



This project is
funded by the
European Union



International
Trade
Centre

ANALYSIS ON
OLIVE VALUE CHAIN
IN BALOCHISTAN



GRASP • PAKISTAN

**GROWTH FOR RURAL
ADVANCEMENT AND
SUSTAINABLE PROGRESS**

Contents

Value Chain Analysis: constraints and opportunities	3
Marketing	3
Access to inputs	3
Farming	4
Planting methods of Olive Plants:	5
Postharvest treatment (storage, packing), collection and transport	6
Processors	6
Distribution channels and competition	7
Support services: public agencies, quality management, training institutions and private support services network.....	7
Public institutions and technical agencies	7
Environmental issues and opportunities	10
Gender inclusiveness constraints and opportunities	10
SWOT analysis	12
Product market combination	13

Value Chain Analysis: constraints and opportunities

Commercial plantation of olive crop was overlooked in the province of Balochistan until recently. The crop, due to certain characteristics such as low water requirements, drought tolerance, and high resistance against pest and diseases became increasingly popular in recent times. However, the crop production is still at its infancy stage. The Federal and provincial governments, to promote cultivation of olive on commercial basis has imported olive plants from abroad – Turkey and Spain¹ – and distributed them free of cost through the extension networks, keeping in view the survival of the plant under natural precipitation without any additional irrigation. Farmers planted these crops on marginal lands instead of fertile land with better moisture holding capacity, and now most of the plants are at the fruit bearing stage with good production and an acceptable oil content. So far, there have been no reported incidences of pest and disease by the farmers or the extension agents. Few farmers have shared the mortality of few plants, but that could be due to heavy rainfall and poor soil drainage conditions, which can be managed better by field management and not allowing rainwater for a longer period. In Olive plants, hardly any organic or inorganic fertilizers are used in the entire olive growing districts in the North-East and Central parts of Balochistan.



The Federal and Provincial governments through the Public Sector Development Programs (PSDP) have allocated funds for the promotion of olive plantation in the form of subsidies, plant availability and better management, as well as crushing units at farmer's field level. Such incentives induce the farmers to bring more area under olive plantation. To improve the yields Good Agriculture Practices (GAP) are required to be carried out at field level through Farmers Field Schools (FFS).

Plant to plant distance is recommended by research wing of agriculture department to be 20x20 feet apart and 110 plants per acre are recommended keeping in view it per unit area production. Olive plant on an average produces 40-60 kilogram per tree but due to climatic favour farmers have harvested round about 300 kilograms with an oil content ranging from 18-22% which encourages the farmers to have more area under this crop.

A large number of small-scale producers dominate the fruit production and only a limited number of specialised farmers exist. Due to insufficient and cost ineffective processing units in the province, the growers prefer to undertake difficulty in transporting the produce long distances to Punjab based facilities for extraction and disposal of oil. In those markets, the process is undertaken at a reasonably cheap rate. They prefer that instead of taking the crop back to Quetta or further marketed to other national markets of the country.

Marketing

There exists neither the domestic market nor the consumer or wholesale markets in the entire olive value chain. Rather farmers take their produce to long distances for crushing and disposal of the produce. Since the crop is getting popularity with the passage of time due to its low water requirement and convincing average oil contents as compare to ones being grown in other parts of the country. There is bright future for the market development within the province and induce the establishment of small-scale processing units and create an opportunity for entrepreneurship development within the province.

Access to inputs

Olives can be grown in a wide range of soils; however, the most suited soils are well drained with a relative good moisture holding capacity.

