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COMMODITY DEVELOPMENT PLAN: OLIVES

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COMMODITY DEVELOPMENT PLAN: OLIVES

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Cognizant Technical Officer	**Kristaq Jorgji**
Chief of Party	**Juan M. Estrada-Valle**
Program Manager	**Ingrid Ardjosoediro**

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ACRONYMS

AAC	Albanian Agricultural Competitiveness
AFADA	Albanian Fertilizer and Ag-Input Dealers Association
CDP	Commodity Development Plan
CEE	Central and Eastern European
MoAFCP	Ministry of Agriculture, Food and Consumer Protection
MT	Metric Ton
TTC	Technical Transfer Center

INTRODUCTION

The olive sub-sector was selected by the AAC project because of its scale, growth potential, dominating involvement of smallholder farmers and micro, small and medium-sized enterprises, and the potential catalyzing impact of development project programs. The olive sub-sector in Albania went through three main phases. (1) Before 1991, there was a state-owned system of plantation orchards and 26 processing facilities in central locations. (2) After the 1991 privatization, numerous private processors emerged using second-hand equipment imported from Italy to replace the state-owned processors that had collapsed. (3) After the financial crisis of 1997, the olive industry re-grouped, new processors using more modern equipment emerged near the olive growing areas and olive tree plantings increased using more efficient intensive orchard systems. Driven by these new investments, the industry embarked on a growth strategy based on quality and cost-efficiency. Nevertheless, success has been limited to date and the competition from imports from Italy and Greece is growing.

OVERVIEW OF THE OLIVE SUBSECTOR

The olives sector's importance as an agricultural export from Albania varies considerably from year to year. [1] For example, exports to Greece rose from 0 to 1,093 from 2002 to 2006, and then fell back to 138 in 2007. The situation is similar in Italy, with Albanian melon exports jumping from 22 to 701 over the same four year period, and then dropping to 138 in 2007. The following sections will review the data of the olive production, consumption and trade balances in Albania

OLIVE PRODUCTION

Olive production occurs under natural growing conditions, with poor tree management making this almost the standard production situation in Albania. In general olive tree yields manifest cyclical or erratic production patterns where abundant production years are alternated with poor ones. For an average production of 40,000 MT, we can roughly indicate that 4,000MT (10% of production) is lost at the farm (due to not harvested), 27,000 MT (75% of harvested volume) is used for olive oil production and 9,000 MT (25% of the harvested volume) for the production of (pickled/salted) table olives.

TABLE 1: STATISTICS ON OLIVE TREES

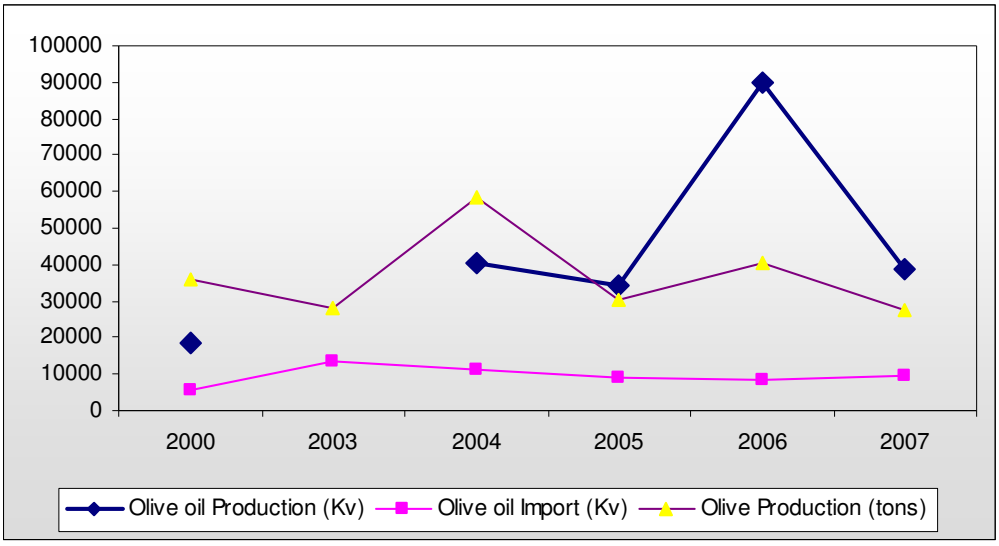
Statistic items	2004	2005	2006	2007
Olive trees 000	4,092	4,264	4,497	4,715
Olive trees in production 000	3,429	3,488	3,603	3,728
Total output Mt	58,700	30,160	40,195	28,120
Production per tree kg	30.2	8.6	11.2	7.5
Production of pickled olives in farms Mt		5,190	No data	No data
Olive oil retained by farmers Mt	No data	No data	951	2,570
Olive oil from oil industries Mt	4,036	3,454	8,985	3,879

Source MAFCP statistical yearbook 2007

The study conducted by DSA titled: Report on food chain analysis of olive oil and table olives in Albania 2008 indicated in qualitative terms, that data is consistent with the opinion of all the interviewed stakeholders that olive growing and olive oil production as an agribusiness value chain with excellent potential. After a peak in 2004, production in the following years has remained relatively low, due to adverse climatic conditions and to the natural fluctuation of production of olive trees among the years, not mitigated by appropriate agronomic practices and irrigation. Interestingly, the trend of increasing the olive trees per orchard is showing an increase of with an approximately 5%/year increase.

[1] These calculations are based on data obtained from the Global Trade Atlas for exports to the 25 EU countries that show that total value of vegetable, fruit and nut exports to the EU were $4,943,089 in 2006 and 5,516,506 in 2007.

FIGURE 1: OFFICIAL DATA ON DOMESTIC PRODUCTION OF OLIVES AND OLIVE OIL AND OLIVE OIL IMPORTS 2000–2007



Source: ACIT 2008 Website

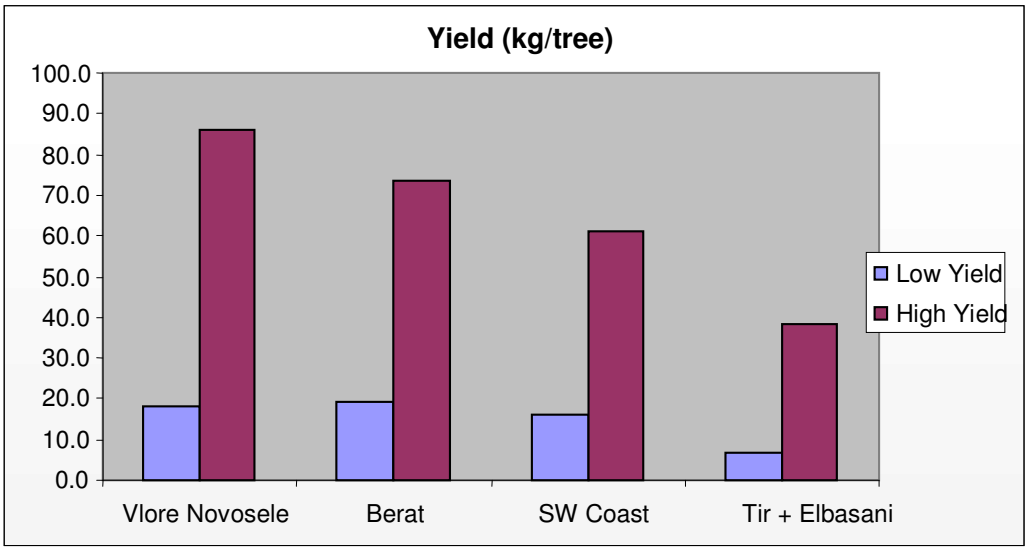
TABLE 2: ESTIMATED DOMESTIC PRODUCTION OF OLIVES NET OF LOSSES AND PER CAPITA CONSUMPTION MT.

Scenarios	Domestic production			Int. trades balance in olives equiv.	Per capita yearly consumption
	Table olives	Olive oil	Total eq. olives		
Conservative	11,000	9,000	56,000	5,500	Table olives: 3.7 kg Olive oil: 3.2 kg
Average	14,000	12,200	75,000	5,500	Table olives: 4.6 kg Olive oil: 4.2 kg
High	18,500	17,500	106,000	5,500	Table olives: 6.0 kg Olive oil: 5.6 kg

According to the DSA study, a large number of producers, including some commercial producers, lack proper information of existing calculation of costs of production and do not know their breakeven price. There is a clear need for farm management training that includes procedures for identifying technical and economic constraints on the farm, calculating production costs. Break even analysis, and general skills in farm planning and management to assist farmers to respond to new market opportunities.

