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LEBANON INDUSTRY VALUE CHAIN DEVELOPMENT (LIVCD) PROJECT

LIFE OF PROJECT AND YEAR ONE AND TWO WORK PLAN

AUGUST 2013 - SEPTEMBER 2014

AUGUST 2013

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LEBANON INDUSTRY VALUE CHAIN DEVELOPMENT (LIVCD) PROJECT

**LIFE OF PROJECT AND YEAR ONE AND TWO 18 MONTH WORK PLAN
AUGUST 2013-SEPTEMBER 2014**

Program Title: USAID Lebanon Industry Value Chain Development (LIVCD) Project

Sponsoring USAID Office: Economic Development and Governance

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SECTION 1.0 INTRODUCTION TO LIVCD

1.1 WORK PLAN OVERVIEW

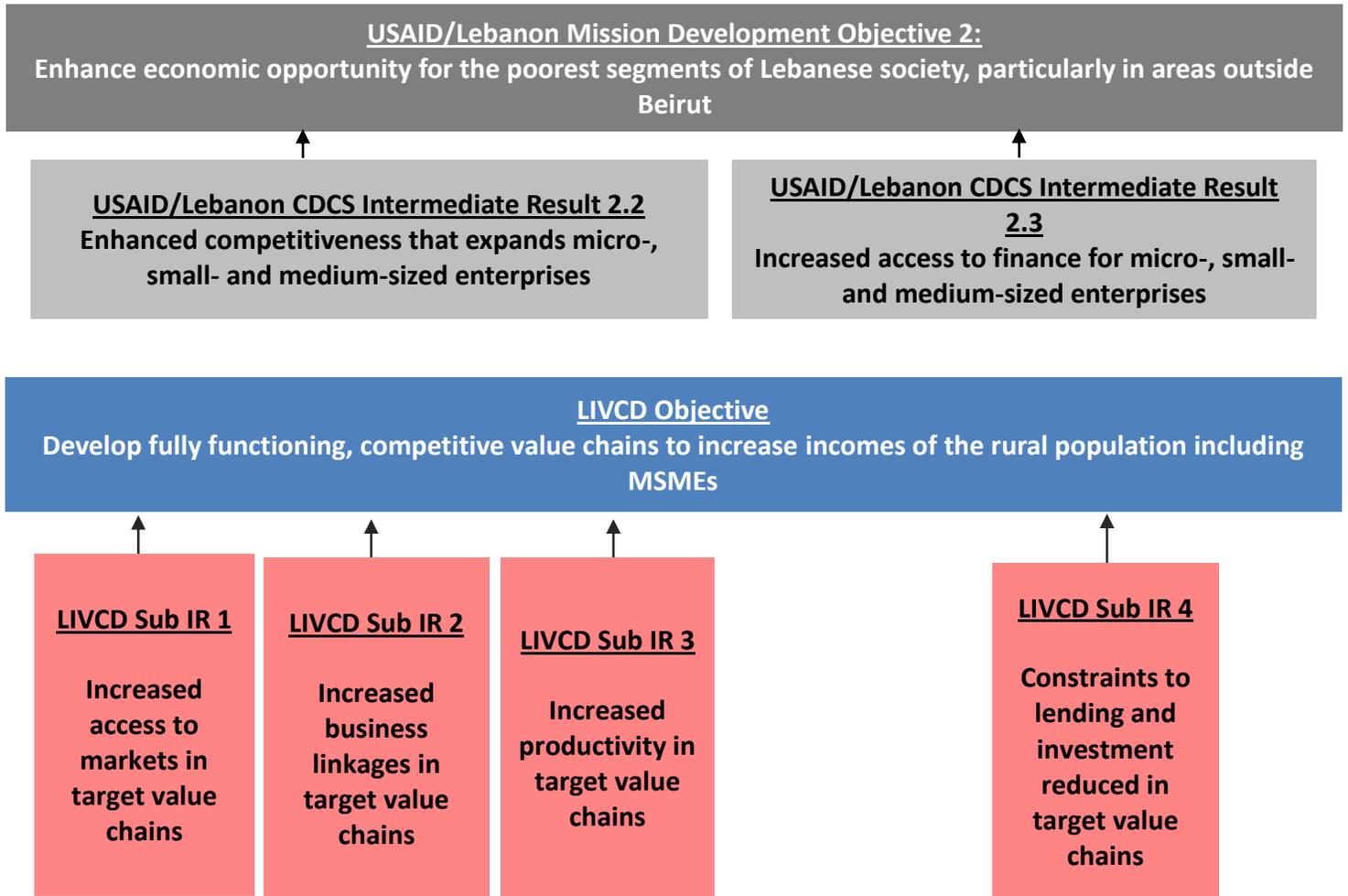
As detailed in this document, LIVCD's activities will focus on achieving measurable results, while providing sufficient project flexibility in order to respond rapidly and effectively to the continually changing circumstances in Lebanon including host community projects, new innovations and technology, regulatory advances or requirements, and domestic, regional, or international economic opportunities. The Life of Project and Year 1 and 2 Work Plan provides an overall analysis of LIVCD activities and notes specific highlights and objectives for the next 18 months that will help USAID and LIVCD achieve the required performance results. The Work Plan delineates the critical activities that will logically lead to expected changes and results.

