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Household Food Security Profiling in the Gaza Strip

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No. 2 - 2009

Socio-Economic and Food Security (SEFSec) Monitoring System in the West Bank and Gaza Strip

Based on data produced by the
Palestinian Central Bureau of
Statistics

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WP 2 – Household Food Security Profiling

1. Introduction

The following Working Paper is part of a broader “Socio-Economic and Food Security Survey Report” initiated by the World Food Programme and the Food and Agriculture Organisation in partnership with the Palestinian Central Bureau for Statistics. The aim of the report is to improve the detail and availability of information related to food security in the occupied Palestinian territory (oPt). The survey report is based on data collected from April to June 2009 in the Gaza Strip. The survey report reflects the socio-economic and food security situation of households in the aftermath of the Israeli military operation Cast Lead on the 27th of December 2008 to the 18th of January, 2009. This working paper aims to analyze the profiles of the food insecure in comparison to the food secure and the total Gaza Strip specifically with respect to gender (male as compared with female) and age (adults as compared with children), as well as other socio-economic aspects.

2. Assessment Methodology

Data was collected through a household survey of a sample size of 7,536 households examining the income, consumption and expenditure patterns. In order to make the collected data useful for programming purposes, the SEFSec was designed to be carried out on a relatively large sample size to allow for data breakdown by governorate, sex, age, refugee or non refugee status, livelihood group and locality type. The sample size used for the SEFSec in the Gaza Strip is thus large enough to provide an accurate profile of the most vulnerable groups. The methodology used for the survey is largely consistent with the methodology used in the May 2008 *Joint Rapid Food Security Survey in the occupied Palestinian territory* conducted by WFP, FAO and UNRWA. Considering that the data is cross sectional, the analysis is static using only income and consumption. The methodology does not incorporate other food security dimensions such as availability of food and utilization (consumption, nutritional status) of food. There is no single indicator able to capture all these dimensions in a simple way. The sudden change in the socio-economic and political climate ensuing from Cast Lead, the methodology was altered with a slight revision in the questionnaire to reflect changes in income and consumption patterns before and after the war. Due to this alteration, the current measurement of food security in the Gaza Strip using income and expenditures does not account for the volume and value of food assistance received. Regardless, of this, the survey provides a robust picture of the profile of food insecure households in the Gaza Strip.

3. Profiling of the Food Insecure

3.1. Typical Household Composition and Household Demographics

Unlike the West Bank where the profile of households tend to be more diverse due to the diversity and fragmentation of the environment, the profile of households in the Gaza Strip show less variation typically because the majority of them are food insecure or vulnerable and are all subjected to the same shocks. The average household size within a food insecure family is 6.7 compared to 6.1 of the Gaza Strip Average and 4.74 of the food secure households as illustrated in figure 1. This shows that generally the

average household size in the Gaza Strip is fairly large and households with a smaller household size are more likely to be food secure.

The female and child ratio among food insecure households and the Gaza Strip Average households vary slightly. Figure 2 demonstrates that households with a higher child and female ratio show a greater likelihood of being food insecure. The link between the food insecure households and the high female ratio is as follows: there is a low level of employment amongst women within food insecure households and are thus dependent on the breadwinner. Women faced constraints on entering the labour force and are thus facing constraints to contribute to the household food security.

Figure 1: Average Household Size compared to the Gaza Strip Average

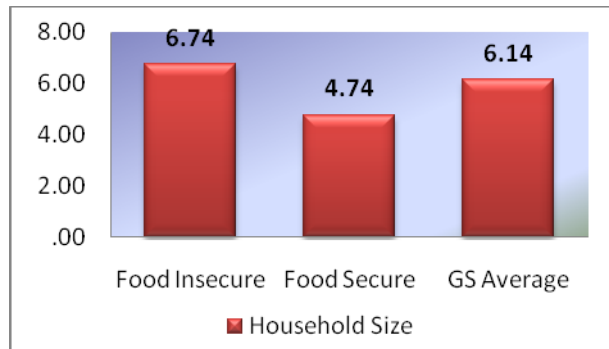


Figure 2: Ratio of Child and Female by Food Insecure Households compared to the Gaza Strip Average

