



Document drawn up in collaboration with

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“Rete internazionale per lo sviluppo ecosostenibile e l’innovazione produttiva, manageriale e commerciale dei piccoli produttori nella filiera agrobusiness della ciliegia in Libano”

NEEDS ASSESSMENT

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Introduction

The present document has been written by Lebanese and Italian experts of the GPIIF. The data used have been collected in the past year on the field through interviews, surveys and direct observation with the direct involvement of the local Chamber of Commerce (Zahle) and the LARI research institute of Ministry Of Agriculture. Some of the information have been taken from official statistics of the Lebanese Government and from reports and studies conducted by international and national organizations (FAO, IFAD, UNDP, UE, Fair Trade Lebanon).

The socio-economic condition of rural smallholders

In Lebanon, there are two agricultural sectors: the capitalist sector and the family farming sector. The latter is the domain of suffering and misfortune. It is where attention should be focused. Agriculture is concentrated in the Bekaa Valley, then the North, the South and, lastly, Mount Lebanon. Agriculture makes up 6 percent of the national income and employs between 20 to 30 percent of the labor force. Furthermore, it represents 17 percent of exports. Despite this, the budget allocated to the agriculture ministry is less than 0.4 percent of the national budget.

A recent assessment by FAO of the impact of the Syrian crisis on food security and agricultural livelihoods in neighboring countries found that it has become extremely difficult for Lebanese farmers to sustain their livelihoods.

The rural areas are home to about 13 per cent of the country's population of 4.1 million. Based on a study by the United Nations Development Program (Poverty, Growth and Inequality in Lebanon, 2007), about 28.5 per cent of the Lebanese population, including rural people, lives below the upper poverty line of US\$4 a day, 8 per cent of which is under the lower poverty line of US\$2 a day. Poverty is prevalent in the mainly rural districts of Akkar, North and South Lebanon and Baalbek-Hermel.

Lebanon's rural people live in poverty as a result of the major problems facing agricultural production, which are mainly the small size of agricultural holdings, lack of agriculture policies, high production costs and lack of specialized agricultural credit. Women, who make up one third of the agricultural labor force, are particularly disadvantaged by the lack of programs and interventions targeting women. This leads to their poor representation in all aspects of agricultural production, with negative repercussions on their own socio-economic status and that of their households.

Last but not least Lebanese agriculture has a high cost structure for several reasons: the mountainous nature of much agricultural land; a limited domestic market and small, fragmented holdings that exclude economies of scale; a high proportion of hired labor; inefficient irrigation practices; and intensive use of fertilizers and pesticides, which is encouraged by input suppliers. (IFAD)

The cherry production

Cherry is a traditional crop in Lebanon, well adapted to Lebanon's agro-climatic conditions that are most suitable for its production; presenting the main need for cherry: chilling requirements.

The following are some of the Lebanese most known cherry varieties: Mkahal (RainBow), Binni (Brown), Telyani, Zaher (Pink), Ferawni. The first two varieties have the highest potential to be improved.

In Zahle, Baalbak and mountainous regions of Lebanon (altitude ranging from 900 to 1800 m) we can find numerous cluster of villages known for their cherry production. Agriculture is the main economic activity of this region due to the existence of fertile lands. Local citizens rely on the agriculture as the main source of income. The area accounts for about 50% of production of cherry in Lebanon. Despite this fact, the farmers suffer from low productivity and high costs of production due to several challenges including poor management, bad agriculture practices at production and postharvest levels, as well as difficulties in marketing their products. Many farmers express distrust towards traders and exporters because they are required to sell on consignment. Linking various value chain actors at the production, cooling and marketing level will ensure an improved value chain approach, an increase productivity of the orchards and generate greater farm income.

Unfortunately the sector of cherries in Lebanon is facing many problems directly linked to the structure of management, production, harvesting and market processes. Most of the production shows a clear imbalance in the control of quality standards. The lack of Lebanese Cherries quality is manifested by several wrong cultural practices and post-harvest interventions: Farmers needs to complete their experience by new technologies and skills; they have to be introduced to improved practices that will lower their input and increase their output.

