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Brief Overview of the Olive and the Olive Oil Sector in the Palestinian Territories

It is not possible to overestimate the importance of olives to the Palestinian economy. Not only are olives the single biggest crop in what remains a largely agricultural economy, but they have deep cultural significance as a symbol of traditional society and ties to the land. It is estimated that olive trees account for nearly 45 percent of cultivated land in Palestine and in good years can contribute as much as 15-19 percent of agriculture output. Given that agriculture accounts for nearly 25 percent of GDP, olives are an important element of the Palestinian economy and estimates suggest that about 100,000 families depend to some extent upon the olive harvest for their livelihoods.

Olive production is cyclical, with good years following bad years and 2006 is expected to be exceptional. About 90- 95 percent of the Palestinian olive harvest is used to produce olive oil, with the remainder being used for pickling and table olives. In the past decade average oil production in good years has been around 20,000-25,000 tons but in 2006 it is expected to reach 33,000-35,000 tons[1].

Olive oil is the primary fat used by the Palestinian population, and most production is locally consumed. Significant exports take place only in high production years when there is a large surplus above local needs. It is impossible to accurately determine the volume of exports because they are cyclical and many occur informally to Israel or as gifts to family members in Jordan or Arab gulf countries. But in very good years as much as 20-30 percent of total production might be exported out of the Palestinian territories[2].

<u>The Olive Value Chain</u>

Cultivation is primarily carried out by small family farms, which mostly use unpaid family labor. In recent years there has been a dramatic growth in the area covered by trees. It expanded from an estimated 520,000 dunums in to over 900,000 today. Many trees are found on the steep terraced hillsides in the West Bank. Consequently, most plowing, weed control and other activities must be accomplished manually or by using animals. Only a minority of farmers use chemical fertilizers, herbicides or pesticides. According to a 1998 survey by the Palestine Central Bureau of Statistics about 21 percent of the total area under cultivation received chemical fertilization and less than 15 percent used pesticides or fungicides[3]. The low use of chemicals is primarily due to the cost of chemicals, but it has the advantage of allowing a quick move into organic farming by many Palestinian producers.

[1] Palestinian Ministry of Agriculture estimate.
[2] The estimate of 30-35 percent is taken, along with much of the other information in this short note, from the exceptionally well done PALTRADE Olive Oil Sector Strategy published in March 2005.
[3] This average masks significant differences between the West Bank and Gaza. In Gaza 61 percent of farmers reported using chemical fertilizers versus just 19% in the West Bank.

***Harvesting and Pressing*.** Harvesting is conducted manually and is a critical time for establishing quality. To produce the best oil, the olives must be harvested at the correct time, using the proper techniques, and immediately moved to presses. There are around 275 commercial olive presses in the Palestinian territories. The presses operate independently of the groves, and instead of taking a fee are typically paid in a percentage of the oil. Pressing is the key activity in determining the quality of olive oil. The olives must be pressed as quickly as possible, and while waiting to be pressed they must be properly stored. During the actual pressing the water must be changed frequently and once pressed the oil must be stored in stainless steel containers to control the level of acidity and dioxide.

Bottling and Distribution. Over 95 percent oil on the local market is sold in 16kg tins or plastic containers. Packaging is done without regard to published standards and most containers are not labeled[4]. The distribution system is underdeveloped. Direct sales from farmers and presses to consumers and local retailers dominate the market. Only about five percent of production is bottled in small 750ml or 1 and 2 liters containers with clear labels and these are primarily for export[5]. Since Palestinian consumers tend to buy in bulk, often only once a year, this system appears to suit the local market. But the large containers, lack of standards and poor labeling effectively prevents most production from entering the high value export market.

The Cost of Production

The Palestinian economy is essentially a part of the Israeli economy and has a similar cost structure. Consequently, production costs are higher than in neighboring countries or in major producing countries. Informal estimates suggest that production costs in the West Bank are 20-30 percent higher than in Jordan, 10-15 percent higher than Syria and 35-40 percent above the cost in Turkey[6].