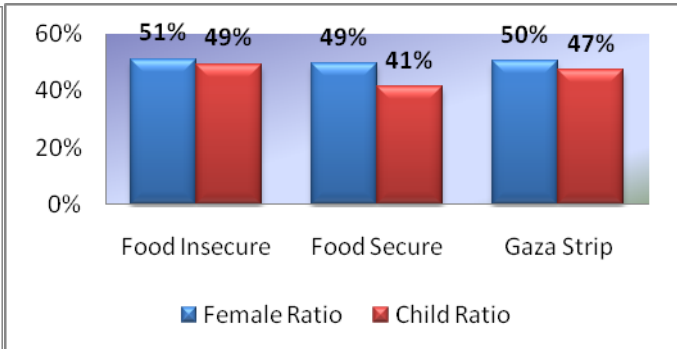


Figure 3: Household Food Security Levels by Age Group

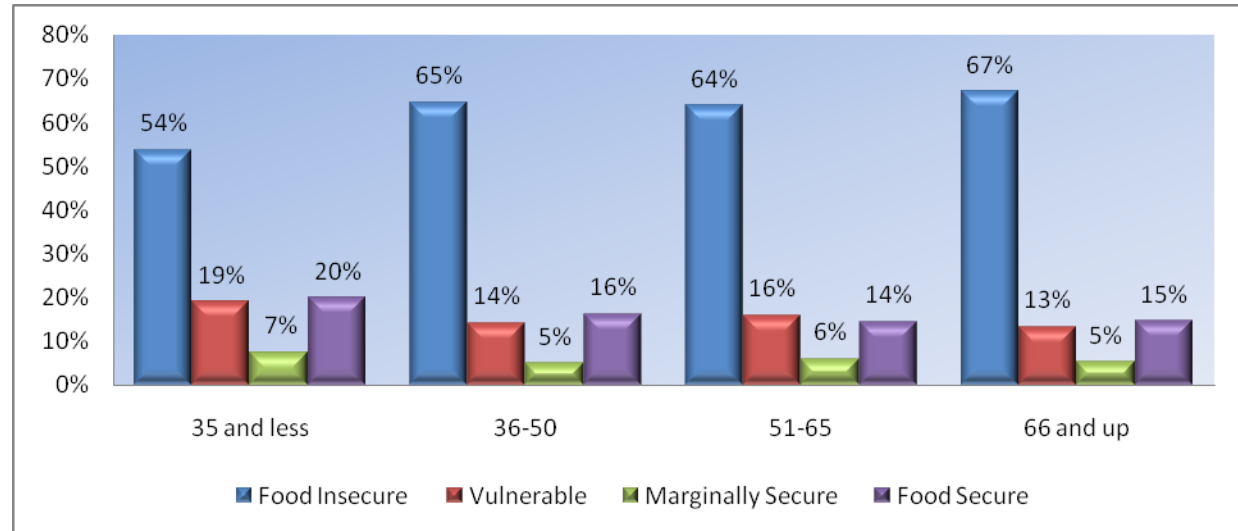
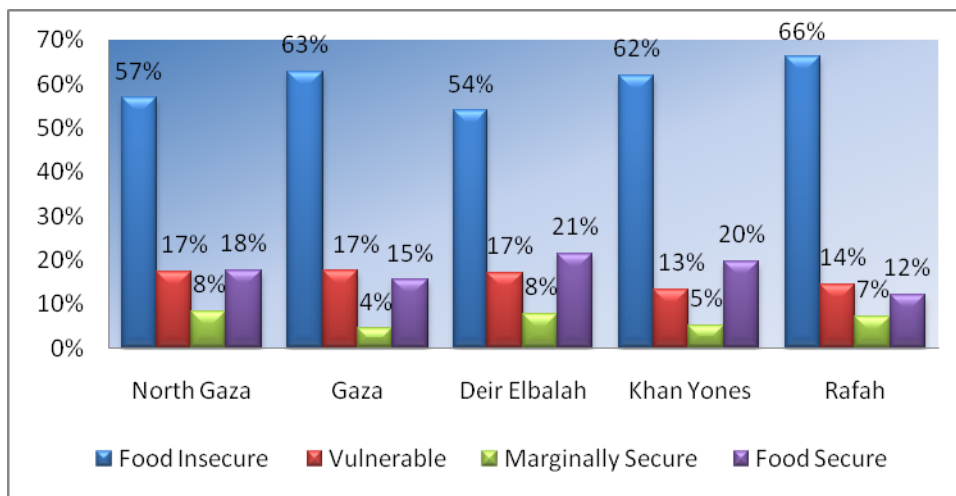


Figure 3 shows a relationship between the age range of the household head and the food security level of the household. The highest cases of food insecurity levels are amongst households with a bread winner within the age range of 36 to 50 years old. The highest percentage of households who are food secure are amongst households whose head is 35 years of age or less. As illustrated in figure 3, the older the household head is, the more likely the household to be food insecure. Food insecurity is the lowest among households with young heads.