Almost all the villages, on the Lebanese East Chain Mountains, are facing severe problems with their Cherry production, frost problems, bad disease management, and absence of well-established fertilization and irrigation programs. Not to forget the major and the most crucial component of the agricultural practices: Pruning and training techniques, and which is severely being neglected.

This is one of the reasons why farmers are planning to substitute their cherry orchards with other crops without realizing the real problem and how to overcome it, ignoring the importance of the identity of the Lebanese cherries and the potential held by this crop;

Beside cherries, Lebanon is one of the countries where cultivated almonds originated; It is widely cultivated in the country (6 217 Ha, 27 500 tons). Its fruits are mostly used for fresh consumption and around 10 000 tons of dried kernels are regularly imported per year to meet the local consumption. Almond commercial orchards in Bekaa valley are constituted of one or two varieties. These varieties are characterized by an early blooming and in certain years are affected by spring frost, which causes an important decrease in national production. Farmers unaware of the importance of dry almonds, prefer to sell at high prices the green almonds. They need a supporting part which will address them to suitable market for dry almonds.

(National studies and researches were implemented in order to face such problems: i.e. Characterization of local almond (*Amygdalus communis*) varieties in Lebanon was carried out by AUB researchers from 1997-1999. The results of the survey revealed that seventeen almond varieties are currently cultivated

throughout Lebanon. The most popular local varieties, “Aouja”, “Teliani”, “Helouani”, “Melkani” and “Nahali”, were further characterized both at the morphological and the molecular level.)

Management and Production

- Increasing climate related incidence / Lack of knowledge and equipment to protect orchards from extreme weather.
- Several wrong production techniques leading to higher input and lower quality of product.
- High costs of production
- Lack of qualified workers
- Poor quality seedlings and expensive germplasm.
- Old tree/ varieties.
- Low quality/homogeneity from old or/and poor managed orchards.
- Ineffective cooperative model.
- Lack of public sector and independent extension service system. High dependency on advice given by input suppliers.
- Small farm size, less than 1 hectare.

Harvest and Post-harvest

- Poor harvest and postharvest handling.
- Old cooling, storage infrastructure and technology.
- Absence of standards, norms and quality controls
- Lack of qualified pickers
- Absence of public policies aimed at reforming the agricultural sector
- Lack of green space and the rapid deterioration of forests
- Storage in Traditional unsuitable harvesting crates that result bruising almost all the fruits during storage.
- Lack of knowledge of good harvest practices
- Bad hygienic conditions
- Usage of soft package carton for export market can damage also the final product
- Lack of awareness on the good post-harvest process

Insufficient post-harvesting handling has a detrimental impact on sales domestically and abroad. The lack of modern automatic sorting, appropriate packaging and cleaning are factors that adversely impact the

quality of Cherry fruit resulting in lower market prices and, sometimes, rejection of the fruit. Furthermore, the absence or obsolescence of the machines used for processing and storing cherries obliges the farmers to sell the harvest to big oligopolistic firms that, taking advantage from this situation, pay a low price for the harvest.

Market Level

- Lack of market analyses and market intelligence capacity.
- Lack of business and market skills among small processors.
- Lebanese exporters lack linkages to the high quality buyers.
- Business decision based on insufficient analyses.
- High dependency on the Egypt market more than 80%, based on consignment.
- The lack of commercial structures and ignorance of existing commercial networks
- A large number of middlemen who greatly reduce income among the smaller and mid-size farmers
- Lack of technical assistance and support services for new agricultural techniques
- Poor marketability of existing old varieties
- Lack of links between farmers and stakeholders.

“Alternate support” crops

Cherry Farmers need a backup income besides their main production. They shouldn't be relying only on one production. Here comes the idea of helping and encouraging them to choose another culture that will make them increase their income: Thyme, Rosmarinus and chickpeas will be of great importance as intercropping with cherries and they thrive greatly in Bekaa, Baalbak and the mountainous regions. These crops as well, will help the women to grasp a role in the community, a job in the agricultural value chain (processing). Empowering women in the rural areas in the agricultural sector thus enhancing gender equality.