All LIVCD activities are aimed at achieving USAID/Lebanon's Mission Country Development Cooperation Strategy (CDCS) Development Objective #2: Enhancing economic opportunity for the poorest segments of Lebanese society, particularly in areas outside metro Beirut. The Project intends to improve the lives of Lebanese citizens by creating stronger and more sustainable enterprises and organizations and by working with Micro and Small and Medium Enterprises (MSMEs) and individuals who can effectively implement activities and continue to provide support after project resources are no longer available.

1.2 OBJECTIVES

Building on recent support to the rural sector through agricultural and other related economic development projects, LIVCD partners with the private sector to develop fully functioning, competitive value chains in order to increase the incomes of the rural population, as well as businesses such as farmers, agro-processors, input suppliers, transporters, exporters, small businessmen, service providers, retailers, and other entities involved in rural wealth creation. Entirely market-based, the project works throughout Lebanon to raise the competitiveness of selected rural value chains, expand the number of MSME's that can compete in selected markets, improve linkages between those firms and other actors throughout the value chain, increase the gross value of products and services in local and export markets, and expand exports. The net effect of these activities will contribute to improved economic stability and food security for Lebanon, especially in the rural areas, and decreased urban flight.

The LIVCD Results Framework provides a graphical representation of the project strategy and development hypothesis:



LIVCD is a key part of USAID’s strategy in Lebanon and contributes to achieving the CDCS Development Objective #2: Enhance economic opportunity for the poorest segments of Lebanese society, particularly in areas outside metro Beirut, by contributing to the achievement of two related intermediate results:

- USAID IR 2.2: Enhanced competitiveness of assisted value chains that expands MSMEs
- USAID IR 2.3: Increased access to finance for MSMEs

The LIVCD Project Objective, or overall result is “Increased competitiveness of value chains that increases incomes of the rural population including MSMEs.” To achieve this objective, LIVCD collaborates with actors within the selected value chains, providing technical assistance, equipment, grants, and access to investment for value chain financing in order to overcome constraints to competitiveness. The activities described in this work plan will achieve the following LIVCD Intermediate Results:

- Increased access to markets in target value chains
- Increased business linkages in target value chains
- Increased productivity in target value chains
- Constraints to lending and investment reduced in target value chains.

LIVCD is responsible for delivering the following results over the life of the project based on the contract:

- A minimum of seven fully functioning, competitive value chains; (Project Objective)
- An annual increase of at least 10 percent in the volume and value of exported agricultural products of selected value chains for each value chain. If, for some value chains actual and potential export is limited, import substitution may be considered in this case. (Project Objective)
- At least 30 new export markets, niche markets, or distribution channels for selected value chain products (LIVCD Sub-Intermediate Result 1);
- An increase of at least 700 businesses or micro-enterprises benefiting from horizontal and vertical linkages (LIVCD Sub-Intermediate Result 2);
- At least 12,000 small and medium commercial growers benefiting from the dissemination of improved production and post-harvest technologies (LIVCD Sub-Intermediate Result 3);