3.2. Geographical Distribution of Food Insecure Households

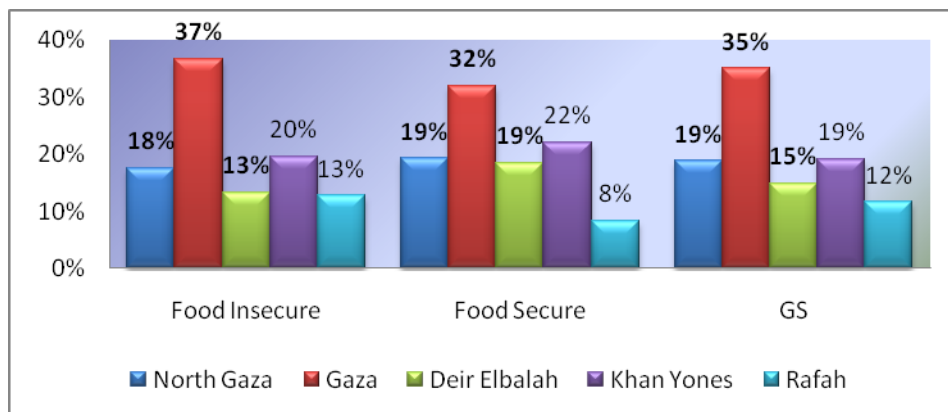
The prevalence of food insecurity across all the Governorates is generally high. The figure 4 shows a higher prevalence of food insecurity in Rafah compared to other governorates. Sixty-six percent of households located in Rafah are food insecure. This is followed by the Gaza City Governorate and Khan Yunis at 63 percent and 62 percent respectively. The lowest levels of food insecurity are in the Governorates of North Gaza, at 57 percent, and Deir al Balah, at 54 percent. North Gaza, Gaza and Deir al Balah show the same level of households vulnerable to food insecurity at 17 percent. The highest prevalence of households that are food secure are in Deir Al Balah at 21 percent followed by Khan Yunis at 20 percent of households.

Figure 4: Prevalence of Food Security Levels by Governorate



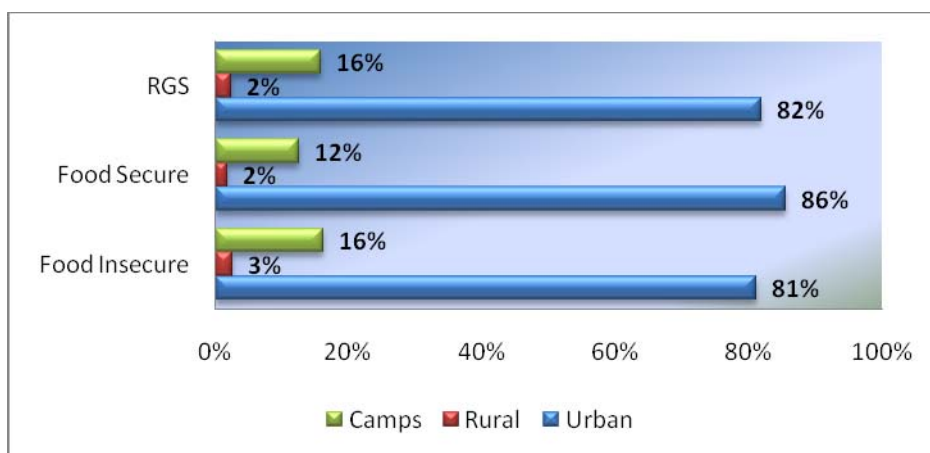
While Rafah shows a higher prevalence of food insecurity compared to other Governorates, the figure 5 shows that Gaza Governorate has the highest concentration of food insecure households across the Gaza Strip, at 37 percent. This is followed by Khan Yunis at 20 percent, North Gaza at 18 percent and Deir Al Balah and Rafah equally at 13 percent. Gaza Governorate also represents the highest concentration of the food secure at 32 percent. This is followed by Khan Yunis at 22 percent, North Gaza and Deir al Balah at 19 percent and Rafah at 8 percent. The distribution of Gaza Strip population shows that 35 percent of households are located in Gaza, 19 percent in North Gaza and in Khan Yunis, 15 percent in Deir al Balah and 12 percent in Rafah.