The analysis of yields shows that the main factor of variation remains the impact of climatic conditions and in particular drought, thus leading to conclude that lack of investments in irrigation facilities remains a constraint more important than inefficient use of inputs, size of farm and total number of trees planted. Yields vary strongly from year to year. In hot dry years, production is very low. Most farms, missing irrigation are exposed and vulnerable to the drought, obtaining low production levels and quality. Yields in Central Albania (Tirana and Elbasan) are lower than in other parts of the country both in good and bad years. In South West Coast, yields are lower than in neighboring Novosela, due to lack of investments and services.

FIGURE 2: YIELD IN GOOD AND BAD YEARS FOR DIFFERENT AREAS



Source: Evaluation of the DSA olive sector study based on field and desk survey

In year 2007, the lower levels of production triggered the prices to more than double compared to the previous two years. Increasing prices and profits encouraged farmers to increase planted surface, but in the long term, it will not be feasible to keep prices much higher than international ones, in good as well as in bad years. A basic calculation made on average processing costs and international prices of extra-virgin olive oil, shows that farm-gate sales prices exceeding 40 to 45 ALL/kg (i.e between 0.3 to 0.4 eur/kg, as compared with prices of 0.5 eur/kg in 2006 and well over 1 eur/kg in 2007) of raw olives would be not sustainable in the long run. Trade channels are becoming more efficient, and barriers are being reduced; traders and processors will respond to high domestic raw olive prices, by increasing imports of olives or olive oil. In particular, the finding that, due to domestic olives price oscillation, profits are higher in bad years than in good ones is absolutely not sustainable. In these conditions, as efficiency of both processors and distributors increases, producers will be under increasing pressure to increase yields, improve quality and at the same time to reduce prices. Thus, for the olive farmers, in order to survive and to become competitive, it is a must to reduce costs and come up with considerably lower prices, and more stable production/supply record along the years.

CONSUMPTION

URBAN CONSUMPTION

Data on urban consumption of olive oil are sufficiently coherent and converging[2], showing that, at least for urban consumers, the figure of 4.2 to 4.5 l per capita per year is realistic, even if relatively high[3]. Rural consumption is expected to be much higher[4] in production areas and much lower in areas

[2] The figure provided by LSMS was compared with trend obtained from declared production of oil industry "cleaned" from statistic tails of extremely high or low yearly data. "Industrial production of olive oil can be considered as a rough assessment of urban consumption, as rural consumption of branded olive oil should more or less compensate purchasing of unlabelled olive oil from urban dwellers.

[3] A consumption of 4-5 lt per capita is comparable with consumption in countries with Mediterranean consumption habits which are not lead producers, such as Syria and Portugal; consumption of lead Mediterranean producers is much higher: 11 lt. per capita in Tunisia, 12 lt. per capita in Italy, 13.6 in Spain and 23.7 in Greece (source: UNCTAD).

[4] Considering consumption in Tunisia, Italy, Greece and Spain, demand in production areas could easily exceed 10 l per capita.

where there are no olive trees. Urban consumption of olive oils should therefore score around 6,300 Mt. [5] met by 5,400 Mt of domestic production and 900 Mt of imported olive oil. Evaluations of urban demand of table olives through different methods are also converging[6] showing a demand between 4,900 Mt and 5,200 Mt per year.

RURAL CONSUMPTION

Consumption in rural areas includes cash trades of rural dwellers and growers self-consumption. Self-consumption figures are the most difficult figure to estimate, but they have no effect in the analysis of other flows within the food chain, with the exception of the share of product retained by growers and used for gifts or non-cash exchanges with relatives. Per capita consumption of rural dwellers except olive growers could have significant differences from district to district, being influenced both by revenues (there are major differences in revenues in different districts) and lifestyles. The best estimates of commercial and non-commercial (i.e. self-consumption) consumption in rural areas in the three evaluated scenarios are provided in **Table 3** below.

TABLE 3: ESTIMATED DEMAND OF TABLE OLIVES AND OLIVE OIL IN RURAL AREAS MT

Scenarios	Table olives	Olive oil	Olives equiv.	Per capita cons.
Conservative scenario				
Market consumption	2,400	1,400	24,000	Table olives: 2.1 kg Olive oil: 1.2 kg
Self-consumption	3,600	2,200		Table olives: 8.1 kg Olive oil: 4.9 kg
Average scenario				
Market consumption	3,400	3,500	43,000	Table olives: 3.0 kg Olive oil: 3.1 kg
Self-consumption	5,600	3,300		Table olives: 12.6 kg Olive oil: 7.4 kg
High scenario				
Market consumption	4,500	4,700	74,000	Table olives: 4.0 kg Olive oil: 4.2 kg
Self-consumption	9,000	7,400		Table olives: 20.2 kg Olive oil: 16.6 kg

INTERNATIONAL TRADES AND SUPPLY BALANCE

IMPORTS OF TABLE OLIVES AND OLIVES FOR PROCESSING

Olives are sourced almost entirely from EU, and more specifically from Greece. Between the year 2000 and 2007, import of table olives has increased by almost 10 times. The import of other olives, which could also be used for processing, is characterized by instability from year to year and is related to shortfall in domestic production and relevant surge of farm gate prices to unsustainable levels, as it happened during the 2007 season.

[5] There are 1.4 M urban dwellers in Albania.

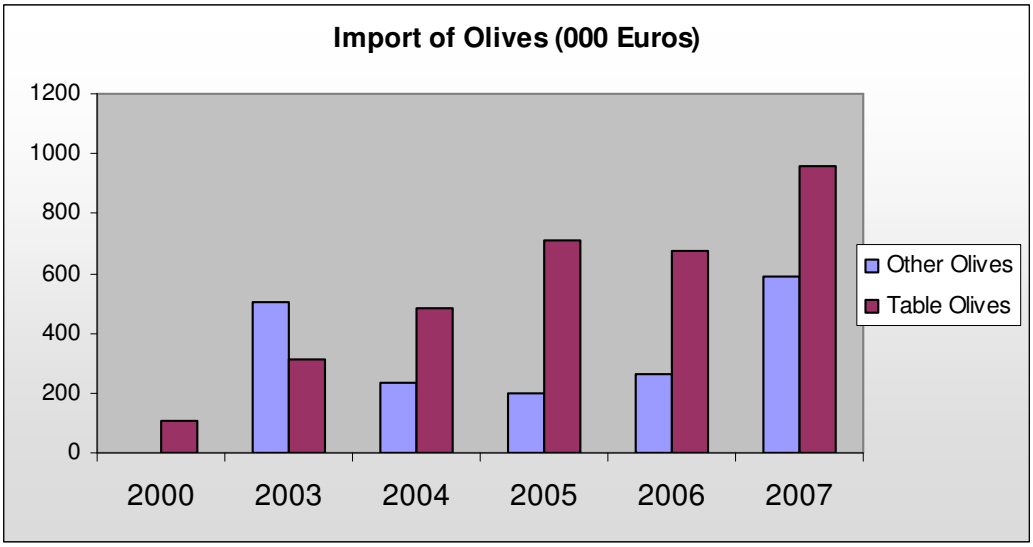
[6] The figure provided by LSMS was compared with a simplified market structure assessment of urban demand, described in appendix 1.

TABLE 4: IMPORTS OF OLIVES BY YEAR MT

Item	2000	2003	2004	2005	2006	2007
Table Olives	109	309	484	708	677	959
Other Olives (not for immediate consumption)	-	853	394	349	462	955

