Palestinian Household Consumption Trends for Agro-Commodities Study summary

1. Introduction

The Palestinian consumer living in the West Bank is exposed to an unstable political situation, due to the Israeli occupation, which affects the overall economic situation in Palestine, in terms of employment opportunities, prices of commodities, and trade restrictions. Due to these factors, the livelihood condition of the Palestinian consumer is highly vulnerable especially towards any alteration and thus the purchasing power is relatively vibrant. The Palestinian consumption trends have changed remarkably over the years, and are expected to witness further changes, due to a globalized world that Palestinians are currently facing that have created new needs, and offered consumers with a variety of options to choose from.

2. Objectives

In order to contribute to the understanding of current Palestinian consumption trends specifically in agro-commodities, the Applied Research Institute – Jerusalem (ARIJ) conducted a survey for the Palestinian households under the project "Food Production-Consumption Assessment to Improve Sustainable Agriculture and Food Security in the West Bank – Palestine". The project is funded by the International Development Research Centre (IDRC) and conducted in partnership with Ministry of Agriculture and Ministry of National Economy. The survey has covered 419 Palestinian Consumers from all over the West Bank Governorates and form different locality types including rural, urban and refugee camps (Map1). The consumer survey aimed at studying the following:

1. The standards of living of the Palestinian households and the spending levels on food and drinks distributed by governorate and locality type.
2. The monthly spending level of Palestinian households on agricultural products compared to the total spending on food.
3. The average family consumption of the agricultural products targeted in the project interventions.
4. The growth levels and future estimations of the consumption of agricultural products in addition to measuring the extent to which seasonality affect the consumption of agricultural products.
5. Self sufficiency of Palestinian households of agricultural products and the impact it has on the consumed amounts.
6. The most important sources for obtaining the agricultural products and the motives behind buying the agricultural products from a specific source.
7. The response of the Palestinian household's towards the fluctuation in agricultural products prices and its effect on level of consumption.
8. The main reasons behind the decision of buying certain agricultural product and the effect of the promotional tools on the decision.

9. The reasons behind and the level of reliability that the Palestinian household has in the local products.
10. The Palestinian household behavior towards the olive and wheat products regarding consumption and source of production (Olives and Wheat).
11. The challenges facing the Palestinian household in terms of consumption, pricing, availability and other challenges.

1. Main Results of the research study

1.1 Standard of living and Expenditure Trends

The average monthly income level of the Palestinian household as presented by the study sample was mainly between 1,500 – 3,500 NIS. This range included 52.2% of the targeted consumers. The average monthly expenditure reaches up to 38.6% on food and beverages. Noting that there is remarkable variation in the portion of expenditure spent on food (as a % of total HH expenditure) among the different governorates of the West Bank. These variations might be a reflection of different consumption trends, living standards, and prices of food commodities dealt with at each governorate.

One of the main contributors to changes in household consumption over the year is the production seasonality of agricultural commodities. Survey results show that the Palestinian household expenditure increases by 17% for field crops and fruits, 18% for vegetables, 4% for olive oil, and 6% for olives during the production off season.

1.2 Annual Consumption of Agro-commodities

The total household consumption of targeted agro-commodities is estimated at 788.5 thousand tons per year; noting that the per capita total consumption of targeted agro-commodities reached 22.3 kg per month. However, it was found that there is a difference in the average annual consumption of agro-commodities among governorates, due to factors that include household size, the prevalent lifestyle and diet trends associated with it. Hebron governorate had the highest consumption levels for targeted agro-commodities reaching 37% of total consumption in the West Bank, while Nablus ranked the second with a total consumption reached 13%. Investigating the average annual household consumption distribution over the agro-commodities, it was found: 42% of the consumption goes to field crops, 40% to vegetables, 14% to fruit trees, and 4% to olive and olive oil.