Figure 5: Concentration of Food Security Levels by Governorate compared to the Gaza Strip Average



The analysis of the distribution of the food insecure, food secure and the Gaza Strip Average by locality is shown in the figure 6. As illustrated, the highest concentration of the food insecure is located in urban areas at 81 percent of total food insecure households. A total of 86 percent of the food secure households are also concentrated in urban areas. Refugee camps have a 16 percent concentration of food insecure households and 12 percent of food secure households. In absolute terms, rural areas show the lowest concentration of households who are food insecure at 3 percent and food secure at 2 percent. The distribution of the population in the Gaza Strip show that 81.8 percent are living in urban areas, 15.7 percent in refugee camps and 2.4 percent in rural areas. In relative terms, households in rural areas are worst off with food insecurity levels reaching 67 percent, while 62 percent of camps dwellers and 60 percent of urban dwellers are food insecure.

Figure 6: Concentration of Food Security Levels by Locality Type compared to the Gaza Strip Average



3.3. Socio-Economic Characteristics of Food Insecure Households

3.3.1. Education

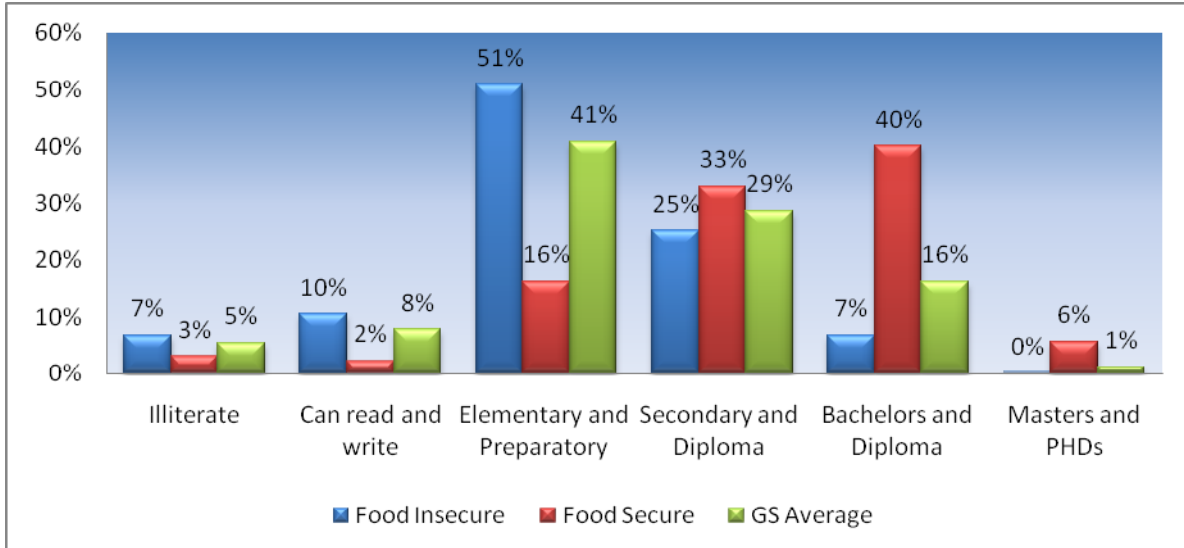
As figure 7 shows, the large majority of food insecure heads of households (51 percent) have only completed elementary or preparatory school. Additionally, 25 percent of the food insecure heads of households have only completed secondary or diploma level schooling. The educational profile of food insecure household heads does not diverge far from the Gaza Strip Average. The data on the Gaza Strip Average indicate that 41 percent of heads of household have only completed up to elementary and preparatory school while 29 percent have only completed secondary and diploma level education. Only 16 percent of the total Gaza Strip heads of households have completed Bachelor’s and diploma level education.

Food secure households tend to have higher levels of education with 6 percent of food secure household heads who are holders of Master’s or PhD level diplomas and a total of 41 percent of the food secure who have completed a Bachelor’s or Diploma level education. Additionally, 23 percent of food secure households have completed secondary and diploma level education and 16 percent have completed elementary and preparatory level education.

Illiteracy rates amongst the food insecure are highest at 7 percent compared to 5 percent of the total Gaza heads of households. However, 3 percent of the food secure households are also illiterate. Heads of food

insecure households that have no other education but can read and write compose 10 percent of the total food insecure households. Compared to the total Gaza population, this is only 2 percent higher.