Labor accounts for over half of the total cost of production because much of the cultivation and all of the harvesting must be done by hand. The average wages in the Palestinian industrial sector are nearly double what they are in Jordan and close to three times those in Egypt. Though there is no comparable data available, it is likely that a similar discrepancy exists in the agricultural sector. The use of unpaid family labor helps offset some of the costs, but they are high enough to still put Palestinian producers at a disadvantage. Other major costs include pressing, utilities, transport of the olives and finished oil and packaging. All of which are higher than in neighboring countries. Pressing contributes about 10 percent of total costs[7]. Packaging is only a small share for bulk oil, but for small bottles aimed at the export market, the bottles and packaging are almost one third of production costs.

Markets and Potential

Export has never been a focus for the Palestinian oil producers and the majority of the production is for the local market. Average consumption is estimated at around 12,000 tons per year and in low yield years very little oil is available for export[8]. In high yield years, part of the production in excess of consumption is stored for the following low years and the

[4] In November 2005 the Palestinian Standards Bureau developed a quality assurance certificate for Palestinian Oil. But so far few producers seem to seek certification.
[5] PALTRADE Strategy page 14
[6] Cost estimates are based on field visits conducted by PARC to neighboring markets.
[7] Traditionally presses take 10 percent of the oil as payment for their services.
[8] Ministry of Agriculture estimate.

remainder is exported. In the past there was usually an excess of 3,000-5,000 tons in good years[9]. However, production has dramatically increased in the last few years and, as noted above, is expected to reach over 30,000 tons in the 2006 season. This will leave a large surplus of well over 15,000 tons, available for export or storage.

Historically the majority of exports have been to Jordan or the Arab market in Israel, where consumers have similar preferences to the Palestinian market. But Jordan has developed its own olive oil industry and has taken steps to virtually end the flow of Palestinian oil except as gifts. The Israeli market has become increasingly difficult to access because of the closures. In 2004/2005, a combination of a calmer political climate and a good olive harvest led to a strong recovery, and by some guesses as much as 5000 to 6,000 tons of oil was sent to Israel, up from an average of 600 tons in the years 2000-2004. But this surge in exports to Israel is unlikely to last once the wall is completed and it becomes ever more difficult for Palestinians to access the Israeli market.

While the Palestinian Territories have lost the Jordanian market, their exports are beginning to make inroads into other Arab countries. Much of exports are in the form of "gifts" to relatives who consume part and then sell the rest commercially. However, there are some large commercial sales. In 2004 Saudi Arabia imported over 300 tons of Palestinian oil and recently Palestinian producers have made small forays into Yemen and China, which demonstrates the promise of new markets[10]. However, the potential for bulk exports of Palestinian oil is limited because of the cost of production.

Recently, a new and potentially significant market for high end, extra virgin or organic bottled olive oil has begun to develop in the Arab Gulf, Europe and North America. The Palestinian climate and soil enable the production of some the of the highest quality olive oil in the world. The oil has a unique taste and aroma that has been recognized in taste tests conducted by certified testers in Europe. Most of the current production is classified as at least ordinary virgin, since the local market has no demand for high quality oil. But with some effort it is possible to produce large quantities of extra virgin oil in the West Bank. Along with these natural advantages, Palestinian oil has unique marketing options. It can be branded as oil from the "holy land", and in some Arab and ethnic markets it will draw support to assist Palestinian labor. In addition, because Palestinian farmers have not been able to afford chemical fertilizers and pesticides, it is relatively easy for many producers to enter the high value organic market.

A handful of enterprises have emerged in the last three years to tap this potentially rich market. Local producers estimate that small bottles earn 15-20 percent more than bulk exports and organic oil can earn as much as 40 percent more. Some of the enterprises are cooperatives selling under a mantel of fair trade while others are strictly private commercial operations. High quality, bottled oil has been successfully exported to Japan, Europe, the Arab Gulf and North America, but so far shipments have been irregular and in limited quantities. Fair trade exports were only around 500 tons in 2005[11]. However, bottlers plan to take advantage of the high yield expected in the 2006 season to dramatically increase

[9] All figures in this section are taken from the PALTRADE Olive Oil Strategy. PALTRADE obtained these figures from a variety of sources including the Palestinian Ministry of Agriculture, the Palestinian Olive Oil Council and PALTRADE's own intelligence and estimates.

[10] Palestinian Central Bureau of Statistics Estimates.

[11] Fair trade goods are those that are not price competitive but depend upon consumers in high end markets to buy them to support the producers in developing countries.

exports. Local producers estimate that in 2006 nearly 20 percent of Palestinian production will be extra virgin, up from five percent in 2005.