Thyme being the farmer's and every Lebanese favorite traditional food since always (a relatively very affordable not luxurious aliment= poor people aliment). It is consumed either green with salads, or dried, grinded and mixed with sesame seeds, sumac and olive oil. In the past, people used to gather zaatar (thyme) from the hills and woodlands. But there was a decline in wild thyme because of environmental changes and high demand for this herb (heavy picking of wild thyme). People started thinking about ways to preserve and produce thyme, and the solution was to cultivate it, just like other crops. It is a traditional culture in Lebanon which deserves to be empowered and integrated. In fact intercropping of thyme in cherry orchard, promoting its cultivation, holds many benefits out of which it is attractive for the pollinating beneficial insects: the bees (being an important nectar source- so enhancing a crucial factor for production: pollination) and will decrease the amount of wild thyme being massively

picked thus preserving it and protecting it from being endangered (environmental effect – protecting the biodiversity).

The know-how is already assimilated and farmers only need skills improvement for thyme processing; and to introduce them to new technologies. Last but not least thyme plays a major role for women empowering, she can be directly involved in the processing procedures. Other than thyme plantlet, we have Rosmarinus an aromatic herb, with culinary usages and showing a great potential as well, looking at the importance of the essential oil extracted from it and different other usages.

Other than being a nitrogen fixing plant, providing the soil with one of the major nutritive elements for trees and plants, chickpeas is as thyme an important element in the Lebanese cuisine (main ingredient for the famous traditional Lebanese “Houmous”). The seeds, if not eaten green, they are dried and used either as ingredients in a multitude of dishes or roasted and eaten as salted nuts or as sweetened snacks. Therefore they will be an interesting integration crop, for the farmer to culture with cherry orchard, women will be responsible for all the processing procedures (picking, cleaning, drying, processing...)

Women involvement in the agriculture sector

A study results showed that the Lebanese rural woman bear all the household activities as cleaning, laundering, cooking, insuring food stocks and child caring. The man on the other hand is responsible for the expenses of health for family, whereas expenses allocation is a joint decision the man and woman take. In addition, the woman participates with the man in all aspects of his rural life and most importantly agriculture. However, woman’s role in agriculture is mostly undermined because it’s considered as a part of its housekeeping activities. In fact, the results showed that around in 48% of the villages the woman main activity is in the agricultural sector followed by education. Results of gender division of labor showed that the woman contributes to agricultural activities in its various stages but at different rates and at percentage share. Her role is complementary with the men’s role and it cannot be clear cut in most of the situations. The most obvious woman’s role is that in the food processing tasks, whereas, the tasks that is equally shared by both is harvesting, weeding, and postharvest tasks and its related decisions. Other tasks such as pest control and fertilization is a man’s activity.

The study has further showed the burden that the woman incurs with advancement in age. Moreover, their tasks would increase with increasing tough family and personal conditions which would mean more contribution to family care as its family size increases. Indeed, the rural Lebanese woman doesn’t separate her needs from her families or community or village needs. When she was asked about her dreams and aspirations her response would be a suggestion that would revolve around the needs of other like social and community care or village level development rather than personal needs.

SWOT Analysis

| Strength | Weakness |
|---|--|
| Active and dynamic players who are ready to invest in the cherries Value chain. | High dependency on the Egypt market more than 80%, based on consignment. |