Map (1): Targeted localities for consumers' baseline survey

On the locality level, survey results show that the average monthly household consumption of targeted agro-commodities is higher in rural communities in comparison with household consumption in cities and camps. This is due to the larger household size in rural communities, and the household dependence on homemade food. This is in addition to the higher availability of agro-products in their localities or even in their home gardens. On the level of the per capita monthly consumption, it appears that there are differences at governorate level, for example a person in Tubas consumes more than a person in other governorates from the targeted crops; it is estimated that per capita consumption in Tubas reaches up to 29.4 kg per month, while per capita consumption in Jerusalem reaches only 12.6kg per month.

1.3 Growth indicators

The research findings have the same opinion with the review of standard of living surveys published by the Palestinian Bureau of Statistics (PCBS) that there is a continuous increase in the consumption of food commodities, including agro-commodities targeted in the project, where more than 63% of targeted households indicated an increase in their consumption during the past 3 years. The average annual growth of consumption was estimated at 12%.

1.4 Consumer Behavior Towards Agricultural Commodities

1.4.1 The Purchase Mechanism

The purchase mechanism of fruits and vegetables varies from one household to another. One of its main characteristics is the frequency of purchase. Survey results indicate that 62% of the targeted households in the West Bank purchase their needs of vegetables and fruits on a weekly basis, while 25.8% do that every 3 days.

The variation in purchase frequencies has a number of reasons that include the varying spending and budget planning methods among households, and preferences regarding freshness and quality of purchased fruits and vegetables. Accordingly, the price is the main and first reason behind the consumer's purchase decision of fruits and vegetables, followed by quality/good appearance and the cleanliness of the purchase source.

1.4.2 Sources Of Purchase

Up to 62% of the surveyed consumers prefer to purchase agricultural commodities from a nearby fruits & vegetables shop and 42.5% depend on central wholesale markets. Only 19.6% of targeted households depend on their own home production of agricultural commodities. The choice of a certain source depends on a set of characteristics. For consumers, the quality and cleanliness of commodities was the main of those characteristics, followed by cheaper prices, proximity of location, identification of source of production, and lastly the product display.

In addition to characteristics related to the source, when taking a decision on the purchase of vegetables and fruits, the consumer undertakes some steps in order to collect information on the different sources. But, 62.1% of consumers in the sample indicated that they go directly to the source that they are familiar with, while 24% of them usually search among different sources before making their decision. The majority of consumers indicated that they trust the local agricultural production. The previous results indicate that Palestinian consumers prefer to rely on their own experiences in the identification of good sources for the purchase of fruits and vegetables, and spend less time looking for new sources before making a decision.

1.4.3 Consumer Sensitivity to Prices

Earlier results have shown that price plays a main role in the decision making process of Palestinian consumers in the West Bank when purchasing agricultural commodities. Therefore, consumption of agricultural commodities is highly sensitive to associated prices. To measure this sensitivity, consumers have perceived an annual increase in the agro-commodities prices over the past 3 years. The average percentage of change perceived varied according to category. Fruits had the highest change in prices with 15.6% increase, indicating that prices of fruits almost double during the past 3 years. Vegetables prices increased by 14% and field crops and olive oil had lower yet remarkable change in annual prices of 12.0%.

1.4.4 Marketing and Promotional Tools

A set of promotional tools are used in order to encourage consumers to purchase agro-commodities. These tools are either used individually, or mixed to form a promotional mix. When asked about the most influential promotional tools that affect their purchase decisions, consumers within the sample identified that price discounts are the most influential, followed by additional free quantities, personal selling, awareness campaigns, and gifts. Out of the advertising tools, televised ads were the most important for consumers, whereas magazine and newspaper ads were the least influential.

The effects of price, sources, quality of product, and the marketing and promotional tools on the behavior of Palestinian consumers of agricultural commodities are very evident. Consumers respond to changes in those, and base their final decision based on one or more of them, with different weights assigned to each. Consequently, much attention should be paid to the design of a successful marketing strategy that incorporates the 4 P's of the marketing mix: product, price, placement, and promotion. A specific strategy for each should be designed in response to the analysis of the consumer behavior, in order to ensure both the satisfaction of the Palestinian consumer, and the maximization of profits for farmers, traders, and wholesalers. Such consideration is expected to add value to the supply chain of agricultural commodities, and enhance its management.