Constraints to Exports

The export market is primarily constrained by the relatively high cost of production resulting from a combination of the cost structure inherited from the Israeli economy and low productivity. Low productivity is partly attributable to the nature of the terrain; the steep slopes, infertile soil and poor rains. But farmers could still do much more to improve yields, especially on older trees. Better pruning techniques and improved use of chemicals would significantly enhance output, and more careful handling would increase quality. Irrigation is a priority. Olive trees are drought resistant but partial irrigation when the fruits are blossoming and the rains have stopped early, could substantially increase yields. However, Palestinians will need full access to water supplies, and removal of any Israeli restrictions from digging new wells or developing new irrigation projects.

The current movement restrictions and closures have a significant impact on the cost of production and value of the olive crop. Palestinian farmers in the West Bank now face over 500 physical obstacles and closures restricting their movement; a 40 percent increase since 2005[12]. Farmers are often prevented from accessing their trees making it difficult to prune the trees, plow and control weeds, which reduces yields. More importantly, while oil will not deteriorate while awaiting shipment, high quality oil requires that the olives be harvested at the correct time and pressed immediately after harvest. Delays in harvesting or in moving harvested olives to the presses reduce the yield and quality of oil produced. Most problematic is the uncertainty caused by the closures. Producing high quality oil that is suitable for the export market requires large investments to build storage facilities, modern presses and to teach farmers proper harvesting methods. If producers are unsure that they will be able to obtain the necessary olives they will be unwilling to make the investment, and will continue the low risk strategy of producing low quality bulk oil.

The movement restrictions also raise transport costs. Since the restrictions are constantly changing it is impossible to quantify their impact. But some idea can be obtained from the overall transport costs. One exporter estimates that a 20 foot container to Europe costs $2000, about 10 percent of the total costs of production and marketing. $400 of this is internal transportation; the cost moving the container to the port, which he believes has doubled since the beginning of the most recent Intifada. In addition, Palestinian producers have to pay a $200 per container security fee that Israeli shippers do not face. Because of the difficulty in clearing goods through Israeli security almost all Palestinian bottlers buy their packaging and machinery from Israeli suppliers. World Bank analysis suggests that relying on Israeli importers adds anywhere from 20-25 percent to the world price of industrial inputs for Palestinian producers[13].

One of the most detrimental effects of the closures is that they prevent Palestinians from committing to specific delivery schedules. Because they are never sure when the borders or internal checkpoints will open or how long it will take to clear shipments, they are unable to guarantee specific delivery dates unless they build in generous lead times, which adds to costs.

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[12] UN 2006 Olive Oil Fact Sheet.
[13] Country Economic Memorandum, September 2006.

To compensate for the high costs of production, producers' best hope is to capitalize on the superior quality and special marketing niche of Palestinian oil and move toward the high end bottled market. But entering the world market is a major challenge. For the past 40 years, most Palestinian exports have gone through Israeli distributors and local producers are only now developing the necessary contacts and marketing skills. As in all aspects of the industry, the closures have an adverse effect on marketing. It is difficult and expensive for Palestinian entrepreneurs to travel abroad to make market contacts. Foreign buyers often will not enter the Palestinian territories and Palestinians are often not allowed into Jerusalem to meet with them. Sending samples, attending trade fairs and the other basic acts of establishing presences in new markets are all much harder and more expensive for Palestinians.

<u>Recommendations</u>

To increase the value added from olive oil and raise Palestinian incomes, producers will have to move into the high value export market. They must establish a "made in Palestine" brand name with a reputation for quality that compensates for its higher price. To do this, producers will have to significantly increase quality, raise productivity and lower costs. This in turn requires investment in modern equipment, training and marketing. The Palestinian Authority and organizations like the Palestinian Olive Oil Council will have to continue supporting producers' efforts by creating and monitoring standards and providing agricultural extension services for the farmers.

However, none of these efforts will be successful without the cooperation of the Israeli authorities. If farmers are not guaranteed access to their fields and kept safe from settler attacks they will not be able to produce the necessary olives. Bottlers and presses must be allowed to ship their oil efficiently and on a predictable schedule. Israel has significant and justifiable security concerns, but it must protect its security while also ensuring that legitimate businessmen can easily travel and export their products without unnecessary delays. Creating predictability for producers is the most critical aspect. Without the ability to plan shipments and commit to delivery dates it will not be possible for Palestinian producers to substantially expand exports.