¹ Source: Olive farming gets boost with arrival of 100,000 plants from Spain <https://www.dawn.com/news/1465351>

Constraints at the inputs/entrants level	Root causes	Ease of resolution (Grade 1 to 5) – 5 is very difficult	Urgent action needed (Grade 1 to 5) – 5 is very urgent
Low use of fertilizer application rather 10-15 kilograms farmyard Manure are applied	Olive cultivation is in its infancy stage and farmers have not considered it as commercial crop	2	2
Hot-bedded unit for plant raising are not functional at Quetta, Loralai and Khuzdar. Hot bedded plant propagation helps propagate elite types with greater genetic uniformity.	Dissemination production of distribution of plants locally produced under Hot Bedded controlled structures will promote the availability and promotion of olive plantation plants. Weak dissemination of research findings Technical skills are required to implement this technique	4	5
High yielding varieties with good oil contents need propagation	Farmer are facing great difficulties in extraction due to non-availability of such a facility at production centres rather at provincial level. Producers are compelled to take produce to long distances to Punjab based facilities	4	4

Opportunities/recommendations at the inputs/entrants' level	Possible implementing partners
<input type="checkbox"/> Reactivation of already existing facilities for plant propagation to ensure the production and availability of quality plants <input type="checkbox"/> Farmers are provided with small extraction unit till industry is fully developed <input type="checkbox"/> Launch a campaign to grow recommended cultivars	Agriculture Department GRASP
<input type="checkbox"/> Micro-propagation through tissue culture to be strengthen	Balochistan Agriculture Department with the assistance of GRASP Project
<input type="checkbox"/> Training on soil sampling, testing and fertilizer needs	Agriculture Extension Department

Farming

Estimated cultivated area by farm category and produce (table and analysis)

- It has been reported that so far, 1287 acres has been brought under olive plantation in 14 districts and there are 444 farmers involved in this activity. The main cause for the promotion of this sector was non-availability of plant and non-availability of extraction units. Marketing of produce was another major obstacle in promotion of this crop on commercial scale being a low delta crop.

S. No	District	No of Plants Distributed	Area in acres	Number of beneficiaries
1	14 districts Zhob, Sherani, Musakhel, Barkhan, Loralai, Duki, Killa Saifullah, Pishin, Killa Abdullah, Harnai, Quetta, Khuzdar, Nushki, Panjgur	138975	1287	444

- Farmers categories and socio-economic profile (description, summary table and analysis)

- The Olive farming in its infancy stage and farmers have not considered it as a commercial crop rather culturable waste land are allocated to have some vegetation with low water requiring crop. The production and oil percentage induced the farmer to think for commercial plantations falling under monsoon tail areas in the eastern districts and Khuzdar district has now been demanding for more plants on swamp lands.
- Level of sophistication of production techniques and technology employed in production
- Due to non-availability of extraction units and absence of markets within the province and in the country in general remained an obstacle for the sophistication of production and going for commercial production. Now federal and provincial governments have realized to allocate a colossal amount for the promotion and development of infrastructure like provision of small extraction units at production centres for processing.

Planting methods of Olive Plants:

- Through rooted plants: more successful

Plantation of Olive occurs twice a year, from February to March and from July to August but plants in polythene bags can be planted any time other than fall of winter season

Constraints at the farming level	Root causes	Ease of resolution (Grade 1 to 5) – 5 is very difficult	Urgent action needed (Grade 1 to 5) – 5 is very urgent
Non availability of plants as per demand and non-existence of small-scale crushing units	<ul style="list-style-type: none"> ▪ Non-availability of small-scale crushing units badly delayed the promotion of olive cultivation on commercial scale ▪ Wholly aphid is a threat to to get full production which required the immediate attention of researchers and extension workers to address the issue and educate the farmers. ▪ Non application of fertilizer may cause in low yield and early drop of fruit. ▪ No guidance on effective and timely control of different insects, pests and pathogens ▪ Low standard pesticides in the markets ▪ Proper practices of disease identification are poorly followed due to lack of knowledge 	4	4
Constraints to higher productivity of Olive production. Considerable percentage of crop is lost due to poor orchard management	<ul style="list-style-type: none"> ▪ Lack of modernisation techniques. No demonstration of improved production technology ▪ No access to recent findings of research on production and protection aspects of Olive ▪ No training of growers in Olive production 	3	2

