based "pair-wise comparison" tool was used as the main instrument for data collection and analysis. The approach involves structured interviews with key informants, for the purpose of capturing both qualitative perceptions and quantitative estimates regarding food insecurity prevalence within a given population. Data was collected through a process whereby key informants sequentially compared one geographic region with another (thus the name "pair-wise" comparison)<sup>1</sup>. Inherent in the "pair-wise comparison" tool is a rigorous consistency check with the purpose of validating the depth of the informants' knowledge of the communities in question. Any responses that fall below 90% consistency were discarded.

Moreover, data was collected on livelihoods and estimates of Palestinian households' dependence upon them within the same geographic clusters of the Pair-wise Ranking.

---

<sup>1</sup> For a more detailed explanation of the pair-wise comparison tool and methodological details in terms of how it was applied, see Annex IV "Pair-wise" comparison tool.

The objective of the livelihood zoning is to gain an understanding of the livelihoods of the non-refugee population in each geographic area of oPt as well as the livelihoods of food insecure households. This was conducted during half day workshops completed in all governorates with a minimum of eight knowledgeable key informants representing the Palestinian Authority Ministries of agriculture, labor and social affairs alongside representatives of various NGO's active in the fields of relief and development works, the chambers of commerce and community leaders.

During the workshop each key informant is presented with a map of the Governorate, divided in its different clusters, then the entire group is asked to reach consensus on the percentiles of the total non-refugee population dependent on the following closed and standard list of livelihoods:

- Irrigated Agriculture
- Rain fed Agriculture
- Livestock Agriculture
- Fisher folk
- Daily Wage Earner – Israel
- Daily Wage Earner – Settlements
- Daily Wage Earner – WBGS
- Agriculture
- Industry/Manufacturing
- Mining/Quarrying
- Traders – Small scale
- Traders – Large scale
- Employee – Public Sector
- Employee – Private Sector

### **iii.Limitations of data**

While qualitative key informant based approaches to analyzing food security have the advantage of greatly reducing the time and resources needed to achieve the required results, they are also limited in their quality by virtue of the fact that the key informants' responses depend greatly on their personal perspective and knowledge.

Whereas the pair-wise comparison tool limits the possibility of erroneous results through several steps of consistency checks and variance analysis it is important to bear in mind the limitations of the tool. While providing valuable information and estimates of "where" and "how many" are considered food insecure at a relatively disaggregated scale, it does not provide an exact picture of the food security situation with pinpoint accuracy. Rather, it is an initial estimation of the food security situation that allows us to better understand conditions at a local level based on local expert knowledge. Its findings must be complemented and analyzed alongside other available primary and secondary data.

### **iv.Conclusions**

As the purpose of the key informant based 2004 assessment update was to capture change over the last 12-month period the general hypothesis was to validate the tool to see how different the results were from the 2003 findings. With no radical changes from 2003 to 2004 reported, the expectations were that the 2004 findings will not be significantly different.

At aggregate level, the results generally seem to have confirmed these expectations. The 2004 assessment update found that approximately 38 percent of the population is food insecure, while a further 26 percent are at risk or vulnerable to becoming food insecure. The 2004 figures represent a slight reduction from the 2003 findings, when 40 percent of the population was estimated as food insecure, and 31 percent were assessed as vulnerable.

## **3. Economic environment and food availability**

### **i.Macroeconomic policy situation**

The Palestinian economy, after three years of negative growth and an estimated cumulative decline of 37% in real terms, has shown signs of relative recovery towards the end of 2003. The World Bank suggests this to be due to fewer curfews, the resumption of revenue transfers from Israel to the Palestinian Authority, economic

growth in Israel, and sustained donor support collectively leading to an increase in domestic job creation. In spite of these encouraging signs, the economy still lags in absolute terms. Unemployment and underemployment remain high, between 30% in the West Bank and 40% in Gaza, and productive capacity has no opportunity to recover from the ongoing damage caused by military incursions and the effect of closures.