| | |
|--|---|
| <p>Existence of potential knowledge and know how that can be built upon to upgrade production, harvest and postharvest practices.</p> <p>Long experience and history in dealing with regional markets.</p> <p>Well established system for production of certified seedling.</p> <p>High literacy level among producers.</p> <p>Existence of tissue culture lab at the “Lebanese Agriculture Research Institution - LARI”.</p> <p>Active NGO sector, which already made big investments.</p> <p>Presence of 4 Agriculture universities.</p> <p>Existence of successful lead initiative at production, cooling, packing, sorting, distribution and export levels that can be built upon.</p> <p>Healthy competitive market for agricultural inputs</p> | <p>Lack of market analyses and market intelligence capacity.</p> <p>Lebanese exporters lack linkages to the high quality buyers.</p> <p>Business decision based on insufficient analyses.</p> <p>Small farm size, less than 1 hectare.</p> <p>Ineffective cooperative model.</p> <p>Lack of public sector and independent extension service system. High dependency on advice given by input suppliers.</p> <p>Poor quality seedlings and expensive germplasm.</p> <p>Old tree/ varieties.</p> <p>Low quality/homogeneity from old or/and poor managed orchards.</p> <p>Lack of knowledge and equipment to protect orchards from extreme weather.</p> <p>Poor harvest and postharvest handling.</p> <p>Old cooling, storage infrastructure and technology.</p> <p>Inconsistent supply of low-priced apples of the appropriate variety for processing.</p> <p>Lack of business and market skills among small processors.</p> |
| <p>Opportunities</p> | <p>Threats</p> |
| <p>Good climatic environment for growing stone fruits (cherries, almonds, plums, apricots...)</p> <p>Good reputation for Lebanon having tasty fruits</p> <p>Growing demand in the local and regional market for Grade 1 fruits.</p> <p>Shortage in supply with high quality/homogeneous fruits.</p> <p>High possibility for establishing new market linkages to higher quality buyers.</p> | <p>Bad reputation of Lebanese traders who might not be sorting and grading homogeneously, fruits have the reputation for being poorly graded and thus highly variable in fruit size and color, leading to high rejection rates by buyers.</p> <p>Bad reputation of having high pesticides residue</p> <p>Unstable political and security situation in countries of current export.</p> <p>Increasing climate related incidence.</p> |

| | |
|---|--|
| Geographical location of Lebanon close to the Gulf Markets. | |
| Presence of efficient financial scheme and publicly supported bank financing plans for agriculture. | |

Evaluation of the cherry producers lost potential in terms of income increase caused by the poor organization and the impossibility to complete the production cycle

The small farmers producing cherries, representing the direct beneficiaries of the project, currently own on average 1 hectare of land and are isolated from the surrounding productive economic context. Some of them are associated in cooperatives that are not playing any strategic role regarding the associated management of purchases and the management of the post-harvest phases of production. The cooperatives, mainly constituted to have access to public and international donors' contributions, are not generating any economy of scale and are not able to support farmers completing the post-harvest phases of production and the direct sale of the products. This situation is the cause of the farmers' isolation from the surrounding economic context, obliging them to sell the raw products to big firms that can purchase big quantities of products paying a lower price compared to the national and international prices. The outlined exploitation system is based on the farmers' lack of machines and equipment to store and keep the products (freezing and cooling warehouse) obliging them to sell the produce at unfair conditions. In fact, the crop prices during the harvest time fall down significantly reducing the income of smallholders. The situation is worsened by the lack of vehicles to ship the harvest to big cities contributing to the necessity to sell the produce to big firms that can load the crop directly from the farm. The availability of a storing system would allow to postpone the sales after the harvest time when prices are at their lowest point. Equipping the cooperatives with the machines and tools to prepare a finished product and to store it and allowing them to sell the associates' harvest jointly would increase the quality of the crop, the possibility to sell it in a more remunerative period of the year and give them a stronger bargaining power.

Throughout last year (2015) the GPIIF staff monitored cherry price's trends showing that smallholders from the mountainous regions sold their crop at an average price of 0,5€/kg to big firms, better organized cherry producers managed to sell their treated and finished products to wholesalers in Beirut at 1,5€/kg. The most structured producers, able to export to gulf countries and Egypt, sold their crop at 2,5€/kg. The analysis showed that the outlined management and organizational weaknesses are hindering the development potential of smallholders and rural communities. The price differential up to an increase of 500% represents an important objective to be reached through a reorganizational path at productive, managerial and commercial level. The project activities, through trainings, best practices workshops, expert consultancies, supply of equipment and machines for the harvest, post-harvest and product's storage, aim at activating a productive system provided with quality control procedures, improve the productivity, complete the post-harvest phase of production, provide the farmers with storing capacities