Opportunities/recommendations at the farming level	Possible implementing partners
Hot Bedded nurseries under controlled conditions and provision of Oil extraction Units at production level will promote olive cultivation on commercial scale	Farmers, Agriculture department and GRASP project
Demonstration on GAP will improve productivity and improve socio-economic status of farmers	Agriculture department and GRASP Project
Introduce a direct helpline for growers to get solutions to their problems	

Postharvest treatment (storage, packing), collection and transport

Constraints at the post-harvest, storage, packing and transportation level	Root causes	Ease of resolution (Grade 1 to 5) – very difficult	Urgent action needed (Grade 1 to 5) – very urgent
Lack of crushing facilities at production	Lack of crushing and processing facilities in the entire province	3	5
Olive maturity index is not known to the farmers	<ul style="list-style-type: none"> ▪ Training of farmers is required by the Directorate of Horticulture to train the farmers to harvest crop at right maturity to extract maximum oil contents ▪ Transporting olive to long distances to Punjab badly affect the oil quality. 	3	3
Fruit is often contaminated with dust and mud when harvesting, which poses risks on food safety and reduces its quality	<ul style="list-style-type: none"> ▪ Manual picking of fruit. Fruit bunch is shaken and fallen olives are collected. ▪ Contamination risk of olives is higher during harvesting rather than during processing 	2	3
No proper processing, packing and labelling is available	Non-existence of SMEs in the entire province with special reference to production centres.	2	4
High temperatures during transportation affect the moisture and quality of the fruit. Wastage during loading and unloading of products	<ul style="list-style-type: none"> ▪ Transport from production centres to Chakwal and other parts of Punjab and the trip may take 18 hours. ▪ High temperatures during transportation due to lack of refrigerated compartments ▪ Wastage is due to traditional practices 		

Opportunities and recommendations at the Postharvest treatment (storage, packing), collection and transport	Possible implementing partners
Training of farmers to harvest crop at full maturity index	Agriculture department and GRASP Project
Transport Olives into plastic crates rather than in bulk to prevent contamination and crushing of the fruit	Farmers and project
Making crushing facilities available for extraction of oil in the shape of small units	Farmers and GRASP project

Processors

In Balochistan, department of Agriculture research arranged two small units for Khuzdar and two number for Loralai and very recently one number for Musakhel to provide processing facilities to farmers at their doorsteps to promote this newly crop at production level but all processing units remain idle for small repairs with the reason farmers are compelled to take their produce to long distances to Chakwal at very high cost of rupees thirty per kilogram. Such a poor performance in the public sector gave a setback to the crop to flourish. The unit at Chakwal under public sector provide services free of cost to promote this crop throughout the country including Balochistan. In Chakwal there are small units available in the private sector processing 100- 500 Kg per hour. Due to climatic favour, Balochistan produce has oil contents ranging from 18-22 % while in Potohar area of Punjab the oil contents are as low as 8-10 %. There is need to encourage the farmers of Balochistan to have their own oil extraction units at production centre and further link them to processors based in Karachi and Punjab. At a later stage entrepreneurship could be developed and complete processing is done within the province which would be a milestone in promotion of olive crop in Monsoon tail areas and Khuzdar district of Balochistan under natural precipitation without any supplementary irrigation.

Table 1: Main Olive Processors

Processors located in Punjab	Company size	Export destinations	Final products
Input sourcing from local producers			
Chakwal	Medium	Locally consumed Import substitution	Olive Oil

Olive processing now is being done at Chakwal where public and private processing facilities are available. The unit under public sector providing services free of cost while units under private sector charge Rs. 300/- per litre and oil is sold in the local market at 1800/- rupees per litre and the same offer has been received from Karachi based traders. The processing under public sector in Balochistan never been a success story with the simple reason that government officials are not accountable and remain absent from their official duty at the time of crop maturity when processing is required. Such processing must be done by the farmers themselves or entrepreneurship is developed to establish extraction units with the support of the project and further linked to other market players of the country.