Source: Eurostat

FIGURE 3: IMPORT OF OLIVES BY YEAR AND TYPE IN VALUE



Source: Eurostat

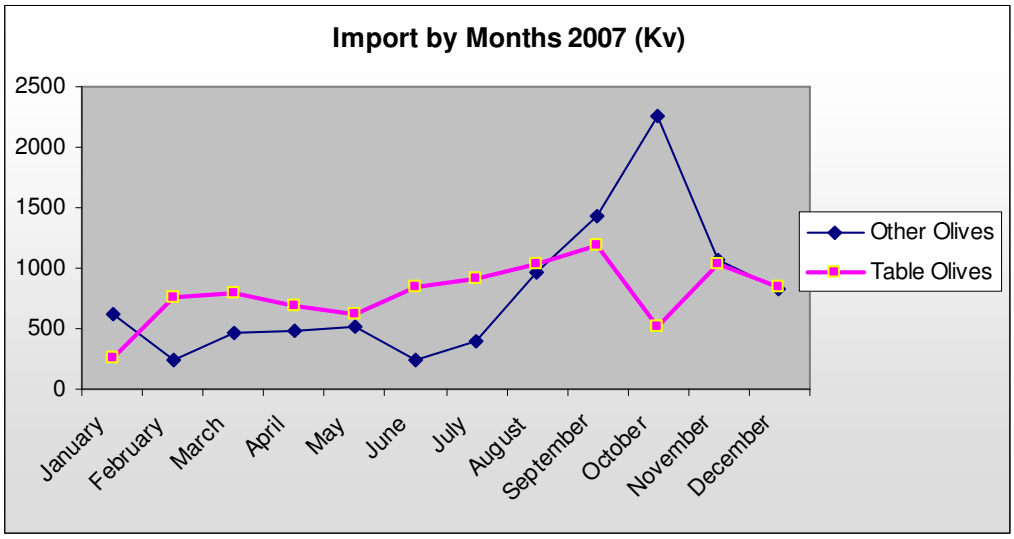
Data show different import patterns and trends for the two types of olives: imports of table olives, especially when considered in value, are following a clear, uninterrupted growth trend, while imports of olives for processing are related to availability and prices of domestic production. In fact, even if official data on domestic production of olives are not totally reliable (see chapter 1 above), imports of olives for processing (olives not for immediate consumption) are clearly inversely correlated to the quantity of domestic production: in good production years as 2004 imports are low, while in years of scarce production as 2003 and 2007, imports are substantially higher, even if they compensate only a minimal part of the reduction of domestic production of olives. Considering all the other costs related to import (transport, insurance custom fees etc.), *each time that farm gate prices of domestic olives for olive oil exceed 80 ALL/kg it could be theoretically more convenient to import olives for processing.* In fact, since to get good quality olive oil olives should be processed within 24 – maximum 48 - hours from collection, logistic difficulties make very difficult and anyhow highly unpractical importing and processing large quantities of olives for olive oil. Imports of olives for processing were used to perform a test from two processors located in Ndroq, Tirana during the 2007 season as they were preparing to enter into the domestic market for the first time. All imported olives come from EU countries, mainly from Greece.

High and growing domestic demand coupled with a lagging production, make the domestic market less competitive than neighboring markets and thus have attracted increasing imports from highly efficient producing countries such as Italy and Greece. These imports are also stimulated by the (incipient) rise of supermarkets catering to consumers with increasingly sophisticated preferences. These factors have combined for a rapid growth of imports: annual increases of roughly 100% over the last 4 years. Even the imports of raw olives has emerged in 2007, as two of the larger processors

imported from Italy in order to cope with limited supplies (and the resulting prohibitively high price) of raw material that year[7].

The bulk of olive for processing is occurring, as expected, during harvesting season, to complement the domestic supply of olives for olive oil making. A smaller share of olives for processing is also imported in other months. These are types of olives also needing further processing, but not used to produce olive oil, e.g. preserved olives exported in bulk to be used for different food preparations.

FIGURE 4: OLIVES IMPORTS FLOWS BY MONTHS IN 2007



Source: Eurostat

[7] It is commonly considered uneconomical to import olives due to the cost of transportation (it takes 5kg of raw olives to produce 1 kg of olive oil) and the need to process within 24hrs from harvesting in order to maintain quality. However, in 2007 imported olives were cheaper than local olives and the larger processors have capacities that allow them to produce large imported quantities fast.

TABLE 5: CUSTOM (FOB) PRICES OF IMPORTED OLIVE BY YEAR (EURO/KG)

Item	2000	2003	2004	2005	2006	2007
Table Olives	0.80	0.76	1.65	1.48	1.47	1.01
Other Olives (not for immediate consumption)		0.59	0.59	0.56	0.57	0.61

Source: Eurostat

EXPORTS

EXPORT FLOWS

There are no reports of exports of olives fruits, whereas very small quantities of olive oil are sporadically exported, mainly with development projects support. Exports of olive oil are in average corresponding to 4% of imports of olive oil in value. Declared price per lt. is marginally higher than average import prices (3.1 eur/lt in 2006 and 3.3 eur/lt in 2007), even if actual prices could not correspond to declared ones.

TABLE 6: OLIVE OIL EXPORT BY YEAR

Year	Euros (000)	Tons
2004	22	2.2
2005	10.7	1.6
2006	169.6	54
2007	85.8	26

Source: ACIT, MoAFCP

DESTINATION OF EXPORTS

Only exports to Switzerland seem to have a more regular pattern, whereas exports to all other destinations are sporadic. In fact, exports are so small, that it is possible to identify the individual actors of such exports. In 2007, more than half of the exports targeted Malaysia. An Albanian olive oil producer located in Elbasan, Skilja, has arranged a deal for exporting olive oil to Malaysia in year 2007. In 2006, 84% of the exports were destined to Croatia. Gjikondi, an olive oil producer from Qeparo, sold a large quantity of (extra virgin) olive oil to Croatia. The rest of exports are destined to Switzerland and other former Yugoslavia countries. Exports to Switzerland are done regularly by Shkalla, a small olive oil producer located near Tirana. In 2004, all olive oil exports were destined to Switzerland, and in year 2000, were destined to Italy.

OLIVE OIL VALUE CHAIN PARTICIPANTS

PRODUCERS

The olive sector is comprised of 96,000 farm households spread widely throughout Western Albania. Almost none of these farm household are specialized in olives production. Planted across 46,000ha, the total number of mature olive trees is estimated at 3.7 million. An additional 1 million trees have been planted in the last five years but are not yet mature (it takes five years to reach maturity). However, of the 94,000 farms with olive trees, only 22,000 sell a percentage of their harvested olives (the others process it into oil for self-consumption or local sales). On average this percentage is 23%, but it varies from 1% to 50% by prefecture.

We can distinguish three types of olive producing farms:

Type 1 – Farms with Small Old Plantation Orchard Sections. These are farm households with 20-70 olive trees (0.2-1ha) on hillside areas. They use extensive production methods (i.e., low or no input) and rely on the limited available public sector extension staff or other farmers for technical assistance. Typically, originally these trees were part of old plantations (500 ha or more) established during the communist era that were divided up into small plots (of on average 0.3 ha) and distributed to the families living in the area in the 1991 privatization process. Such olive plantations were for example established in Lukova and Borsh (Saranda district), in Jonufer (Vlora district), in Malinat (Berat district), and in Lushnja, Fier and Durres up to Ana e Malit (Shkoder district). Over the years since the privatization, due to limited maintenance trees died off leading to the disintegration of the original orchards. Although trees are essentially grouped together, farmers of this type in a given community do not collaborate with each other, neither in production nor in marketing. There have been donor-funded attempts to bring these farmers together and link them to new market and industry growth opportunities. Most notably, one FAO project (2003-2007) worked with the village community of Novosela in Vlora district and an EU project implemented by CEFA worked with the village community of Dumrea in Elbasan district. Producer associations were established and linked to processors via contracts. However, after five years of project interventions the established associations have not grown much, linkages with processors remained fragile (e.g., no embedded services emerged), and farmers remained critically dependent on donor funding for inputs and technical assistance.

Type 2 – Farms with Small New Orchards. These are farm households with 50-70 olive trees (0.2-1ha) who established new orchards in the flat areas they were able to gain ownership to at the end of the communist era (1991). Although these are still small farms (on average 0.3 ha), they use intensive production methods and are more dynamic (i.e., business-minded and market-focused) in nature than those of type

Type 3 – Farms with Medium-Size New Orchards (5% of total olive farms). These are farms with 1-10 ha or more under olive trees (more than 200 trees), possibly combining parts of the old state orchards with new plantings. These larger producers use modern, intensive production technologies (irrigation, pruning, fly traps, chemicals, fertilizer, right sapling varieties, hired labor), private business service providers (e.g., technology advise) and good business management practices (e.g., keeping records). Emerged in recent years (after 1991), the farms of this type are owned by

individuals who are more closely coordinated with the larger processors. One development that needs to be mentioned here is processor Agrotal's plan to develop a 1,000 ha olive orchard on land the government has offered for tender (vertical integration).

CONSOLIDATION

When Albania privatized its olive orchards in 1991, the state-owned processing industry had already collapsed. Initially, consolidating brokers served the role of buying and bulking supplies from small farmers and selling these to exporters. However, currently these brokers play a less significant role and seem to be a destabilizing factor in the olives trade in Albania.