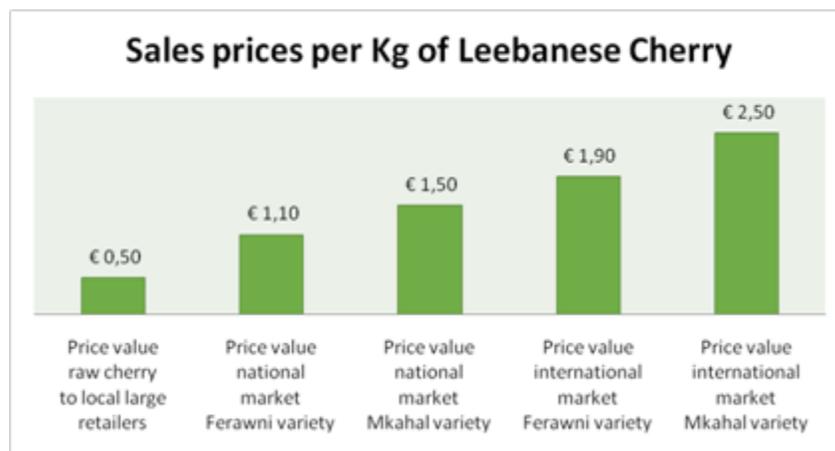
so that they will be able to sell their crops when the prices are higher to national and international markets.

The outlined reorganizational path offers a true economic development potential, promising to return on the investment on the medium term and guaranteeing the economic sustainability of the action on the long terms for smallholders, cooperatives and target communities.

Market analysis

Identification of sale price according to final market and product quality standard

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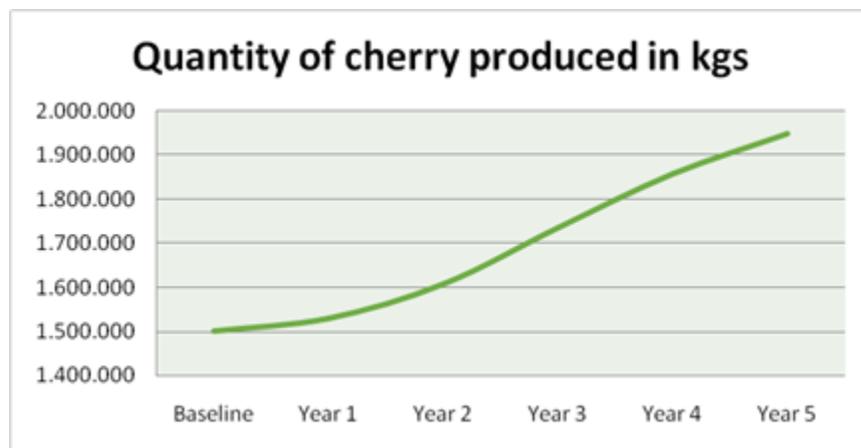
Analysis of the production of cherries

The production of cherry in Lebanon is about 25.000 tons per year, of which 10.000 tons are produced in the area of Bekaa Valley. The project beneficiaries, about 350 small rural enterprises mainly run as family business, are located in the mountainous regions (between 900 and 1.800 m. altitude) and produce about 1.500 tons per year. Knowing that the average extension of an orchard is 1 hectare, the average yearly production of each smallholders is about 4 tons. The average productivity in Italy is 12-15 ton per hectare, while in Lebanon the national average is 4,5 tons per hectare.

Estimated increase of the productivity level through the introduction of new agricultural practices

Considering the favourable climate conditions, our analysis showed that there is a good potential for increasing the quantity of the production. Thanks to actions aiming at increasing the sustainability of the soil management and utilization, improving the fertilizer utilization, the Eco sustainability and the efficiency of the irrigation systems, the techniques for fighting and prevent diseases and the protection of the crops on the trees, we estimate that an increase of 30% of the total production in a time horizon of 5 years.