Due to the closures, blockades and restriction in movement, a large number of jobs have been lost because Palestinians are unable to work in Israel and in settlements. The World Bank estimates that two out of five Palestinians are living under the poverty line of 2 USD per person per day, while 16 percent of the population is living in absolute poverty, with less than 1.5 USD per person per day. An increasing proportion of workforce has shifted to low paid and irregular work and unpaid family labor involving women and children has risen.

## **ii. Impact of shock on markets and availability of food**

Within the Palestinian society, the gap between rich and poor in terms of wealth distribution and per capita food consumption is increasing, leaving fewer opportunities for the most disadvantaged. With falling incomes being the main reason for rising food insecurity and nutritional vulnerability, the purchasing power of the poor population groups are severely affected by the rise in consumer prices of fresh foods as well as basic food commodities. Poor households are recorded to be forced to resort to negative coping patterns, notably debts with shop keepers and neighbors, forgoing payment of utilities, withdrawal of children from schools, selling productive assets, cutting out expensive foods such as meat, milk and milk product from their diet, substituting it with cheaper staples and reducing the quantity and number of meals.

## **4. The health and nutrition situation**

The ongoing crisis and closure policy in oPt has impacted on the deterioration of living conditions and the nutritional status of most vulnerable population. A study conducted by CARE and the *Al Quds* University point to a prevalence of malnutrition, particularly nutrient deficiency. Anemia is a condition affecting, with various degrees of severity, more than 30% of Palestinian women and children. According to the findings of the late 2003 CARE assessment, the nutritional status of children under 5 has improved relative to the previous year. 10.7% of oPT children under 5 are affected by chronic malnutrition and 3.4% by acute malnutrition.

## **5. Contextual information**

The humanitarian crisis in the occupied Palestinian territories has now entered its fourth year and economic hardship for Palestinians is compounded with recurring military incursions, house demolitions, closure, curfew, violence, and asset destruction. Even

with the “closures” policy imposed by the Israeli Defense Forces since the outset of the Intifada, slightly eased in the West Bank, less restriction of movement is offset by the extreme effects of the Wall on those populations affected by its route. In the Gaza Strip, internal and external closure, frequent incursion, extreme violence and asset destruction have had dire effects on the security and livelihood of its inhabitants. In both West Bank and Gaza, closures restrict Palestinians in their search for employment opportunities or to market their produce, within oPt or to Israel.

The effects of the construction of the first 185 km of the “Separation Wall” in the West Bank cannot be overstated. The “Separation Wall” isolates farmers from their lands, water wells and markets. According to the latest round of the “Palestinian Public Perceptions on their Living Conditions” conducted by the University of Geneva, agriculture has been rendered difficult or impossible for one third of the farmers in the affected areas. Thousands of Palestinian households are also being cut off from employment opportunities, social services, trade and commerce. The southern extension of the Separation Wall is advancing rapidly and will soon be completed to Ramallah, Jerusalem and Bethlehem Governorates. It is estimated that if the entire 447 km projected length of the “separation wall” is completed approximately 189,000 persons will be directly affected.

The latest World Bank West Bank – Gaza Strip update survey (March 2004) states that

*“at the household level, food assistance was the need most often selected - it was both the number one ranked need (selected by approximately one third of households each month) as well as the need most included among households’ ranking of the top five”*

## **6. Food / livelihood security & economic situation of households**

The 2003 baseline analysis of the food security situation in the occupied Palestinian territories resulted in vulnerability profiling and the Pair-wise Ranking Analysis which provided estimates of food insecurity percentages and the following socioeconomic profiles:

“Chronic Poor”:

Defined by the Palestinian Authority Ministry of Social Affairs as households (mainly female headed) without an able bodied male capable of working and therefore have a higher proportion of divorced women, widows, spinsters, disabled persons, elderly and children.