Figure 7: Level of Education of Households by Food Security Level compared to the Gaza Strip Average



4. Unemployment, Economic Activity, Occupation, Sector and Quality of Jobs of Heads of Households

4.1. Unemployment

Unemployment rate in Gaza remains extremely high during the 2nd quarter of 2009 with 42 percent under the broad definition and 36 percent according to the International Labour Organisation (ILO) Standards¹. The Gaza Strip Average heads of households who are considered unemployed under a broad definition is 24 percent. Thirty-six percent of them are food insecure and only 3 percent of them are food secure. The food insecure households heads considered unemployed according to the ILO standards composes 15 percent of the total Gaza Strip population. Twenty four percent of them are food insecure households compared to 2 percent of the food secure. The food insecure also show higher levels of underemployment at 11 percent compared to 5 percent of the food secure.

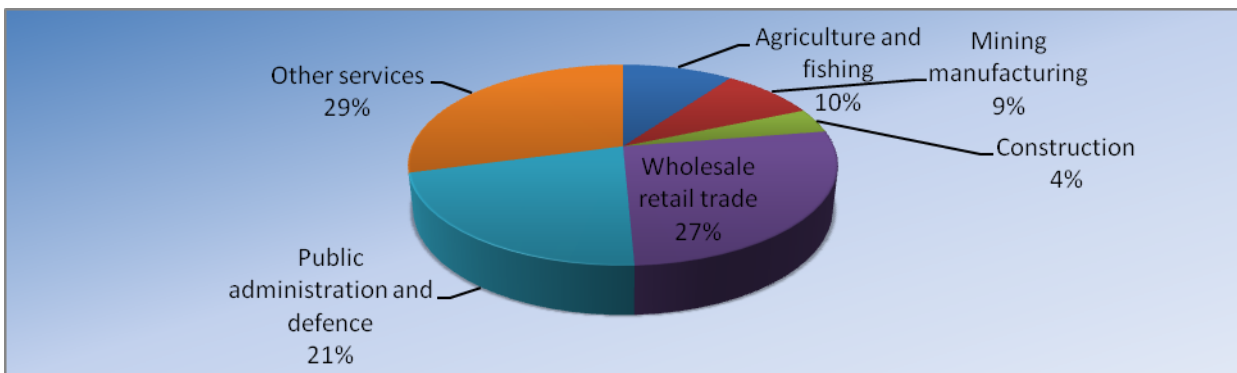
Figure 8: Unemployment Levels of Household Heads by Food Security Level compare to the Gaza Strip Average



¹ Broad unemployment includes those who are discouraged workers and refers to a person of a specific age who is not in employment but is available and given the opportunity to obtain a suitable job or start an enterprise; said person would have actively looked for ways to obtain the job in the recent past. Underemployment is achieved when persons who are employed are in jobs that do not meet their employment level whether in terms of salary scale, regularity or the reliability.

4.2. Economic Activity

Figure 9 shows the economic activity of heads of food insecure households. In absolute terms, the economic activity representing the largest percentage of food insecure household heads is the wholesale retail trade at 27 percent. Public administration and defence represents the second highest economic activity comprising 21 percent of food insecure households. This is followed by agriculture and fishing



(10 percent), mining and manufacturing (9 percent) and construction (4 percent).

The table 1 shows the distribution of heads of households within each economic activity across the food security levels. Agricultural/fishery, construction, restaurants/hotels, wholesale retail trade, transport and storage/communication are activities producing the highest percentages of food insecure households. Comparatively, finance, insurance and mediation is the activity providing the highest food secure households at 63 percent. This is followed by properties, rental and commercial businesses at 54 percent and health and social work at 41 percent. Generally, the majority of the economic activities do not provide food security for households.

Table 1: Head of Households Economic Activity by Food Security Level

	Food Insecure	Vulnerable	Marginally Secure	Food Secure	Total
Agriculture and fishing	87%	9%	1%	3%	100%
Mining manufacturing	69%	16%	4%	11%	100%
Electricity, gas, water supplies	34%	35%	0%	30%	100%
Construction	81%	11%	2%	6%	100%
Wholesale retail trade	73%	15%	4%	8%	100%
Restaurants and hotels	74%	14%	4%	8%	100%
Transport storage communication	73%	14%	3%	10%	100%
Finance, insurance and mediation	19%	17%	2%	63%	100%
Properties, rental and commercial businesses	22%	15%	9%	54%	100%

Public administration and defence	28%	26%	11%	35%	100%
Education	34%	26%	9%	32%	100%
Health and social work	34%	16%	10%	41%	100%
Other social and personal care	58%	11%	7%	25%	100%
International organisations	39%	25%	13%	23%	100%

4.3. Sector of Employment

Figure 10 shows the distribution of food insecure households within the sector of employment. Keeping in mind that the concentration of the population employed within the private sector are higher than other sectors, the sector composed of the highest prevalence of food insecure households is the private national establishments at 69 percent. This is followed by the national government at 21 percent.