PROCESSING & BOTTLING

There are an estimated 135 olive oil processors in Albania, the majority of the smaller firms are clustered in the central and southwestern parts of the country where most of the olive trees are. Many processors are also growers, but the quantity they produce is negligible. All of these processors emerged since the mid 1990s, after the large, but obsolete technology using state-owned processors had collapsed. These new processors initially used second-hand equipment imported from Italy or Greece, but some of them gradually invested in newer technologies, improving output and product quality along the way. These oil processors are represented by the Albanian Edible Oil Processors Association (AOA) established in 1997. These processors may provide processing services, sell oil in bulk or sell oil in retail packaging, or any combination of these three. All processors will process oil as a paid service to farmers who want to keep their oil. Not all processors have a desire to grow. They seem to be content with the business size (and tax bracket) they are in.

With supplies both low and irregular, these processors are typically operating at 20% of capacity, i.e., their capacity is measured in volume processed per hour as this indicates how much they can process during the 2-3 month harvest season (the plant lays idle the rest of the year, except for bottling which is not done by all processors). Some plants have closed down for several years (in part due to a lack of raw materials) and some of those are being set up again in anticipation of a bumper crop in 2008. Processing has traditionally been based nearly 100% on local supplies, except for last year when for the first time significant quantities of olives were imported for olive oil production. In 2007, 1,500 MT of olives were imported from Italy by two larger processors facing a supply shortage that year (Agrotal, Aloliva).

Olive oil quality is linked to factors at each level of the value chain, but especially to the factors at the processor level. At the level of the micro and small processor, quality is low because of a lack of quality control of the raw material, bad processing equipment and handling (exposure to light and oxygen, long storage times) and blending of oil from in-kind payments (see below). At the level of the large processors, quality is destroyed due to adulteration. Quality appears to be the highest at the level of the dynamic small to medium sized processors and the industrial processor. Another critical factor determining quality, is the harvest timing. Growers tend to harvest olives when they are at their ripest, so that oil content is maximized, but for extra virgin olive oil quality olives need to be harvest early. Given the price premium for extra virgin olive oil, processors have an incentive to pay farmers a better price for early harvest olives. (Some processors are starting to offer higher prices for early harvest olives).

We can distinguish four types of processors:

Type 1 – Micro and Small Processors with Localized Focus (75). These are the first processors that emerged after the privatization in 1991. They mostly work for nearby smallholder growers to which they have some community or family ties, use older processing equipment, are paid in kind for the

processing service (as opposed to buying the olives for cash), have limited or no storage or bottling capacity. A processor of this type handles 1-100 MT of raw olives annually. They may be engaged in limited roadside selling or selling to traders in the rural towns.

Type 2 - Small Processors using Modern Technology (40). These are more dynamic and commercially oriented producers that emerged more recently (after 1998), using more modern equipment (cold press technology that can produce extra virgin quality). They process larger volumes of around 100-350 MT of raw olives per firm. They have storage capacity and buy olives to produce their own oil which they sell bottled and branded. They do more upgrading because they are more concerned with quality, some of them focusing on organic or high quality extra virgin olive oil for both the domestic and export market. The latter is still limited mainly because they do not have the volumes required by buyers in the export market.

Type 3 – Medium-sized Processors (15). These are similar as the processor of type 2, except that they operate on a larger scale (350-1,000 MT of raw olives). These are the key players in the urban olive oil market, holders of the biggest domestic brand names, directing both supply and distribution. They are more formal businesses that comply with the all Albanian food and sanitary safety laws. They are slightly less driven by quality than the previous type, and more cost-conscious (leading to the sale of blended vegetable oil products). Most (if not all) processors of this type are members of AOA.

Type 4 - Industrial Processor – Agrotal (1). This new player in the olive processing sub-sector is in a category of its own. It was established in 2007 and uses state-of-the-art equipment from Italy with a capacity to process 25,000 MT of raw olives per season. It is the only HACCP (ISO 22000) certified olive processing plant in Albania. It will process imported and local olives for both the domestic and export markets.

Type 5 – Bottlers (4). These basically fall in the same category as the medium processors in terms of channel and market power, except that they do not process themselves. Rather they buy from medium-sized processors and bottle the oil using their brand name.

DISTRIBUTION WHOLESALE & RETAIL

Wholesale distribution of olive oil (and table olives) is fairly limited as both processors and retailers prefer to deal directly with each other. There are some distributors who work with the larger processors and bottlers in their distribution as they have larger volumes to distribute to the many smaller retailers that make up over 90% of grocery sales. In addition, some olive oil is distributed through wholesalers at the main wholesale markets (e.g., in Tirana). The number of supermarkets in Albania has grown rapidly and currently represents an important factor in the olive distribution, wholesale and retail. In addition there are chains of smaller outlets (e.g., Big Market) which are growing rapidly and behave in much the same way as supermarket chains (likely these different chains will consolidate in the near future). The main chains have announced ambitious expansion plans (opening 15 more new branch in the next year). As the two leading chains (Euromax and Conad) are foreign owned, they represent regional trade systems which facilitate both increased import threats and export opportunities . The emergence of supermarkets implies tighter quality requirements, but also increases opportunities for more value added products, both directly and indirectly (through the competitive response of other retailers).

TABLE 7: ESTIMATED STRUCTURE OF OLIVE OIL FLOWS FOR URBAN MARKETS AT DISTRIBUTION LEVEL MT

Type of processor	Number of Processors	Estimated Annual Quantity	Organized retail	Traditional retail	Direct sales	Restau-rants	Exports	Other Processors Bottlers
Small local	106	3000	0		400			2600
Modern small	5	50	5		41	2	2	0
Medium	15	900	50	150	80	250	50	320
Industrial	4	800	200	550		50		
Bottling Companies	8	3500	750	2820				
Importers	5	900	600	300				
TOTALS			1,605	3,820	521	302	52	6,300
			25%	61%	8%	5%	1%	100%

Source: DSA study

As it can be noticed from the table, the traditional retail is still the dominating distribution channel for olive oil, while the function of supermarkets has increased to an estimated 25%. Direct sales remains a considerable channel for many small olive oil mills, while the restaurants represent a market segment on its own, which will expand with the development of tourism.

4 TABLE OIL VALUE CHAIN PARTICIPANTS AND FUNCTIONS

COLLECTORS OF TABLE OLIVES

Farmers with table olives apply the same method of hand collection and plastic sheets on the ground used by farmers with olives for processing. In general, trade links in Berat are more stabilized and formal than in other parts of the country, with prices which are agreed for the whole season and long-term trade relations between farmers, collectors and processing plants. Most table olives in Berat are collected in October and directly sold for processing. A few farmers with a high number of olive trees and higher production, harvest, process olives for conservation in water and salt and preserve them in drums, selling the processed olives to wholesalers in the next months.

PROCESSORS

Processors of table olives are supplied both by local collectors and individual farmers. Processors have agreement with a collector based in each village. Collectors are often also input suppliers and have their own storage facilities. Collectors charge 10% margin for the collection and storage of olives. Processors collect the olive supplies from the collector's premises with their own transportation vehicles. Small farmers transport their own produce to the processors with mules. Farmers put olives in sacks of 35 kg and pay 100 lek per sack, or 300 lek per quintal of olives. Processors provide for transportation to collect olives from large farms. Most table olives are sold at an average price and unsorted by quality.

VALUE CHAIN SERVICES

Key services to the olives value chain include finance, extension and transport. Some of these services are embedded within the value chain and provided by one of the value chain actors, but this is not always the case. There are currently no services offered in-country for packaging or packing. While soil testing is available at National Laboratory, it is not widely used by growers.

FINANCE

The most common forms of finance for olives producers are informal credit offered by input suppliers who provide the producers with inputs at the beginning of the season and collect payment after harvest, with no interest charged. This finance is only offered to preferred customers who are known to the input dealer and is not available to producers who opt to purchase inputs in Greece. There are several financial institutions that offer services to olives value chain actors. These include Agricultural Credit Unions; Raiffeisen Bank, which is increasingly interested in the agricultural sector; World Vision, which is providing credit to producers in Lezhe through the microfinance institution Building Futures/Vision Fund Albania; and Opportunity Albania, which provides finance and technical advice to producers.

EXTENSION

The three most common sources of technical information cited by producers are through relatives working in Greece, from their input suppliers, and from integrated consolidators. Many questioned the quality of the information from input suppliers, given their incentives to promote the use of pesticides and fertilizers. That said, Agroblend has three extension agents that work exclusively with producers and train in all aspects of production. Some integrated consolidators such as Bruka Seedling already have full-time extension agents on their staff to work with their suppliers; other consolidators are considering providing this service. While the MoAFCP has a broad network of extension agents, however, resources are scarce, as one extension agent covers 3-4,000 hectares of farmland (olives as well as all other production). There are exceptions such as in Lezhe where the Ministry is engaged with producers.