“New Poor”:

Farmers whose land is confiscated

Traders whose shops and people whose homes are demolished  
Farmers (including Bedouins) and traders who have lost access to markets  
Waged workers who have lost jobs due to closure, including men in agriculture and construction, and women in textiles and horticulture.  
Households “locked” by Israeli controlled security zones (restricted to the Gaza Strip), especially fisher folk who are denied access to the sea in the southern Gaza Strip.

In late 2003, the WFP VAM unit conducted a pilot coping strategies index (CSI) survey. Findings of the CSI survey coupled with the pair wise ranking update and livelihood zoning point to the need to redefine targeting criteria of WFP “New Poor” beneficiaries according to the following:

“Chronic Poor”: (*Same as above*)

Defined by the Palestinian Authority Ministry of Social Affairs as households (mainly female headed) without an able bodied male capable of working and therefore have a higher proportion of divorced women, widows, spinsters, disabled persons, elderly and children.

“New Poor”:

Farmers whose land is confiscated  
Farmers (including Bedouins) who have lost access to markets  
Waged workers who have lost jobs due to closure, including men in agriculture and construction, and women in textiles and horticulture.  
Households “locked” by Israeli controlled security zones (restricted to the Gaza Strip), especially fisher folk who are denied access to the sea in the southern Gaza Strip.

## **7. Institutional arrangements**

Since the beginning of the current intifada and specifically due to the crippling effect of the Israeli Defense Forces’ operation “Defense Shield” on the various Palestinian Authority Ministries, WFP has shifted towards implementing their programs mainly through NGOs, national and international, due to the high restrictions on movement imposed upon the Palestinian Authority employees. Since then, a slow but steady return to work with both the Ministry of Social Affairs and Ministry of Agriculture has been an objective for the WFP oPt country office. It is planned, through future operations, to continue and to increase implementation through the Palestinian Authority ministries alongside national and international NGOs including Palestinian Agricultural Relief Committees (PARC), Catholic Relief Services (CRS), Ard-El-Insan (a local branch of Terre Des Hommes, a Swiss NGO), Centro Regionale di Intervento per la Cooperazione (CRIC).

## 8. Additional considerations for refugees

Given the unique circumstances of Palestinian refugees and the presence of the United Nations Relief Works Agency (UNRWA) specifically to address the needs of the refugees, the mandate of WFP in oPt is to assist only the non-refugee population.

## 9. Conclusions and response options

The 2003 Care international and Al-Quds University Nutritional Assessment clearly states:

*“The prevalence of malnutrition amongst children 6 – 59 months has improved since June 2002 due to increased and sustained food assistance”*

Results from the CSI survey conducted in late 2003 indicate that a great majority of registered social hardship cases receiving free food aid and those benefiting from supplementary feeding programs (i.e. “Chronic Poor” beneficiary category) depend heavily upon WFP aid as a major source of food in their households.

Such arguments warrant the conclusion that WFP has, through EMOP 10190.1, reduced risk of starvation in many beneficiary households, and played a key role in bringing malnutrition rates down between 2002 and 2003. Discontinuation of such interventions could have dire effects on households / individuals fitting the “Chronic Poor” category.

Equivalent in importance is the need to support and prevent from deterioration the livelihoods of Palestinian households for whom food insecurity has become a reality as a result of the continuous cycle of violence and the IDF closure policy imposed throughout the past four years. During 2003, it has been recorded that WFP beneficiaries within the “New Poor” category Poor households have resorted to negative coping patterns, notably debts with shop keepers and neighbors, forgoing payment of utilities, withdrawal of children from schools, selling assets, cutting down and substituting their normal diets with cheaper staples and reducing the quantity and number of meals. It is of great importance that any assistance to the “New Poor” category be designed and delivered in a manner which reduces possible dependency and builds upon, rather than usurp, the fragile livelihoods upon which members of this category depend.

The main finding of the 2004 update to the “pair-wise comparison” is that food insecurity is a reality for approximately 752,000 of the non refugee population in the occupied Palestinian territory and a near threat to approximately another 586,000. While, at the aggregate level, the figures indicate a slight drop in food insecurity between 2003 and 2004, it must be made clear that these results are estimates, and thus, could not be expected to solely provide the basis of comparison between 2003 and 2004. Accordingly, the analysis of the results was conducted in conjunction with available primary and secondary data.