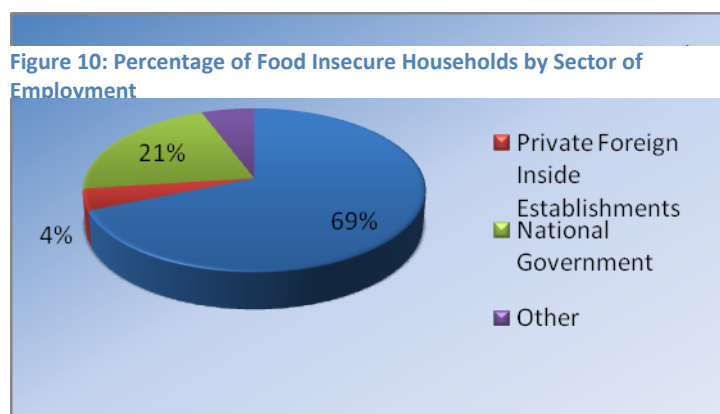


Table 2 below shows the distribution of heads of households employed within each sector categorised by food security group. The private national sector employs 51 percent of the total Gazan heads of households. Sixty nine percent of food insecure households compared to 23 percent of food secure heads of households are employed in the private national establishment. The national government employs 39 percent of the Gaza head of households. Twenty one percent of the food insecure compared to 68 percent of the food secure are employed within the national government. The sectors listed in the table show employment within the national government provides greater opportunities for food security compared to employment within the private national sector.

Table 2: Percentage of Head of Households within Each Sector by Food Security Level

Sector of Employment	Food Insecure	Vulnerable	Marginally Secure	Food Secure	GS Average
Private National Establishments	69%	35%	27%	23%	51%
Private Foreign Inside Establishments	4%	2%	0%	1%	3%
National Government	21%	56%	61%	68%	39%
Other	6%	6%	11%	8%	7%
Total	100%	100%	100%	100%	100%

4.4. Type of employment

Regular wage work employs the highest percentage of the total Gaza population; 55 percent of heads of households are receiving regular wages. Thirty-six percent of households receiving regular wages are

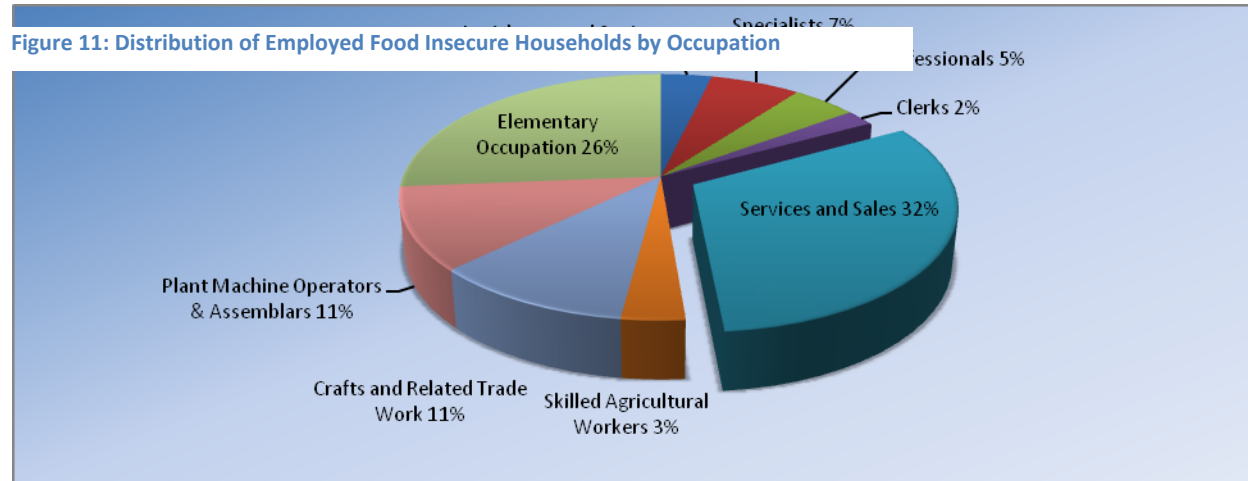
food insecure. Thus regular wage work represents those who are employed in low wage work and those who are employed in relatively well paid work. However, regular wage work provides a greater opportunity for households to be food secure as 88 percent of food secure households are employed in regular wage work.