The intervention idea will make available to the cooperative a refrigerated warehouse, a quality control laboratory, a washing system, a selection and confectioning equipment. The refrigerated warehouse will enable producers to gain an important – though partial – economic benefit, by a) facilitating product preservation and storage to allow market sale after the harvest period, when prices drop for supply increase and by b) minimizing losses due to produce deterioration as a consequence of the absence of proper refrigerated rooms (a loss rate ranging between 10 and 20% over the last years)



A market- oriented production opportunities and analysis

As previously mentioned in relation to the product's quantitative improvement, even for the qualitative component results will be visible by the third to the fourth year, when the reorganized production and management practices will be fully absorbed in terms of a) product quality, b) post-harvest management and c) ability to get more profitable selling conditions.

- a) Product quality and b) post-harvest process management: the qualitative production improvement will stem from harvest and post-harvest procedures in line with quality control regulations. As for cultivation and harvest practices, new tools and procedures will be shared to facilitate parasites' control, to enhance irrigation and fertilizers utilization and finally to plan harvest according to humidity and ripeness control.

As for the post-harvest stage, the project shall introduce dehydration and rehydration systems which will ensure better conditions of the product transferred to the storage warehouse. The efficient time management from the harvest to the refrigerated room is a key factor to raise product quality.

c) Ability to access to more profitable commercial channels. The cooperative's staff capacity building in analysing local and international market trends will facilitate alignment to market's requests. The opportunity to promote the product within international fairs will facilitate activation of new commercial routes with higher prospects for profit.

Access to new markets opportunities

National Markets

The project foresees the creation of a brand for cherry produced and packaged by the cooperatives, through the different activities revolving around identity, packaging and labels development.

The project intends moreover to facilitate contact with traders interested in establishing and developing long-term relationships, which could in the long run produce mutual benefits in expanding turnover of cooperatives and partner traders.

International markets

The strategy to access new commercial channels will be focused on three main points:

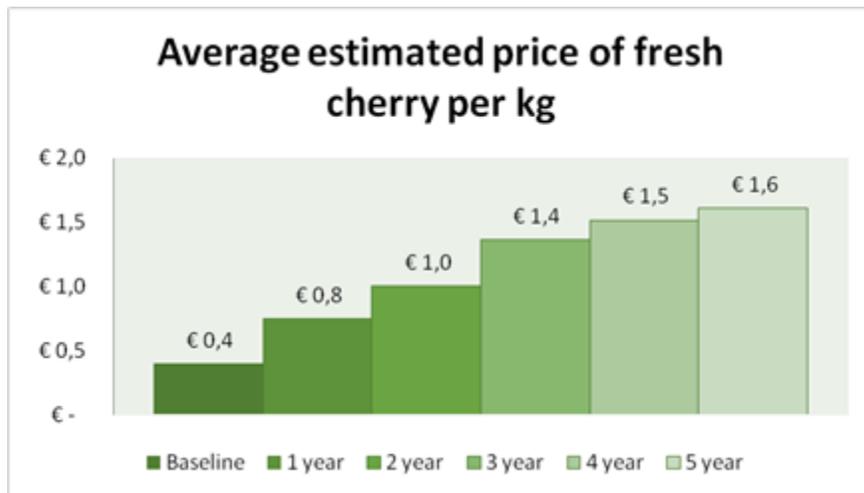
- Quality enhancement of products and alignment to production practices which can ensure access to Prime Quality market and Fair trade channels;
- Participation in fairs of international relevance in Italy, Germany and Abu Dhabi so as to foster product promotion and direct contact with foreign retailers
- in the framework of its project activities the JPIIF has established and strengthened a partners network with Italian importers which could be interested in cherry trade, as far as the product is in line with quality standards required. In the framework of the broader strategy to expand commercial opportunities the JPIIF intends to facilitate contact between the two entities.