At the sub-national level, the results indicate that the situation has not significantly varied in 50% of the governorates while 25% have experienced a positive change and another 25% experienced a negative change between 2003 and 2004.

In a recent publication, the World Bank indicates to an increase in domestic job creation in the Palestinian economy, attributable to easing of closures, revenue transfers from Israel to the Palestinian Authority, economic growth in Israel, and sustained donor support. The Bank reports that the increases are most visible in the manufacturing and commerce sectors. Noteworthy is the fact that many of the governorates that experienced a positive change in food security status in 2004 have experienced either easing of closures and/or are traditional centers for manufacturing and commerce activities. Conversely, the majority of the governorates reported by the “pair-wise” update to have experienced a drop in food security status between 2003 and 2004 have suffered from either the completion of the devastating “separation wall” or from recurring Israeli military incursions.

Moreover, analysis of bivariate correlations between the results of the pair-wise ranking and the livelihood zoning exercise point to a significant relationship between livelihood variety and food insecurity. Prevalence of food insecurity diminishes in geographic units recorded to have a high variety of livelihood possibilities.

In determining to “who” and “how many” food aid is an appropriate tool of intervention, it is apparent that a prioritization scheme based upon socio-economic and geographic factors is required.

Profiles of various vulnerable household types were considered in both the CSI survey as well as the baseline update. Results consistently point to the fact that although small scale traders and even Palestinian Authority employees are vulnerable to food insecurity, their living conditions remain relatively better than that of “New Poor” farmers and unskilled waged workers. The severity of coping strategies employed by these vulnerable traders and employees is far from reaching the severity of those employed in “New Poor” farmers’ and unskilled waged workers’ households. Therefore, in effort to target WFP food aid to the most destitute households and to best allocate resources, small scale traders and PA employees must not be included in the list of profiles planned to receive WFP assistance.

Relevant data on geographic factors, nutrition and income options provide a further opportunity to better target WFP assistance. Through creating an index which assigns weight to significant factors affecting food security, prioritization of geographic areas where the factors exist, and food insecurity is high, ensures that areas where food aid will have the least positive impact are excluded.

Based upon available information the following factors were included in the index:

- Income diversification
- Geographic location (urban/rural)
- Presence of the “Separation Wall”
- Prevalence of malnutrition

The weight assigned to each of the listed factors was based upon the result of the Pearsons test (rho), obtained for all factors, which describes the strength of the relationship between each of the factors and the prevalence of food insecurity. Consequently, geographic locations whose index was 0 or below – i.e. none of the above-mentioned conditions exist, are discarded. According to this rationale, the geographic unit with the highest “score” would be a rural area with the least possibilities of income diversification that is directly affected by the “separation wall” and is reported to have high malnutrition rates. Conversely the geographic unit with the lowest score, and hence discarded, would be an urban area with high possibilities of income diversification that is neither affected directly by the “separation wall” nor is reported to have high malnutrition rates.

Accordingly, out of the 752,000 non-refugee food insecure population, it is estimated that for 457,000 food insecure persons, prioritized socio-economically and geographically, food aid is considered an appropriate intervention, and should be considered to comprise the proposed WFP caseload. In order to maintain flexibility and ensure ability to respond to acute emergencies caused by sudden Israeli military activities, planning for a contingency caseload up to 5% of the proposed caseload.

Accordingly, out of the estimated 752,000 non-refugee food insecure population, the proposed number of beneficiaries for operations in planning is 480,000 food insecure persons.