Table 3: Distribution of Employed Heads of Households by Food Security Level and Type of Employment

	Food Insecure	Food Secure	GS Average
Employer	5%	4%	5%
Self Employed	21%	5%	15%
Regular Wage Worker	36%	88%	55%
Irregular Wage Worker	38%	3%	25%
Unpaid Family Member	0%	0%	0%
Total	100%	100%	100%

4.4. Occupation

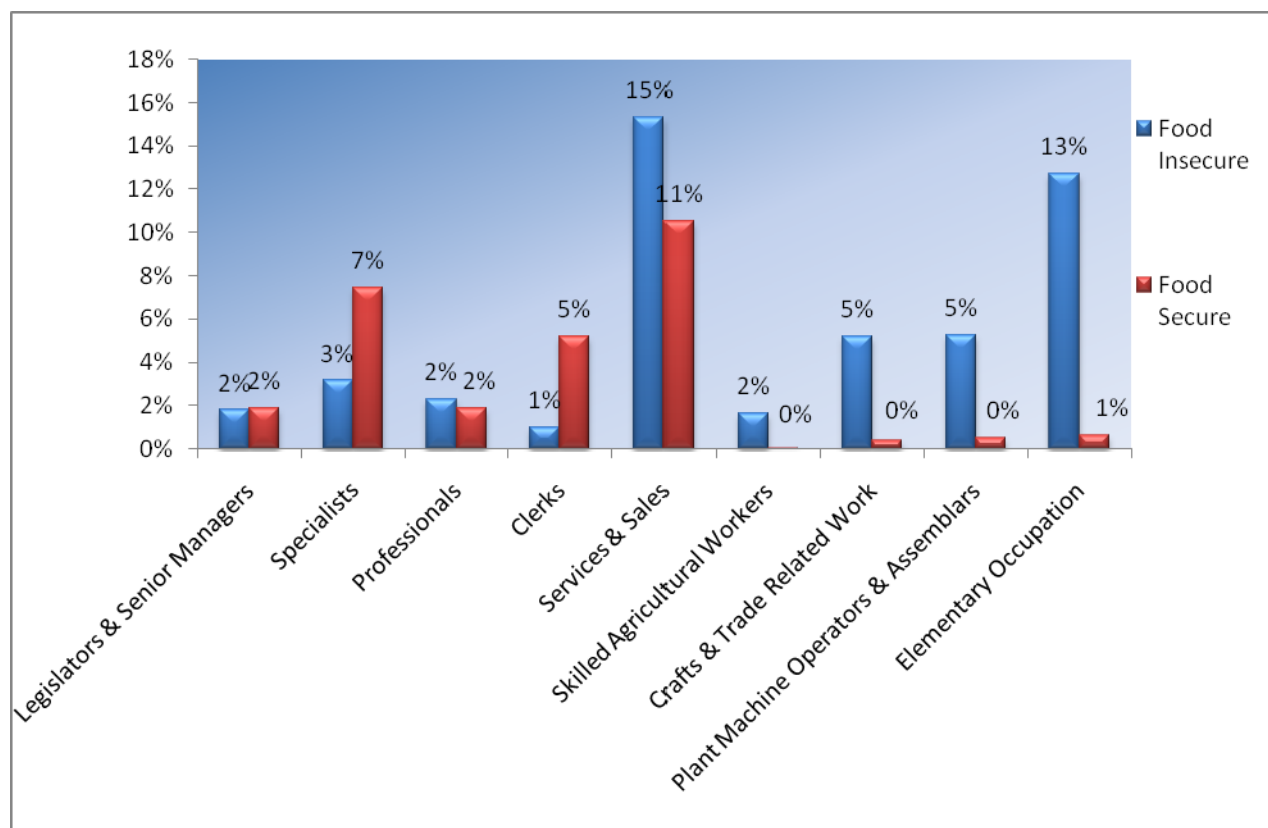
The specific types of occupation employing the largest percentage of food insecure households are services and sales at 32 percent. Elementary occupation falls in second place as the largest type of occupation for food insecure households at 26 percent. Both plant machine operators/assemblers and



crafts/related trade work compose of 11 percent of food insecure households.