3.5 Self –Sufficiency and agro-commodities

Self-sufficiency refers to the consumption of home produced or grown agro-commodities. And although own production of agricultural products has been a common practice in the Palestinian community, this phenomena began to decrease with time, due to urbanization changes in lifestyles, and consumption trends. According to the survey results, only 19.6% of targeted households produce their own agro-commodities, yet not all of them achieve self-sufficiency of home-grown products. Only 4% of the per capita annual consumption of agro-commodities is provided from the family self-production. Variations in the degree of self-sufficiency were also noticed based on the locality type. Rural communities had the highest rate with 35% of households growing and producing 1 or more agricultural crops at home.

3.6 Food Security and consumption patterns

Food security in the Palestinian territory has a special nature that differs from most areas in the world, as it is linked to the political conflict that negatively impact the livelihoods. The basic causes of food insecurity translate into underlying and immediate causes of food insecurity at household level, including: (i) limitations on food availability: negative effects on agricultural production and food trade/market supplies, including food dependency on imports; (ii) insufficient economic access to food: prices artificially high, high cost of production inputs but also lack of opportunities to secure employment and higher household incomes; (iii) impaired food utilization: poor water, sanitation, hygiene, access to health care, and declining quality of the diet, and (iv) unreachable food stability: unorganized food markets and pricing systems, no control on borders and thus limitations on exporting procedures. Upon the current population growth rate[1], this is anticipated to magnify food insecurity prevalence and depth[2].

Food insecurity is increasingly witnessed among the Palestinian households as poverty averages and unemployment rates are in continuous increase in the Palestinian territory; reaching up to 25.8% and 26.7% respectively. Food insecurity affects more than 1.57 million Palestinian people (34% of Palestinian population) during the year 2012. It is becoming a concern among refugee camps in particular as camps has the highest insecurity level reaching up to 35%. (Graph 1) it is also noted that household expenditure on food reached up to 55% of its total expenditure which indicates that accessing food is totally linked to the purchasing power of the Palestinian consumers and thus the poorer households are the ones mostly affected by changes on the level of food prices[3].

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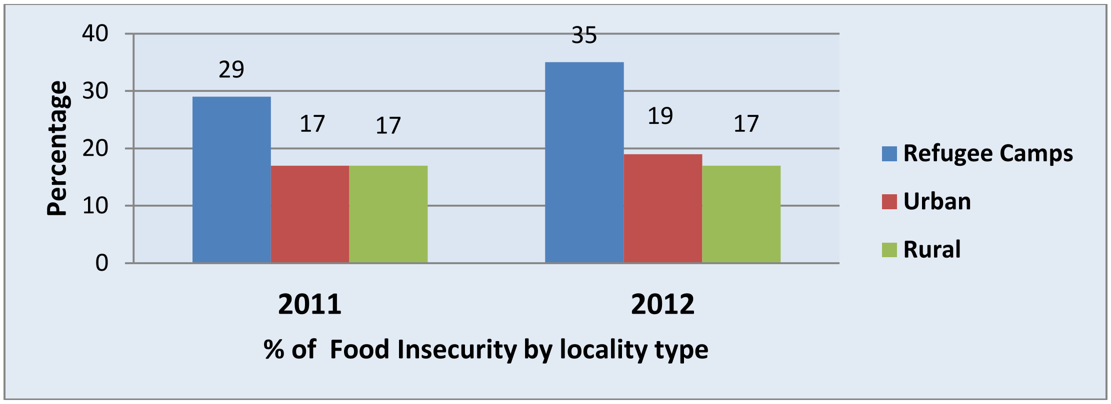
[1] Growth rate reached 2.94% in the Palestinian Territory in the year 2013; according to the PCBS (2014), Palestine in Number 2013.

[2] World Food Programme (WFP), the Applied Research Institute- Jerusalem (ARIJ) (2010). Socio-Economic and Food Security Atlas in the Occupied Palestinian Territory. Palestine.