Constraints at the processing level	Root causes	Ease of resolution (Grade 1 to 5) – very difficult	Urgent action needed (Grade 1 to 5) – very urgent
Post-harvest manual practices reduce quality of products and cause contamination	Weak manual techniques cause rupture skin, reshaping, mashing, and rotting of dried fruits. Olive being a new crop facing lot of difficulties as far as processing within the province is concerned. After harvesting and further transporting to long distances adversely affect the oil contents and increase cost of production as well	3	4

Opportunities and recommendations at the processing level	Possible implementing partners
<input type="checkbox"/> Provision of small crushing units at farm level	Farmers and GRASP Project
<input type="checkbox"/> Promotion of SME's	SMEDA and GRASP Project
<input type="checkbox"/> Creation of Special Economic Zones at Zhob and Khuzdar under CPAC	Department of Commerce and Industries Balochistan

Distribution channels and competition

Competition

- Crop is in its infancy stage and no marketing exist in the entire country rather farmer take their produce to crushing centres located in Punjab province and sell the Olive oil @ 300 rupees a litre. If such infrastructure is developed within the province, then farmers were in a much better position to bargain and sell at premium price.

Domestic market

- No domestic market available for olive produce in the entire value chain

Support services: public agencies, quality management, training institutions and private support services network

Public institutions and technical agencies

Quality management support services

Describe and assess the quality and effectiveness of the quality management support services

Department of Agriculture has been making strenuous efforts since 1985 for the promotion of olive crop keeping in view its importance and low water requirements. Initial trial were encouraging with the result few number of small processing units were arranged to facilitate the farmers at production level and propagation units were established to provide quality plants from those facilities instead of relying on imports. Unfortunately, those facilities could not facilitate the farmers in processing and federal government continued to import plants from abroad. Balochistan is producing high quality of olive oil as high as 18-22 % and demand for olive oil has been generated in Karachi and Punjab Markets. The Karachi based firms offering Rs. 1800/- per litre. The quality can further be improved, provided oil extraction units are arranged at farmer's field level till medium level processing units are established in the private sector and its marketing channels are streamlined.

□ Extension services providers

Assess the quality and effectiveness of the extension services providers

Though extension services are available at Tehsil and village level and qualified staff under Deputy Director are engaged at district level. The processing units procured by research wing of Agriculture department are not capable to run the units to provide services required for the promotion of olive crop. Extension staff needs to be motivated and received training in this field to enable them to take quality message to the farming community dealing with olive oil crop. The oil extraction units should be mobile and reach to the farmers on demand basis without losing even a single day. The existing staff is not capable to promote olive product on commercial scale until and unless they are trained and given special task in their respective areas.

	<i>Institutions</i>	<i>Main constraints</i>
Public support services network	Government of Balochistan, Directorate of Agricultural Extension Agriculture Training Institute, Quetta	<ul style="list-style-type: none"> □ Functioning of the department needs to be improved, particularly related to increasing the number of women extension workers to improve their outreach. □ The Department is responsible for standardization of doses of pesticides, registration of distributors and dealers, and quality control through its inspectors and pesticide laboratories. Enforcement of regulations is weak
	Balochistan Food Authority	<ul style="list-style-type: none"> □ To ensure food safety regulations are followed by all companies across Balochistan □ Poorly equipped, lack of resources and shortage of manpower □ Limited reach to districts. Currently, main operations are limited to Quetta, and will expand gradually to other cities of Balochistan
	Research institutes. <ul style="list-style-type: none"> • Directorate of Agriculture Research • Lasbela University of Agriculture, Water And Marine Sciences, Uthal² • Balochistan Agriculture College, Quetta • Balochistan University of Information Technology and Management • Southern Zone Agricultural Research Centre (SARC)³ 	<ul style="list-style-type: none"> □ Poor linkages with farmers and private sector for the promoting of Olive in the province, private sector indicates research is not geared towards finding solutions □ Weak funding opportunities
	Agriculture Engineering Department	Land Development through bulldozers has no engineering background
	Directorate of Economics and Marketing Directorate of Plant Protection Directorate of fertilizer and Soil Science	Establishment of market Squares and implementation of Market act To regulate Pesticide related activities