TRANSPORT

Transport is a constrain in this sector, as not all producers, traders and consolidators have their own transport. There are local transport companies but they are often very busy during the height of the season. Forward planning is required to secure transport well before harvest.

OLIVES VALUE CHAIN

Four distinct channels have been identified within the Albanian olives value chain as depicted in the following figure and described below. The primary differentiating factors between Channels 1 and 2 are the presence of integrated consolidators and of a small number of producer groups in Channel 2, who serve to organize the chain and sell to domestic, regional, and western European markets. Channel 2 is therefore tightly vertically integrated, while Channel 1 is fragmented, relying heavily on spot transactions and opportunistic selling. This is a simplification of complex relationships between buyers and sellers of olives in Albania that serves to provide olives value chain actors with a better understanding of the key intervention points. The traditional retail is still the dominating distribution channel for olive oil, while the function of supermarkets has increased to an estimated 25%. Direct sales remains a considerable channel for many small olive oil mills, while the restaurants represent a market segment on its own, which will expand with the development of tourism.

CHANNEL 1: ROADSIDE SALES CHANNEL

This channel consists of small olive growers who take their olives to the nearest (micro to small sized) processor (type 1 above) to have it processed for a fee, typically paid in kind. The latter means that, rather than pay in cash, the farmer gives a percentage of his/her oil to the processor by way of payment. Processors then sell this oil through roadside stands directly to consumers. No contract or other coordinated sales relationship exists, although there may exist some family or clan relationship that binds the farmer to the processor. These farmers strongly prefer to sell oil rather than their olives, especially when national yields are low and prices are high. For the more dynamic processors, these small producers are too small and too cumbersome to work with to develop a more long-term business relationship. For the most part, these farmers consume half of their production (household, extended family, friends), which is the main objective, and sell the other half as surplus production through road-side stands in unlabeled packaging directly to consumers.

CHANNEL 2: TRADITIONAL RETAIL SHOP

In this channel, traditional retail shops buy their olive oil from the more dynamic small-to-medium sized processors with whom they have a regular and more formal trading relationship. These processors sell either in bulk or in retail packaging (labeled bottles) and payments are in cash. They have storage capacity and bottle the oil based on standing or individual orders from the retailers. Processors buy olives mostly from small modern (type 2) and large (type 3) growers for cash payment (although there typically is a delay between time of supply and time of payment, supplier credit). These relationships are more contract-like in nature (no written contract though) which enhances adherence to quality standards and traceability systems.

CHANNEL 3: MEDIUM PROCESSOR – IMPORT CHANNEL

In this channel, the key players are the medium sized processors and bottlers who currently dominate urban olive oil supply channels in Albania. Olive oil is sold in branded bottles, shelf-ready, and either directly sold to the emerging supermarkets or through distributors to the rest of the fragmented retail sector. Because of their stronger market linkages and more dominant market position, these processors and bottlers can better predict supply needs over the course of the year and hence can organize their supply chain more efficiently. These supplies rely mostly on olive growers using intensive orchards, but will buy from small growers with extensive orchards through consolidators as

well, to top off their supply. The two main supermarket chains (Euromax and Conad) are currently trying to establish regular contracts with these processors. Supermarkets import olive oil from trusted and easy-to-order brands overseas which have traceability systems and certified processing facilities in place to guarantee a quality product. This is especially the case for Conad, a supermarket chain with Italian links which imports olive oil from Italy. [imports of bottled olive oil were 500 MT in 2007].

CHANNEL 4: INDUSTRIAL PROCESSOR – EXPORT CHANNEL

This last channel is just emerging and while relatively small at this point has the potential to become an important channel in the next 2-3 years. Here we have one key player, processor Agrotal, who envisions three sources of supply: its own orchard, imports and collection from Albanian producers of all sizes. At this first stage, and with 2007 raw olive prices being too high to purchase olives locally, the company relied heavily on imports of olives from Italy. With a bumper crop expected in 2008, the company will like shift more toward local procurement via its own four collection centers. At these strategically located centers olive growers can bring their olives as long as they are of good quality. If the offered raw olives contain some that have been lying on the ground etc. the whole offer will be rejected. Farmers are paid in cash on the spot (main point of difference with grower to processor sales in channels 2 and 3) and the raw olives are transported in modern 400kg containers to the processing facility in x within 72 hours and while maintaining traceability . Agrotal currently markets its labeled and bottled (2L tin cans) to supermarkets in Albania and via a German distributor to retailers in Germany. It will sell olive oil in bulk to its Italian partner Olivetti if prices for raw materials are low enough.

FIGURE 6: ALBANIAN OLIVE OIL VALUE CHAIN MAP

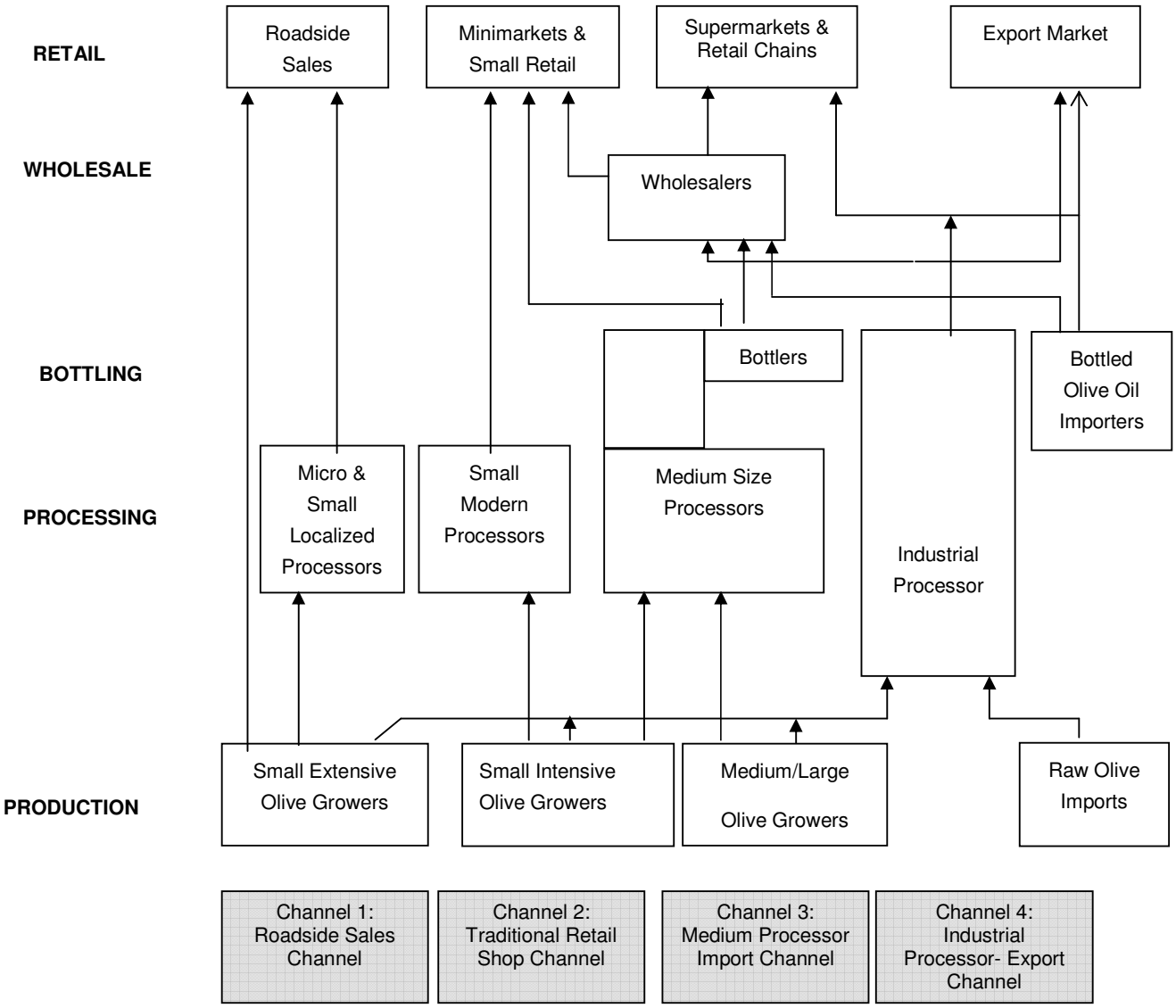
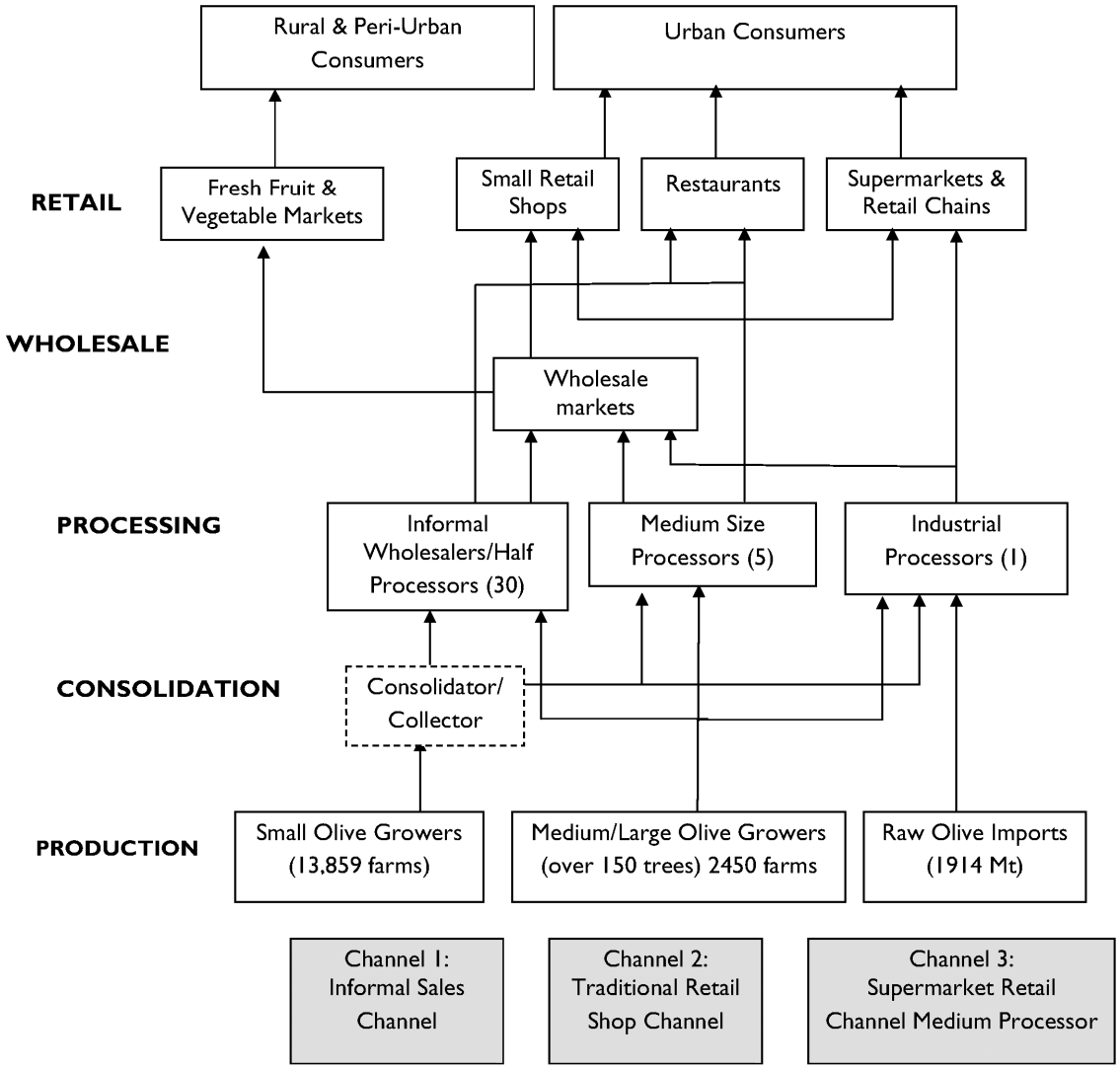