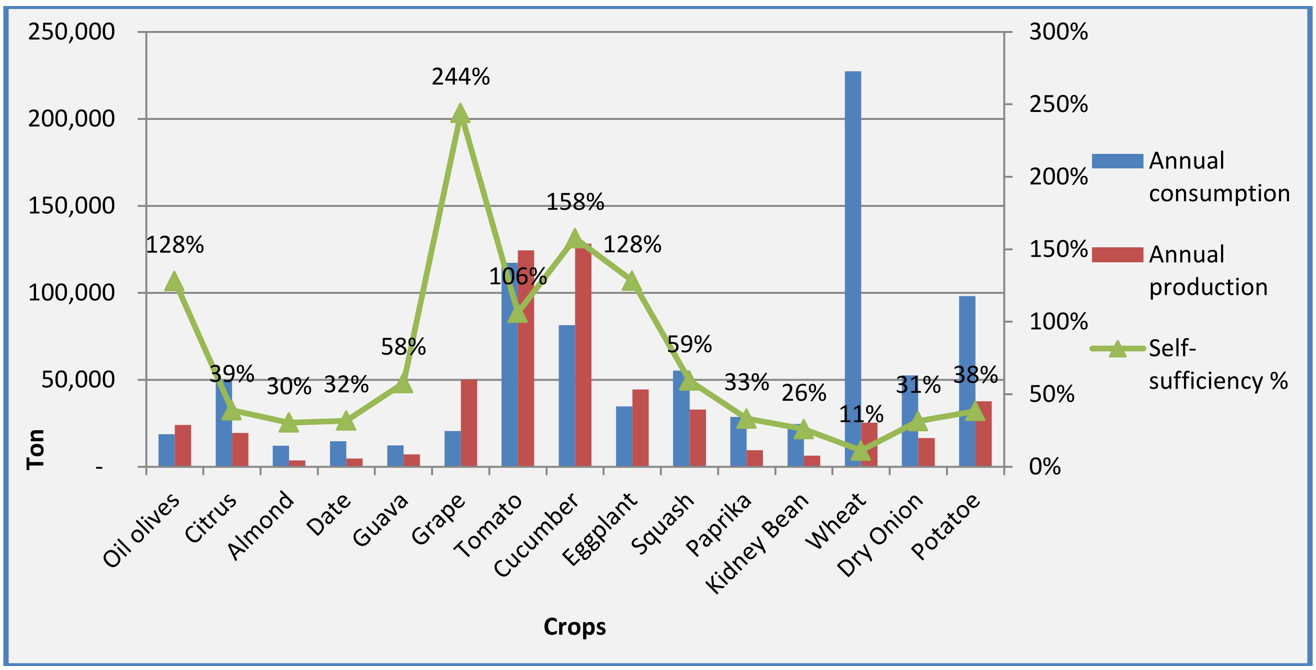
[3] World Food Programme (WFP), Palestinian Central Bureau of Statistics (PCBS), Food and Agriculture Organization (FAO), and UNRWA (2013). Socio-Economic and Food Security Survey 2012. Palestine.



Graph 1: Food insecurity level in the Palestinian Territory by locality type

According to the findings of the consumer baseline survey, the prices of the locally produced agro-commodities is in continuous increase; during the last three years (2011-2014) the prices of fruits increased by 15.6%, vegetables prices increased by 14.4%, and field crops and olive oil prices increase by 12% respectively. Only 20% of the surveyed Palestinian households indicated that they consume their self produced agro-commodities (cultivated at their home gardens), thus most households depend on purchasing their agro-commodities from the fruit and vegetable markets. There are many factors that limits the capability of the Palestinian households from cultivating their lands mainly deficiency in available cultivated areas such as in Jerusalem governorate, lack of sufficient water along the year, high prices for the cube of water, high prices of agriculture inputs, Israeli occupation policy especially the confiscation of land and control on Area C in a way that limits the possibility of developing these areas. It is also clear that agro-commodities' self insufficiency is not reachable which oblige local consumers to buy their needed commodities from markets, retailers or wholesalers to satisfy their needs and demands despite the commodities' prices or seasonality. Upon the research findings, the highest percentage of locally produced agro-commodities that are essential for food security at household level are available only in certain seasons and in certain amounts which does not guarantee self sufficiency and does not cover the Palestinian market needs and thus oblige the consumer to buy the imported products either from Israel or other regional or foreign markets at any price. This supports few benefited traders especially in the monopoly with prices.