² Lasbela University of Agriculture, Water and Marine Sciences (LUAWMS), <https://www.luawms.edu.pk/post-graduate/>

³ PARC website

	Small & Medium Enterprise Development Authority	SME's were not established in the province to develop entrepreneurship in the Province
	Vocational and technical training institutes, managed and coordinated by the Provincial TEVTA (Technical Education Vocational Training Authority) has done very little in the area of skills provision in these sectors	<input type="checkbox"/> According to NAVTTC (National Vocational Technical Training Commission), Balochistan has about 149 training institutes (including 12 technical ones) that offer short-term (6-12 months) courses in various fields. However, none of the public or private institutions offer vocational/ technical training in traditionally designed courses in the agriculture and livestock sectors <input type="checkbox"/> The relevance and quality of the courses offered in these fields can be debated.

Public support services network	<i>Institutions</i>	<i>Opportunities and recommendations</i>
	Provincial Agricultural Extension Department	Arrange training for the farmers in GAP and FFS
Balochistan Food Authority	Rules and Regulation are framed and notified	
<ul style="list-style-type: none"> • Agriculture Research Institutes, • Lasbela University of Agriculture, Water and Marine Sciences • Southern Zone Agricultural Research Centre under PARC 	Horticulture Research Institute may arrange plants through Tissue Culture and provide to the farmers Farmers are linked to SMEs for the processing of olive fruits for processing	
	Research institutes may develop a production technology concerning olive production under rain-fed conditions	
Reforming the Technical Vocational Education and Training (TVET) system	<input type="checkbox"/> The first phase of the TVET Reform Support Programme ⁴ ended in December 2016. The Programme achieved several milestones, but due to limitations in resource allocation and prioritization of intervention, limited investment was made in reforming and streamlining skills provision in the Agriculture and Livestock sectors across the country, which is a strong area of reform. This can be undertaken as part of the GRASP project. <input type="checkbox"/> Further, courses with such nationally recognized certification, as well as market-relevant courses can be introduced for other products as well.	

Constraints in the business environment at the product level	Root causes	Ease of resolution (Grade 1 to 5) – 5 very difficult	Urgent action needed (Grade 1 to 5) – 5 very urgent
No specific quality parameters are followed by producers	No quality standards for the commercial Pakistani Olive produce	3	3

⁴ In the end of the first phase, the milestones achieved include- establishment of the National Vocational Qualifications Framework (NVQF), the development of 72 qualifications and the implementation of the ever-first competency-based training and assessment (CBT&A) for more than 16,000 young people across the country. Amongst the national recognized qualifications developed in line with the CBT&A approach in the agriculture and livestock sectors include the following courses: Pine Nuts Processing (National Certificate Level 2, 3 and 4), Chili Processing and production (NCL 2), Citrus Processing and Production (NCL 2), Cotton Processing (NCL 2), Cotton Picking (NCL 1), Livestock (Dairy Farm Supervisor; NCL 3, 4), Agriculture (Farm Supervisor; NCL 3)

Opportunities and recommendation at the product level	Direct beneficiary	Possible implementing partners
Entrepreneurship development	Producers and consumers	SMEDA and GRASP Project
Establishment of Tissue culture Labs	Producers	Agriculture Research and GRASP Project