## **10. Recommendations**

### **i. Measures and actions required**

- With the overall objectives of saving lives and sustaining the livelihoods of the affected Palestinian population and preventing them from resorting to extreme and desperate coping strategies and based upon the Palestinian Authority figures of registered social hardship cases and recommendations, as well as the analysis described above, the proposed figure of 480,000 beneficiaries should be according to the following categories:

#### “Chronic Poor”

1. Social Hardship Cases – 41.2%
2. Supplementary feeding – 1.3%
3. Institutional Feeding – 1.7%

#### “New Poor”

1. New Poor farmers and waged workers – 53.3%
2. New Poor fishermen – 1.5%
3. New Poor Bedouin – 1.0%

- In order to ensure that the remaining food insecure non-refugee population for whom food aid is not recommended receives appropriate attention, coordination must be undertaken with the various organizations active in poverty alleviation and emergency relief works.

## **ii. Indicators to be monitored**

- Reduction in frequency of negative coping strategies adopted at targeted households.
- Sale of assets of the target population decrease (%)
- Household food expenditure of the target population decrease (%)
- Target population alleviated from malnutrition (%)
- Number of beneficiaries participating in asset- and income-generating activities (by gender). As well as record sustainable and dependable assets created at the community, household and individual levels

## **11. Annexes**

### **i. “Pair-wise Ranking” methodology**

The pair wise ranking exercise had two basic objectives; to better understand first the extent of food insecurity within the Occupied Palestinian Territories (OPT), and secondly, it’s spatial distribution.

The data supporting the analysis was based on key informant interviews with staff from the Palestinian Authority, United Nations Relief and Works Agency (UNRWA), ICRC and local NGO’s participating as key-informants. Two factors were emphasized when selecting key informants; 1) an individual’s knowledge (based on long service in the field) of the food security status of populations being evaluated, and 2) the participant’s past professional experience working for organizations with a focus on humanitarian aid, poverty relief, or agricultural development. Most of the 79 key informants chosen were working either as directors, or programme officers, for their respective organizations. Participants were expected to know about their whole governorate, in order to compare levels of food insecurity for populations living within the sub-governorate size sampled areas.

Using structured interviews, key informants were asked to qualitatively evaluate food insecurity rates for sample areas within the 16 governorates of the West Bank and Gaza. Due to the absence of an authoritative and accessible map showing administrative boundaries below the governorate level, a decision was taken to create a new set of geographic sampling units by sub-dividing the governorate boundaries into smaller sample areas. Ninety-six geographic sampling units were created in total.

Ensuring that all key informants had a firm and common understanding of “food security” was important for the success of the exercise. Mission members acted as “interviewers” during data collection, and were trained prior to the field-work on interview procedures. Issues reviewed during the training included “how to clearly and unambiguously convey the definition of food security to key informants”, how to clarify key concepts or procedures associated with the interview process, etc. . . .

A working definition of food security was reviewed at the onset of each interview, to ensure consistency with regard to key informants’ responses. The definition of food security appears below:

*Food security exists when a population has sufficient, safe and nutritious food for an active and healthy life.*

Key informants were asked to respond to the following interview question: How would you compare the “percent of the population food insecure” for area-1 vs. area-2? Respondents were given a list of nine pre-defined “response options”; which appear below:

...The percent food insecure in area-1 as compared to area-2 is:  
“very much higher”, “much higher”, “higher”, “slightly higher”, “the same or similar”, “slightly lower”, “lower”, “much lower”, or “very much lower”.

Interviews proceeded until all possible combinations (area pairs) within a governorate were compared. Key informants were also asked to compare “percent food secure” for each area. Having data for both groups (i.e. the food insecure and the food secure) later allowed estimates to be produced for a third group; those understood as being in the “middle” w/ regards to food security status. The middle group can best be described as those most vulnerable to becoming food insecure, and whose food security status is prone to fluctuation.