For example, it was found that the products of citrus, almond, date, guava, squash, paprika, green kidney bean, wheat and its derivatives, dry onion, and potato do not cover the needs of the local market all over the year; not even in its productions season. This appears clearly in the wheat product since it covers only 11% of the Palestinian market needs. On the other hand, the products of olive oil, grape, tomato, cucumber, and eggplants are the ones that achieve self sufficiency during their production season (Graph 2). Thus, an agricultural plan for production calendar is very essential to develop the agriculture sector and to reach self sufficiency at the Palestinian agro-commodities along the production seasons. This is also an important step to limit the entrance of non-Palestinian same products to the local markets accompanied with high prices and variant qualities, which affects negatively the market capacity to absorb the products' surplus especially during the local production season.



Graph 2: Percentage of self sufficiency of targeted agriculture products during the research study[4]

Palestinian households confirmed that their main interest during the purchasing process is the price of the selected commodity more than its nutritive value or quality. This indicates that food intake patterns at the Palestinian household level depend mainly on the availability of low priced products at markets which reflects a general weak nutritive, health and food security status. It is worth noting that those households with high dependency ratio and less education attainment are the ones mostly vulnerable to food insecurity status. For example, up to 51% of the surveyed households indicate that their monthly income is less than 1500

[4] The production numbers were taken from the surveys specialized in the agriculture sector conducted by the PCBS for the agricultural year 2009/2010. The percentages that exceed 100% are the ones that achieved self-sufficiency at Palestinian market during their production season.

NIS and in most cases they buy their agro-commodities from nearby market on dept. In addition, up to 66% of surveyed households led by an illiterate head secure less than 1500 NIS/month, while 33% of the households led by a head with Masters Degree attainment secure more than 6000NIS/month.

4 Recommendations

Understanding consumption trends is highly important for decision makers and stakeholders involved in the production of agro-commodities. Based on the findings of the survey, the following is recommended:

- Encourage farmers to use modern agricultural techniques that would contribute to increase the production, decrease the cost of production of agro-commodities, and thus their prices. This would increase consumption given that Palestinian consumer trusts the local product but is highly sensitive to changes in prices.
- Encourage consumers to cultivate their home gardens to improve self-sufficiency at household level and as an attempt to reduce household expenditures.
- Design marketing strategies that incorporates a mixture of pricing, placement, quality, and promotional tools, in order to better market agro-commodities for Palestinian consumers.
- Encourage fruits and vegetables markets to improve their advertising techniques in a way that would find positive response from the consumers. Some influential techniques are the direct communication with consumers, price discounts from time to time, and televised ads are of most successful techniques. Noting that Palestinian consumers depend a lot on their own purchase experience.
- Enhance promotion ability for better introduction of the local agro-commodities and thus increase the competing ability of local commodity when compared to the Israeli or foreign products.
- Conduct awareness campaigns for Palestinian farmers in order to enhance their productivity, since demand for agro-commodities is growing at annual rate of 12%. This is an opportunity for farmers and traders of agro-commodities.
- Encourage Palestinian households to purchase their agro-commodities during its production season so as to ensure its quality, competing price, and higher nutrition values.
- Encourage the consumption of fresh vegetables and fruits to become a diet followed especially among urban population.
- Encourage consumers to store extra portions of those highly consumed agro-commodities through food processing (drying or freezing techniques) during their peaks of production season.
- Diversify in food intakes mainly from the agro-commodities and include new food patterns.
- Diversify in food source including agro- commodities to ensure better quality and reasonable prices.

- Purchase agro- commodities from clean markets to reduce transition of diseases.
- Provide awareness material for women that is specialized in best practices in purchase processes and best methods to support local products.
- Train related and effective association and organization staff on issues related to consumers' protection as it goes with status of Palestinian consumers and nature of available products at local market.