Environmental issues and opportunities

Environmental issues	Root causes
Weak water management efficiency	Flood irrigation is used in Sindh which holds low running costs and easy application, but is less efficient. Acute shortage of irrigation water in the entire olive growing zones
Climate change and Global warming	Severe drought in one part and heavy flooding in other parts
Elimination of high delta crops like apple and room for the promotion of low delta crop like olive under drip irrigation system	Over exploitation of underground reservoir using flood irrigation water and installation of indiscriminate number of Tube Wells

Opportunities and recommendation on environmental issues	Direct beneficiary	Agriculture department a
Promotion of low delta crops under drip irrigation system	Producers	Agriculture department and GRASP
Arranging training for the farmers on irrigation efficiency	Producers	Agriculture department
Introduction of drought and salt resistant cultivars	Producers	Agriculture department and GRASP

Gender inclusiveness constraints and opportunities

Gender inclusiveness constraints	Root causes
Large number of women can be engaged in olive processing and pickle making at village level. Women's' role in these areas are not existent	Short trainings are required specific to women. Women Division of Agriculture department or NARC can be involved
Harvesting: Only older women participate alongside men. Young women are discouraged from working at the farms	Cultural constraints Being a tribal society, women are not allowed to get out of their premises and work with men. Due to poor literacy rate women feel unsafe working in a male dominated society
Whilst a number of organisations provide training in agricultural practices, the participation of women in such trainings are often low	Organisations that provide training usually do not adopt methods to ensure that women can fully benefit from the exchange of knowledge and capacity building

Opportunities and recommendation on gender	Direct beneficiary	Possible implementing partners
Designing of new trades and programmes specific to olive processing and handicrafts industry (aligned with proposed Organizational Assessment of Women TVET Institutes in Pakistan, 2019)	Women in processing	WBT Advisory Council

Farmer Field School (FFS) training for women, primarily on good agricultural practices (GAP) and integrated pest management (IPM)	Women on the fields	GRASP + FAO
Holding women-only training sessions or ensuring that sessions are conducted at a time and place that is convenient for women to attend would help women access skills they need.		
Empowering women through olive cooperatives and processing, for example support women cooperatives to produce tapenade (olive paste) - a specialty product that can be marketed in high-end shops and delicatessens, for export markets. (https://www-cdn.oxfam.org/s3fs-public/file_attachments/the-road-to-olive-farming_0_3.pdf)		