Results analysis of the commercial and productive reorganization – Percentage of sales to most profitable markets

All of the examined factors will allow a progressive increase in the high-quality cherry production percentage. With regards to such element, progressive ponderate increase estimation over 5 years time has been drafted –see *Table A*.

| Table A | Price value raw cherry to local large retailers | Price value national market Ferrara variety | Price value national market Mikahai variety | Price value international market Ferrara variety | Price value international market Mikahai variety | % losses for product deterioration | Average estimated price of fresh cherry per Kg |
|-----------------|--|--|--|---|---|---|---|
| Baseline | 100% | | | | | 25% | € 0,4 |
| 1 year | 50% | 25% | 25% | | | 20% | € 0,8 |
| 2 year | 30% | 30% | 30% | 5% | 5% | 15% | € 1,0 |
| 3 year | 20% | 20% | 20% | 20,00% | 20,00% | 10% | € 1,4 |
| 4 year | 10% | 20% | 20% | 25,00% | 25,00% | 10% | € 1,5 |
| 5 year | 5% | 20% | 20% | 25,00% | 30,00% | 10% | € 1,6 |

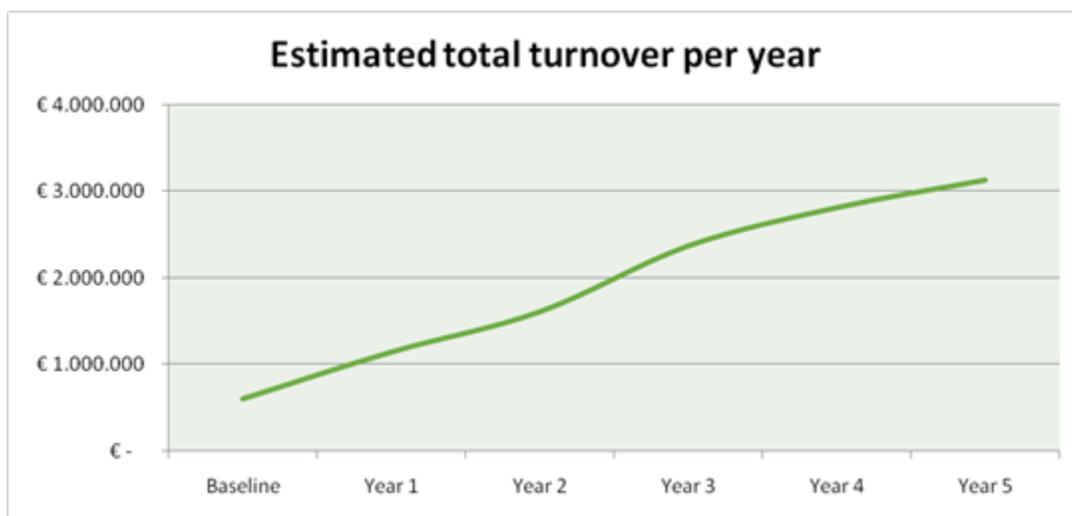
Table A displays the esteemed production trends related to the quality enhancement deriving from the productive and commercial restructuring introduced by the project strategy. It also includes the per cent decrease of losses due to product deterioration during the post-harvest process. Currently, the unavailability of proper equipment produces a high loss in the harvest and post-harvest phases. Both the introduction of the refrigerated warehouse and the adoption of quality-controlled procedures for harvest, will reduce such phenomena by 15%, from the current 25% rate to 10%. According to the weighted average displayed in Table A, the growth trend is estimated as depicted in the following table:



Turnover growth prospects analysis

According to estimated production and price raise, the total revenues of cooperative's associate producers are to grow as indicated:

| Description | Baseline | Year1 | Year2 | Year3 | Year4 | Year5 |
|--|-----------|-------------|-------------|-------------|-------------|-------------|
| Total production in kg | 1500.000 | 1530.000 | 1606.500 | 1735.020 | 1856.471 | 1981.25 |
| Description | Baseline | Year1 | Year2 | Year3 | Year4 | Year5 |
| Average estimated price of fresh cherry per kg | € 0,4 | € 0,8 | € 1,0 | € 1,4 | € 1,5 | € 1,6 |
| Description | Baseline | Year1 | Year2 | Year3 | Year4 | Year5 |
| Estimated total turnover per year | € 600.000 | € 1.147.500 | € 1.606.500 | € 2.365.996 | € 2.818.461 | € 3.196.998 |