The figure 12 shows the distribution of the food secure and food insecure out of the total population. The type of occupation which consists of the highest percentage of food insecure households is services and sales at 15 percent. This is followed by elementary occupation at 13 percent. The highest percentage food secure heads of households are employed in services and sales at 11 percent. Specialist occupation is held by 7 percent of the food secure compared to only 3 percent of the food insecure.

Figure 12: Comparison of Food Insecure and Food Secure Households Out of the Total Population by Type of Employment



5. Food Consumption Scoring

In the Gaza Strip, the food consumption patterns² shows that Rafah Governorate had the highest prevalence of households with “poor” food consumption at 14 percent of the total population, this is followed by Gaza governorate households with 23 percent of their population with “poor” food consumption patterns. Khan Yunis governorate appears to be the governorate with the lowest prevalence within the population with “poor” food consumption and also the highest prevalence within the population with “good” food consumption.

Table 4: Food Consumption Scoring by Governorate

FCS Groups	North Gaza	Gaza	Deir Al Balah	Khan Yunis	Rafah
poor consumption	11%	23%	8%	5%	14%
borderline	27%	27%	24%	13%	23%

² The Food Consumption Score estimates the amount and variety of food consumed in the households during the 7 days preceding the survey, by counting the number of times specific food items (grouped in specific food groups) are consumed. Three groups are constructed by applying thresholds that define a ‘poor’ food consumption pattern, ‘borderline’ food consumption, and ‘acceptable’ food consumption.

consumption					
good consumption	62%	51%	68%	81%	63%
Total	100%	100%	100%	100%	100%

Urban areas in the Gaza Strip prove to have slightly worst proportion of the population with ‘poor consumption’ compared to rural areas and refugee camps. Fifteen percent of the urban population appear to have “poor” food consumption compared to 14 percent of rural areas and 7 percent of the refugee camp households.

Table 5: Food Consumption Scoring by Locality

FCS Groups	Urban	Rural	Refugee camps
poor consumption	15%	14%	7%
borderline consumption	23%	22%	25%
good consumption	62%	65%	68%
Total	100%	100%	100%

The non-refugee population register a slightly higher prevalence of “poor” food consumption compared to the refugee population. Eighteen percent of non refugee population compared to 11 percent of the refugee population reported having “poor” food consumption. However, the population reporting higher level of having “borderline” consumption are amongst the refugee population. Despite this, non refugee households have lower levels of those with “good” food consumption.

Table 6: Food Consumption Scoring by Refugee and Non Refugee Status

FCS Groups	Refugee	Non Refugee
poor consumption	11%	18%
borderline consumption	24%	22%
good consumption	65%	59%
Total	100%	100%

Female headed households show a higher proportion of those having “poor” and borderline food consumption compared to male headed households. Seventeen percent of female headed households compared to 14 percent of male headed households have “poor” food consumption and 26 percent of female headed households compared to 23 percent of male headed households have “borderline” food consumption.

Table 7: Food Consumption Scoring by Gender of Head of Household

FCS Groups	Male Headed	Female Headed
poor consumption	14%	17%
borderline consumption	23%	26%
good consumption	63%	57%
Total	100%	100%

The food consumption scoring by food insecure and food secure households show that typically food insecure households have higher prevalence of those who have “poor” food consumption. Nineteen

percent of food insecure households have “poor” food consumption compared to 3 percent of the food secure.

Table 8: Food Consumption Scoring by Food Insecure and Food Secure Households

FCS Groups	Food Insecure	Food Secure
poor consumption	19%	3%
borderline consumption	26%	15%
good consumption	55%	82%
Total	100%	100%

The table below shows that the child or female ratio within the households does not necessarily influence household’s food consumption. Fifteen percent of households with a female ratio below 51% (typical food insecure household’s female ratio), have “poor” food consumption. Equally, 15 percent of households with a child ratio below 49 percent (typical food insecure household’s child ratio) have “poor” food consumption.

Table 9: Food Consumption Scoring by Child and Female Ratio

FCS Groups	Child Ratio below 49%	Female ratio below 51%
poor consumption	15%	15%
borderline consumption	23%	24%
good consumption	62%	61%
Total	100%	100%