FIGURE 7: ALBANIAN TABLE OLIVES VALUE CHAIN MAP



DRIVING FORCES IN THE OLIVE OIL SECTOR

Key drivers and bottlenecks that affect changes in the sub-sector are:

Channel shift: Driven by urbanization and the emergence of larger firms in processing and retailing as the key agents of change, the roadside sales channel will decrease in importance over time, while the medium processor channel, which is already the dominating channel in the urban olive oil market, will grow. The rest of the channels, which caters to the higher-end markets domestically and abroad, and channel 4, which mainly focuses on the export market, will grow driven by growing demand in these markets, if certain conditions are met (improving quality in channel 2 and finding sufficient supplies of raw material in channel 4). This channel shift has two further consequences.

1. As these channels grow, so will the growth of intensive olive orchard which feed into them (as evidenced by the 1 million olive trees planted in the last 5 years).

2. The channel shift also brings with it a shift in supply chain governance (vertical coordination) with an increasing number of olive processors willing to work with growers in their respective areas to expand the supply of good quality raw olives and reduce supply volatility. In turn, linked to this is a shift from in-kind payment to cash payments by processors to growers.

Government Subsidy Programs & New Plantings in intensive orchards: The GoA has various subsidy programs aimed at stimulating growth and quality improvement in the olive sub-sector. One subsidy program (2KR project) focused on improving processing capacity [size, impact, finished?]. The government also has a policy to subsidize the cost of saplings for new orchards to the growers . A third subsidy program that pays LEK100/kg for extra virgin olive oil produced, is to be implemented from 2008. Based on a speech made by the Prime Minister at the 2007 KASH Fair, the amount of money available for these subsidies schemes could be doubled in 2008. Whiles these support programs certainly provide a stimulus, the investments would likely have occurred also in their absence with private capital. For example, while 1 million new olive trees were planted in the last five years, only 30,000 or so were planted with subsidy assistance.

Increased competition: Increased competition amongst processors and between domestic and imported products have put the competitive bar higher and are currently strong drivers of upgrading strategies that improve quality and reduce costs. For example, in the x area, there are currently five processors of varying size and level of sophistication (Albania's largest olive processor Agrotal is one of them) in close proximity of each other (and the olive growers in the area). These processors can be found to fix up buildings and clean up and tune equipment in order to be able to compete and attract the growers. It is unlikely that all processor will survive, likely leading to business failure and/or consolidation in the near future. Agrotal's supply requirement of 25,000 MT of good quality raw olives per year will likely have a strong impact on the supply system

Policy shift: Are requirements for traceability and quality standards (labeling) changing (so driver here) or a possible change in the future (so leverage point below)?

The main bottlenecks and weaknesses in the olive value chain are:

1. A lack of knowledge on markets (consumer wants, product development)

2. A low level of collaboration at the grower and the processor level and weak linkages between growers and processors , in part due to a lack of trust (caused by widespread lack of respect for contracts, short-term profit seeking behavior)

3. A weak policy environment which negatively affects efficiency (e.g., difficulties related to land consolidation) and product quality (e.g., labeling requirements, no membership of IOC, leading to variable and often low quality of processed products).

4. A lack of larger olive orchards (economies of scale are critical). Most olive orchards are of a size at which profitability is not proven yet, especially for olive varieties aimed for oil production (i.e., less than 200-300 trees).

5. Widespread use of extensive production, late harvesting, and inappropriate post-harvest technologies, leading to high production costs, low yields and low supplied volumes, low and variable quality of raw material. For many growers, olives are not something they derive a profit from.

6. Reluctance by some processors to grow their business as they are afraid to get into a higher tax bracket (above small firm level)

7. Consumer lack awareness of Albania's high quality oil

Key points of leverage in the sub-sector are:

Organizational nodes in the sub-sector: The key firms and organizations in the olives sub-sector are: the bottlers and medium-sized processors, industrial processor Agrotal, the AOA, TTC and the input suppliers (e.g., nurseries supplying olive saplings), the RADs with their extension service.

Policy changes: Changes in subsidy program? Changes in regulatory environment: e.g., need for traceability, labeling and adulteration, land ownership, compliance with EU regulations and International Olive Oil Council (IOOC) membership? Conclude ongoing roundtable on establishment of a National Fund for Olive Industry Development.

Geographic areas of concentration: Although olive production is widespread across Western and Southern Albania, there are some production clusters. These are areas well-known for olive growing, where there are many small growers who are willing to cooperate. The private investors that were supported by government under the 2KR project have built processing lines in these geographic areas and there are also extension agents present to work with the small growers. The main areas are Mifol-Novosele Bestrove, Qeparo-Himare, (in Vlora), Petrela, Dajt (in Tirana), Elbasan, Berat, Fier, and etc. Areas for AAC to operate should be carefully selected, aiming for those areas where there are larger growers and dynamic processors present.