The analysis of the hereby provided data suggests significant growth values. This trend is due to two main reasons:

- 1) Diseconomy conditions faced by small producers due to the tight control of oligopolistic companies on the local cherry market. The baseline situation experienced by the small cherry producers identified as project beneficiaries is compromised by strong limitation in their possibilities to access the market. The cherry sector in the Lebanon is controlled by a few oligopolistic international firms able to condition market trends according to their interest. Small producers, whose activity mainly revolves around raw product harvest, do not benefit from direct access to local and international final markets, due to internal organizational limits which prevent them from selling the finished product. As a consequence, they only supply and deal with big local companies which speculate on the raw product's sale by offering very low prices. The unavailability of equipment for product processing and storage to small producers forces them to quickly sell the fresh product within 3 days from harvest, bending to big firms' conditions.
- 2) Real opportunities offered by the finished product-related market. The project strategy, will finalize the productive restructuring process and allow cherry commercialization on local and international markets at prices varying between 1,1 to 2,5 euro as indicated in the Market analysis Chapter. Availability of equipment for product processing and storage and the activation of a path

of productive and commercial skills enhancement will foster income, development and employment opportunities. The establishment of a quality control system will moreover facilitate alignment to international quality standards. It is worth underlining that Lebanese cherry demand in the gulf countries and Egypt exceeds the actual supply and hence favourable conditions subsist for commercialization in this market. A cautious approach was anyway adopted in the estimated international commercialization trends, by focusing on sale volumes in the local markets. Potential customers within local and regional markets are traders mainly dealing with fresh product which is branded for sale with their own trademark. The assessment surveys conducted with the Lebanese Agriculture Ministry and the Chambers of Commerce while planning the project strategy enlightened a strong interest in the cherry product within the regional market, especially over pre and post harvest periods. All these elements let foresee real commercial success opportunities and consequent economic development of producers.

Conclusions and opportunities analysis

The study clearly illustrates the opportunities offered by the initiative and the positive spill-over effects which would benefit Bekaa Valley communities.

Economic opportunities: The proposed strategy will generate strong impact on poverty reduction for the most marginalized society groups. The project ensures sustainability of income-generation and employment possibilities along the cherry value chain. By building cooperative's capacity and providing it with necessary equipment the producers will gain a strategic space along the value chain, gathering profits which have not been accessible so far. The reorganization process will facilitate the Cooperative in getting access to local and international markets, which appear to be thrice as profitable as the raw product market that has been the only end so far. The enterprise development opportunities are to benefit also about 1000 among women and young workers in the sector, who will get engaged in the different post-harvest processing stages.

Social opportunities. The project lays foundations for a durable development in the cherry value chain, one of the most relevant Lebanese rural products, allowing local rural communities to benefit from the positive spill-over effects of the initiative and contributing to the reduction of youth forced migration. Peculiar attention was paid to the situation lived by new generations: the offer of new employment and economic opportunities within their families' business will incite them to pursue the family business and revive an important socio-cultural tradition. They will be actors of a rural economy surviving hardship and constraints, contributing to their communities' development and limiting exodus from rural areas to nearby cities. The sustainable land and resources' management practices will improve soil quality and contribute to reduce natural calamities' risk.

Environmental opportunities: the eco-sustainable methodology adopted is a cornerstone of the productive reorganization. The exchange and training activities with the different international partners are based on sustainable resources' management methodologies, favouring conservation of low degrees of water salinity and the promotion of an ecosystem in crisis whose effects strongly affect the product quality. Alignment to eco-sustainability criteria is a particular added value within the market, as it attributes economic advantages to products developed accordingly. The market-oriented approach is totally responsive to this priority.

Innovation and multiplier effects. The project will accord priority to cherry-producing small farmers willing to start organizational innovation paths. These will be supported through endowment of start up funds to the businesses adopting tools to improve productivity and quality. Pilot initiatives will be launched to facilitate replication by other enterprises in the field, after acknowledging the positive impact generated.