SWOT analysis

	Strengths	Weaknesses
At Farmer level	<ul style="list-style-type: none"> □ An emerging low delta crop in almost in 14 districts of Balochistan, but also an indigenous crop) wild olives) in many districts of Balochistan. □ Olives could become an important source of livelihood, particularly in areas with some rainfall during summer season 	<ul style="list-style-type: none"> □ Hot-bedded controlled nurseries for olives are lying idle and need small investments to produce large number of olive plants. □ Dependent on imported plants for introduction and multiplication. □ Imported trees are expensive and beyond the reach of common farmers
Agribusiness services (input, collection and processors)	<ul style="list-style-type: none"> □ There is potential for the establishment of Agri-business activities keeping in view the potential of olive in Balochistan 	<ul style="list-style-type: none"> □ Lack of basic and modern processing units in the province □ Non-existence of cold storage facilities
Support services	<ul style="list-style-type: none"> □ Olive is prioritized by national and provincial programs and development partner' projects. □ Emphasis has been put on growing olive on commercial lines 	<ul style="list-style-type: none"> □ Poor linkages between research and private sector □ Weak outreach of extension and other Government operated services □ No economies of scale yet; development of the olives sector requires a network of and multiple services to be established.
Regulatory	<ul style="list-style-type: none"> □ New Balochistan Food Authority Act 2010 has been promulgated □ Rules and regulations are yet to be framed and introduced including specific requirements for olives 	<ul style="list-style-type: none"> □ No specific quality standards are available and followed by producers □ Poorly equipped food safety institutions □ Poor out reach of Balochistan Food Authority to Districts to enforce new regulations
Gender	<ul style="list-style-type: none"> □ Significant opportunities for female participation in the value chain; especially because olive is a new crop. 	<ul style="list-style-type: none"> □ Non-recognition of role of women throughout the value chain □ Limited space for women entrepreneurship. □ Unavailability of training opportunities for women and lack of specialized training modules for women (including on business development and entrepreneurship)
Environment	<ul style="list-style-type: none"> □ Balochistan has a large biodiversity in terms of indigenous olive varieties. 	<ul style="list-style-type: none"> □ Poor water management efficiency
	Opportunities	Threats
At Farmer level	<ul style="list-style-type: none"> □ Significant domestic demand for olives, especially during festivities. 	<ul style="list-style-type: none"> □ Competition with other crops such as grapes and other deciduous crop for scarce resources □ Producers and private sector indicates research is not geared towards finding solutions
Agribusiness services (input, collection and processors)	<ul style="list-style-type: none"> □ High potential for value addition, and processing of olive, such as olive oil, animal feed, pickle, medicines etc. □ Substitution of imported olive oil in the market in Pakistan. □ High demand in national markets 	<ul style="list-style-type: none"> □ Low standard plants, fertilizer, and adulterated pesticides in the market
Support services	<ul style="list-style-type: none"> □ New Special Economic Zones in Zhob and Khuzdar may offer processing facilities and a training centre for olives. □ Regular monitoring of trees, along with maintenance can help control infestations 	<ul style="list-style-type: none"> □ Limited resources available for olives development □ Competing priorities (with other major crops: such as grapes, pomegranates etc.)
Regulatory	<ul style="list-style-type: none"> □ Training and awareness sessions on regulations under the Balochistan Food Authority can further strengthen the sector 	<ul style="list-style-type: none"> □ Weak coherence between federal and provincial regulations
Gender	<ul style="list-style-type: none"> □ If properly linked to market opportunities, women can be pivotal for the development 	<ul style="list-style-type: none"> □ No female extension workers on the ground in the districts.

	<p>of household processed value-added products such as pickles and achar, using olive oil, for local consumption.</p> <ul style="list-style-type: none"> □ Olive is labour intensive, opportunities for further inclusion of women, particularly in processing and post-harvest activities as well as nursery management. □ Modern technologies may support the introduction of services for women to overcome mobility restriction of women. 	<ul style="list-style-type: none"> □ Cultural constraints
Environment	<ul style="list-style-type: none"> □ Environmentally friendly technologies (e.g. solar crushing units for oil extraction at farm level can help diminish post-harvest losses 	<ul style="list-style-type: none"> □ Prolonged drought badly affected the promotion of olive cultivation on commercial scales

Product market combination

Market segment	Key constraints	Key success criteria	Suggested actions at the production level	Suggested actions at the market level	Targeted market channel
All year round supply of olive oil and its value added products	<ul style="list-style-type: none"> - Lack of processing facilities - Lack of economies of scale (volumes) 	<ul style="list-style-type: none"> - To increase the volumes and quality (cost price be decreased) - Development of network of processing units and business services 	<ul style="list-style-type: none"> - Introduction of Good Agricultural Practices (GAP) for improving productivity and oil percentage through Farmer Field Schools and demonstrations / model farms - Nursery development 	<ul style="list-style-type: none"> - Improve collaboration between farmers: Farmers Marketing Associations - Develop cold chain logistics, collection/ processing hubs for large scale preservation 	National retailers
Processing of olive with value addition (e.g. branding) in particular for women	<ul style="list-style-type: none"> - Facilities for processing and value addition 	<ul style="list-style-type: none"> - Value Added Products (packaging, food safety certification, branding) 	<ul style="list-style-type: none"> - Introduction of techniques to ensure food quality - Improve preservation techniques (quality and efficiency) and storage 	<ul style="list-style-type: none"> - Support to develop farmer-processors-market linkages - Market information and development of marketing strategies 	National retailers

www.intracen.org/GRASP/