OLIVE OIL VALUE CHAIN INTERVENTIONS

VISION FOR GROWTH AND OBJECTIVES

The opportunities for growth are in developing a well-coordinated olive oil and table olives value chains in which all firms are profitable and end-consumer products are highly competitive (price and quality wise) in the domestic and target export markets. Stakeholders need to collaborate to continuously improve quality and efficiency in order to grow their market share. Specific goals to be achieved with AAC assistance are:

- Increase high quality olive sales in the domestic market with 10 %
- Increase sales of packaged/bottled table olives in the domestic market by 5 %.
- Increase export sales of high quality olive oil by 2 % Increase the number of AAC client farmers that have supply agreements with AAC client processors
- Increase the number of AAC client farmers using modern production and post-harvest handling methods
- Increase the number of farmers using modern production and post-harvest handling methods
- Facilitate policy changes that will stimulate land markets and the implementation of product quality standards

STRATEGY

AAC's core growth strategy for the Albanian olive industry is to simultaneously work on quality improvement, cost-reduction and delivery reliability with the larger growers and the most dynamic processors to develop and promote high-quality extra-virgin Albanian olive oils in differentiated retail packaging to meet growing demand and displace imported product from Greece and Italy in the domestic market. Growth can only be achieved if quality goes up and (production and transaction) costs go down at each level of the value chain and if consumers become more savvy on olive oil quality and develop a preference for Albanian brands. Processors, the processors' association, larger retailers, and selected government organizations (e.g., SEPP) will be the key entry points.

The strategy for table olives marches in lock-step: AAC will facilitate the development of high quality table olives in retail package (vacuum, glass jar), with clear brand differentiation, using Albanian raw material to displace imports in the domestic market. This will also provide synergies with AAC's activities in fruit and vegetable processing, given that to a large extent these are the same processing firms. For table olives, ACC will explore the potential for fully developing the Berat source of origin label (as part of a tourism brand) that captures a premium from domestic consumers.

The major elements of this strategy:

- Facilitate market access and market share growth (to assure a market driven approach)
- Improve horizontal and vertical collaboration in the value chain (to assure a smooth product flow)
- Improve agronomic practices and business skills of the growers (to achieve reliable, quality, low-cost supplies)
- Strengthen the policy environment (to facilitate efficient, quality-driven business models):

ACTIVITIES

The main activities to achieve this strategy include:

- Improve Agronomic Practices and Coordination of Olive Production by working with Oil millers and Olive growers
- Improve Horizontal and Vertical Collaboration in the Value Chain by linking producers to buyers working closely with olive producer groups and oil millers.
- Improve and Develop the Brand for High Quality Olive and Table Olives, to Incrase Market Share Growth (to assure a market driven approach)
- Strengthen the enabling environment to facilitate efficient, quality-driven olive oil production in Albania.

IMPROVE AGRONOMIC PRACTICES AND COORDINATION OF OLIVE PRODUCTION BY WORKING WITH OIL MILLERS AND OLIVE GROWERS

It is important to improve the harvesting and post-harvest handling (quality, timing) in the olive sector. The AAC project will also provide technical assistance to improve production practices and management skills (yields, quality, and delivery format)

The AAC team will:

- Provide cost-share grants to growers or grower groups to stimulate the use of modern equipment (e.g., olive harvest nets, mobile motorized olive shakers, plastic aerated containers, pneumatic lifts, this will be paired with training to growers so they can assess farm profitability.
- Provide cost-share grants in the adoption of irrigation and fertigation systems.
- Adopt a Code of Practice (GAP) and provide training on its components, including: pest management (including IPM) and disease control, pruning, record keeping, olive sapling variety selection, (drip) irrigation, intensive orchard management.
- Provide field training in agronomic, harvesting and post-harvesting practices to growers working closely with the commercial olive oil mills.
- Work with input suppliers and growers to promote the use of qualitative and certified saplings for new plantations. This can be coordinated with the Ministry of Agriculture department supplying subsidies to olive growers. (grants program of the MoAFCP)
- Facilitate (e.g., through farmer field days, training sessions, demos, etc.) in the provision of commercial production related services such as: the supply of inputs (e.g., saplings, chemicals) and

harvest tools, transport, soil testing and adjusted fertilizers use, pesticide residue testing, credit supply, and so on. This could be done in collaboration with TTC.

- Evaluate, in cooperation with farmers in Berat, on the most feasible investments to intensify production of table olives and subsequently promoting and providing business management training to facilitate access to finance.

IMPROVE HORIZONTAL AND VERTICAL COLLABORATION IN THE VALUE CHAIN BY LINKING PRODUCERS TO BUYERS WORKING CLOSELY WITH OLIVE PRODUCER GROUPS AND OIL MILLERS

As part of the efforts in improving the horizontal and vertical collaboration between value chain actors the AAC team will focus on strengthening the AOA and strengthen the linkages between growers and processors.

The AAC Team will:

- Provide capacity building assistance to the AOA; they could lobby for the development of an olive oil cadastre (EU requirement); and to organize itself into an effective and self-sustaining organization for the benefit of its members.
- Assist the AOA in developing a self-regulated system for quality control (e.g., by conducting quality test and publicizing the results to consumers) to strengthen the consumer confidence in the quality of domestic brands.
- Conduct a census of all olive oil processors in Albania and; identify the most dynamic processor to work with assessing the level of entrepreneurship of leading olive growers.
- Facilitate embedded technical assistance provided by the processors to the growers and stimulate the use contracts through contract format development and training sessions
- Establish links to supermarkets chains and facilitate contractual relations with large retailers
- Provide through our MIS program: volume/yield and price forecasting & international commodity exchange prices for raw olives, communicated throughout the channel.
- Develop premium payment schemes for higher quality olives with lead olive growers and oil millers
- Provide business/financial models to strengthen linkages between growers and processors (coordination, logistics timing)

IMPROVE AND DEVELOP THE BRAND FOR HIGH QUALITY OLIVE OIL AND TABLE OLIVES, TO INCREASE MARKET SHARE (TO ASSURE A MARKET DRIVEN APPROACH)

It is important to improve the knowledge of targeted domestic and export market opportunities as this will shape the marketing strategy and development of Albania Olive Oil. The goal to increase the domestic market share has greater priority due its potential. Important in this effort is to facilitate linkages between processors/bottlers and domestic retailers and importers. As part to prepare the growers and olive oil processors to these higher standards for export, the AAC team will work with processors on product development and value-added branding.

The AAC team will:

- Conduct research on the current product offering in the domestic market, domestic versus imported olive oil
- Develop and strengthen the introduction of the marketing mix "4P's "such as: product (good or service), price (value), place (distribution channels, location) and promotion (integrated marketing communications), market segmentation, target marketing and positioning. Training and workshops will be conducted for farmers and processors on these elements. Particular attention will be devoted to improve the capacity of supported processing units to consolidate their distribution channels in line with the geographically competitive advantage.
- Provide quality and safety standards awareness training (including EU standards) and this will be done in alliance with the Albanian olive producers working on incorporating the International Olive Oil Standards as the rule in Albania.
- Explore the potential for developing a strong Berat label for the table olives (as part of tourism marketing) and lay the groundwork for a lead project that would qualify for EU pre-accession funds for local development
- Conduct stakeholder workshops on contractual agreement development and implementation between olive growers and processors
- Build upon the success of the EDEM project and continue with the tasting competitions and promote in-store tasting in Albania. AAC will expand the activities by increasing public awareness trough promotional activities (fairs etc.) to consumers the importance of origin and traceability of products.
- Additionally, to increase the local demand for high quality olive oil, the AAC team will produce informational leaflets, media campaigns on the health benefits of extra virgin olive oil.

STRENGTHEN THE ENABLING ENVIRONMENT TO FACILITATE EFFICIENT, QUALITY-DRIVEN OLIVE OIL PRODUCTION IN ALBANIA

To address the constraints of the enabling environment, some efforts of the AAC project will be targeted into working with the government on land market development and product quality enforcement.

Activities:

- Work collaboratively with the government in using subsidies strategically to facilitate the emergence of larger orchards
- Facilitate the GoA in accelerating the completion of an olive cadastre (in preparation for EU requirements
- Facilitate IOC membership to support quality enforcement
- Help develop and improve the olive oil labeling regulation
- Strengthen quality inspections and regulatory enforcement of olive oil
- Strengthen the use of high-quality and right variety of saplings, by assisting the government with strengthening certification work and the strategic use of subsidies to stimulate the use of the right sapling varieties, working with SEPP and nurseries. This section describes the first year AAC interventions that will help to move the olives value chain towards the vision created above. These

activities will be updated annually during the annual CDP revision which will identify new gaps and activities to reach the olives value chain goals. These activities are those that are specific to the olives sector. Some issues that were raised including land tenure issues and market information will be addressed by activities that cut across all value chains and are described in the AAC Annual Workplan.