The qualitative key informant response data gathered during the interviews were later coded with scaled fractional values to reflect each districts comparative standing, or relative position, within a district pair. For example, if two areas were evaluated as having “same/similar” food insecurity rates, the assigned code for that response was a

“base” value of 1.0 (or 1/1, in fractional terms). The specific codes associated with each of the nine response options; are shown below:

Key Informant's Response:	Very Much Lower	Much Lower	Lower	Slightly Lower	Same/ Similar	Slightly Higher	Higher	Much Higher	Very Much Higher
Code Assigned:	1/5	1/4	1/3	1/2	1	2	3	4	5

The coded data made it easier to perform consistency checks (quality control), during the data processing. An example of a consistency check is given below; to illustrate the process:

If area-1 was evaluated as lower than area-2, and area-2 was evaluated as lower than area-3, then area-1 should logically be evaluated as very much lower than area-3<sup>2</sup>.

Numeric “weight” values were also generated, by processing the coded data. The value of an area’s weight reflects it’s importance, in terms of it’s food insecurity rate. Areas with higher weight values are associated with higher food insecurity rates, and vice versa. The weight values were then used to rank the areas within a governorate.

Key informants were subsequently asked to focus only on those areas within the governorate whose relative ranks were “worst” and “best”; respectively.

Key informants were then asked to focus only on those areas ranking “worst” and “best” respectively within a governorate; and to make “approximate” quantitative estimates regarding the percent of these area populations food insecure. Percentage estimates for the remaining areas were then interpolated utilizing the “weights” data described above. Having the data in percentage units, allowed for a comparison of results across governorates.

This series of data processing steps resulted in area level “percent food insecure” estimates, for each key informant interviewed. The statistical measure “variance” was used to identify the “three out of five key informants” whose responses/estimates were closest to one another. The closest estimates were then averaged together to produce a final set of “percent food insecure” estimates for each area<sup>3</sup>. Finally, these percentage figures were applied against the base population figures for each area (1997 population census data projected to 2003) resulting in final estimates of food insecure per sampled area.

<sup>2</sup> When unacceptable consistency scores were detected; key informants were either asked to re-consider those particular “pairs” that contributed to the unacceptable consistency score. In a few cases, the entire interview (and responses) were discarded, and later substituted w/ another key informant’s responses, with acceptable consistency scores.

<sup>3</sup> The same procedures were used to produce estimates of “percent food secure”. The at-risk/vulnerable group was calculated by subtracting the sum of the food insecure estimate + the food secure estimate; from 100 (i.e. 100% of the population). At risk/vulnerables = 100 – (food insecure% + food secure%).

## ii. Livelihood Zoning methodology

The objective of the livelihood zoning is to gain an understanding of the livelihoods of the non-refugee population in each geographic area of the oPt as well as the livelihoods of the food insecure households. The geographic unit taken into consideration is the same cluster utilized for the Pair-wise ranking comparison.

Through livelihood zoning, households are classified into different groups depending on various sources of livelihoods, allowing an in-depth analysis of the variables of food insecurity through correlating livelihoods and prevalence of food insecurity at the sub-national level.

Each focus group discussion must include eight key informants to be interviewed by WFP staff. The eight key informants must represent government and non-governmental organizations active in the fields of emergency relief and poverty alleviation. During the focus group discussion each key informant is presented with a map of the Governorate, divided in its different clusters, then the entire group is asked to reach consensus on the percentiles of the total non-refugee population dependent on the following closed and standard list of livelihoods:

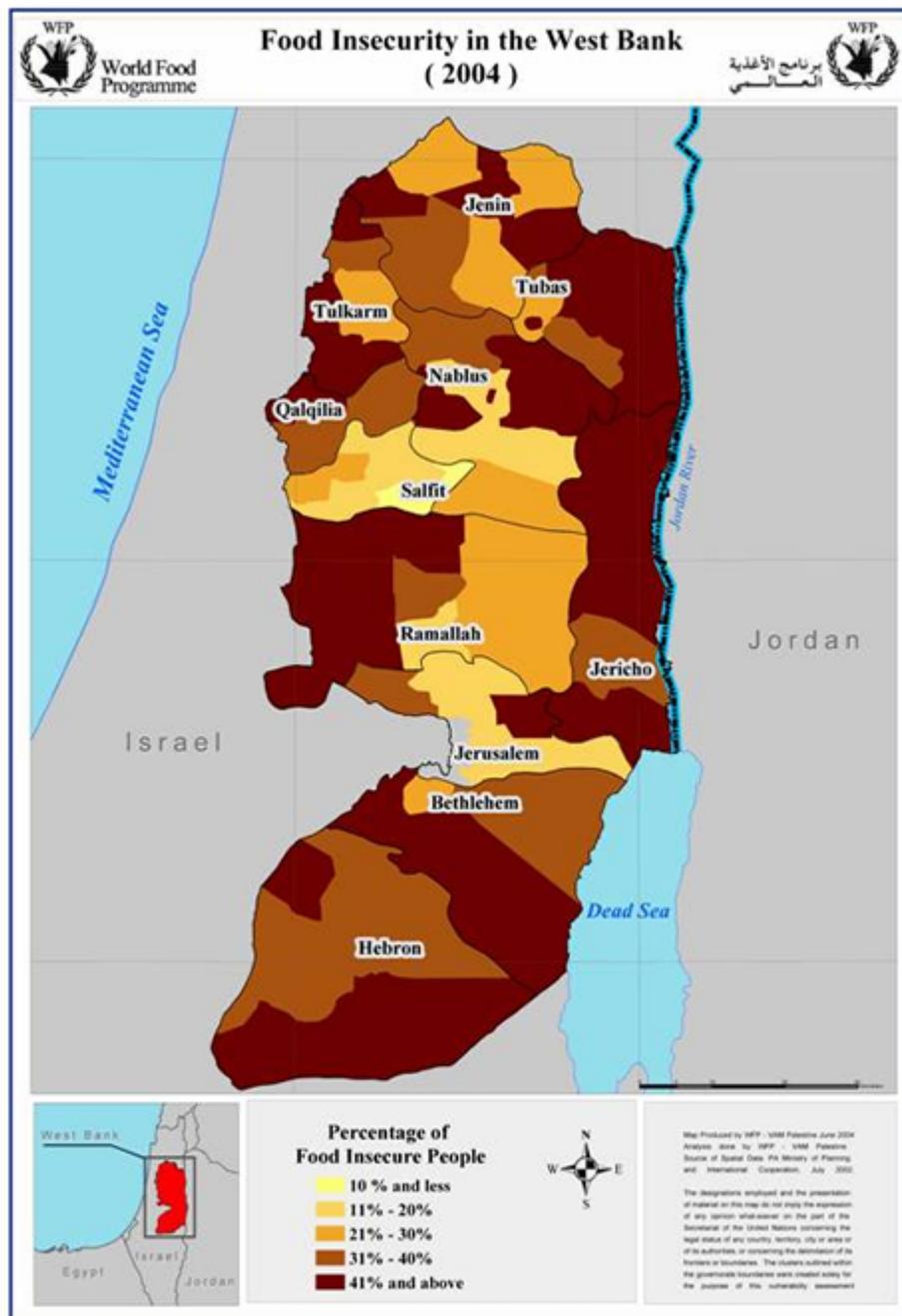
- Irrigated Agriculture
  - Rain fed Agriculture
  - Livestock Agriculture
  - Fisher folk
  - Daily Wage Earner – Israel
  - Daily Wage Earner – Settlements
  - Daily Wage Earner – WBGS
1. Agriculture
  2. Industry/Manufacturing
  3. Mining/Quarrying
- Traders – Small scale
  - Traders – Large scale

- Employee – Public Sector
- Employee – Private Sector

Subsequently, the same exercise is repeated for the “food insecure, non-refugee” population, summing up to 100% of the food insecure non-refugees in each cluster. This step is designed to shed light on the socio-economic profile and livelihood type, as well as the vulnerability level of food insecure in 96 different clusters across the oPt.

The results have been consolidated and summarized in an ACCESS database, for easy reference.

### iii. West Bank "Pair-wise" Food Insecurity map, 2004



iv. Gaza Strip “Pair-wise” Food Insecurity map, 2004