All AAC activities will be demand driven. All products must be grown to meet present and potential buyer specifications, and both growers and buyers need assistance facilitating first rounds of negotiations to develop trust and strong market linkages over time. The recommendations which follow therefore begin with identifying buyers and understanding market demands, and then move backward to assisting consolidators and exporters to strengthen their business operations, and finally working with farmers to produce those products demanded by target markets.

ANNEX A: FARM BUDGETS

OLIVE PRODUCTION ECONOMICS ANALYSIS

Data were processed and analyzed for each districts, calculating costs, revenues and profits per 100 trees and kilo of olives, for good and bad years (olive production in Albania is characterized by strongly oscillating production/yield cycles). In this study we referred also to the farm size, analyzing separately farms with less than 150 trees and farms above this number, which show more commercial behavior.

FIGURE 8: YIELD IN GOOD AND BAD YEARS FOR DIFFERENT AREAS

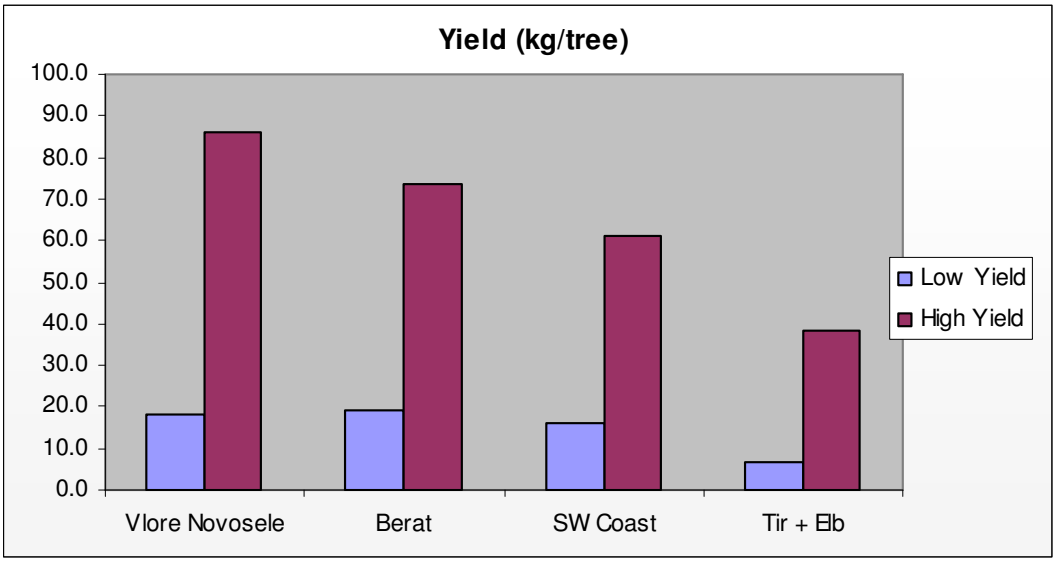


FIGURE 9: LABOR COST BY FARM SIZE AND AREA

FIGURE 10: FERTILIZER COST BY FARM SIZE AND AREA

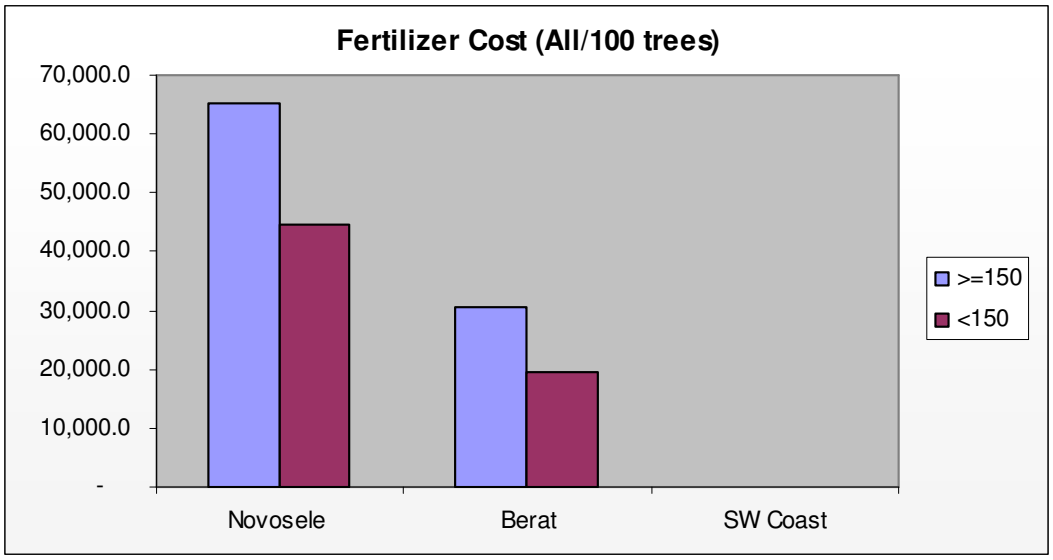


FIGURE 11: COSTS BY TYPE, FARM SIZE AND AREA

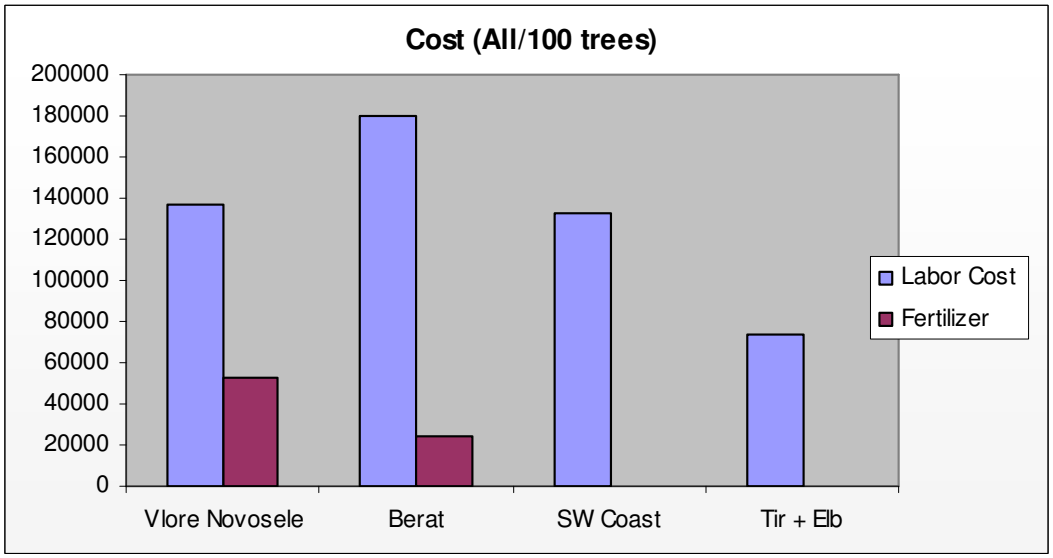


TABLE 8: YIELD, COSTS, BY SIZE AND AREA IN BAD YEAR

	Labor Cost per	Fertilizer	Other costs	Total Costs	High Yield	Low Yield
Novosele >=150	118,979.2	65,350.0	10,000.0	194,329.2	**19.0**	**64.0**
Novosele <150	151,367.4	44,618.8	10,000.0	205,986.2	**20.8**	**93.3**
Berat >=150	153,671.5	30,537.8	10,000.0	194,209.3	20.0	87.5
Berat <150	215,229.7	19,580.6	10,000.0	244,810.3	21.3	47.5
SW Coast >=150	86,250.0			86,250.0	17.5	130.0
SW Coast <150	121,441.4			121,441.4	20.4	55.4

TABLE 9: COSTS AND PROFITS BY AREA AND SIZE

	Cost All/kg good year	Cost All/kg bad year	Profit All/kg good year	Profit All/kg bad year
Novosele >=150	30.4	46.8	19.6	47.4
Novosele <150	22.1	36.1	27.9	51.3
Berat >=150	22.2	36.1	107.8	69.9
Berat <150	51.5	71.2	78.5	57.0
SW Coast >=150	6.6	11.7	53.4	72.8
SW Coast <150	21.9	32.0	38.1	73.9
Average	**25.8**	**39.0**	**54.2**	**62.1**