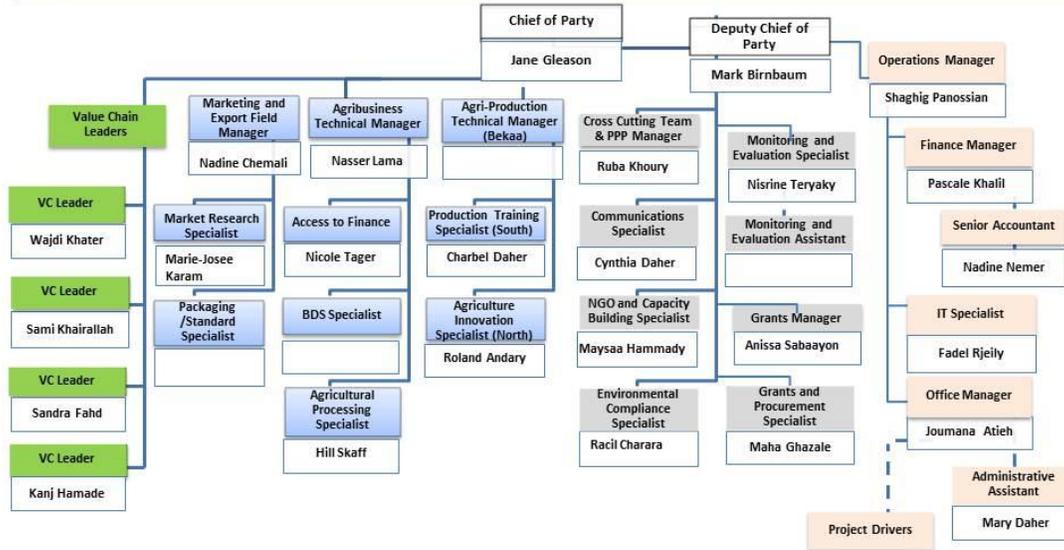
1.3 ORGANIZATIONAL STRUCTURE

LIVCD has established offices throughout the country staffed by technical experts and support staff. The main office is based in Sin El Fil, while three field offices will be established in Saida, Tripoli, and Zahle. The organizational chart depicted in the figure below shows the overall structure of the organization and current staff who have been hired for selected positions. Led by Chief of Party, Dr. Jane Gleason, the LIVCD team consists of both technical and operational specialists who have experience working on USAID funded projects supporting individuals and enterprises, and who are dedicated to improving the livelihoods of beneficiaries in the rural economy. The Project will support this team with short-term experts who can contribute to project interventions in specific technical areas, including: production, marketing, food safety, exporting, financial services, organizational capacity building, and enterprise development.

ORGANIZATION CHART

Head office: Horsh Tabet, Confidence Center, 1st Floor, Dimitri Hayeck Street, Horsh Tabet, Sin el Fil

Development Alternatives Inc.



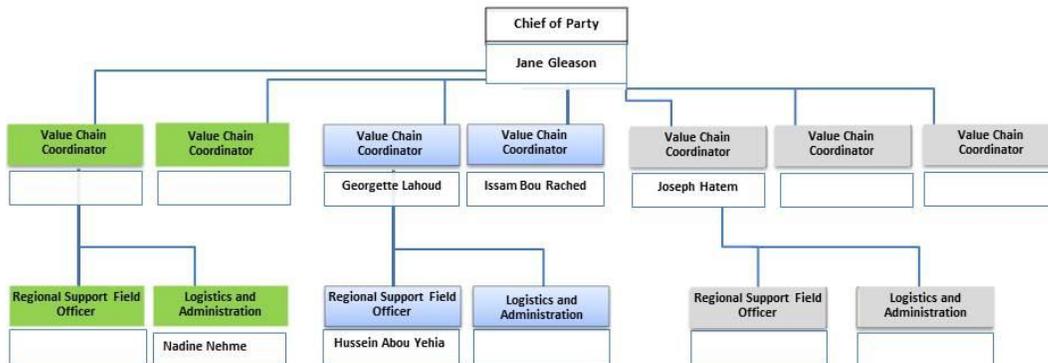
Technical

Administrative

ORGANIZATION CHART - Regional offices

Head office, Horsh Tabet, Confidence Center, 1st Floor, Dimitri Hayeck Street, Horsh Tabet, Sin el Fil

Development Alternatives Inc.



NORTH

SOUTH

BEKAA

1.4 TECHNICAL APPROACH

LIVCD is **a) market-driven, b) flexible and responsive to targets of opportunity; and c) results-oriented.** Project activities are implemented in close coordination with other USAID and donor supported projects involved in rural economic growth activities. LIVCD approaches rural economic development from the perspective of target markets, where there is the greatest potential for collaboration between buyers and sellers. Partners are entrepreneurial MSME producers, businesses, and rural farmers who have shown a commitment to working with other stakeholders and LIVCD to maximize benefits.

- A. **Market-Driven:** LIVCD provides assistance that responds to potential value chain markets in order to achieve the ultimate objective of increasing income of the producers and actors involved in rural-based value chains. LIVCD collaborates with private and nongovernmental institutions, as well as producer and professional organizations and associations as needed to achieve objectives.
- B. **Flexible and Responsive:** LIVCD assists partners to evaluate progress toward goals, and to identify adjustments in activities that appear to be needed in light of progress achieved, lessons learned, or changes in the environment. Moving forward, the Project will minimize less promising activities, explore additional value chains based on market analysis and the need to support Lebanese communities impacted by the Syrian crisis, and attempt to capitalize on windows of opportunity to increase incomes in the rural economy and improve the competitiveness of value chains.
- C. **Results Oriented:** LIVCD has a range of assistance mechanisms available including provision of expatriate or local technical expertise, training activities, provision of small grants, co-investment and public-private partnerships, institutional capacity building for local partners, and partnerships with public or private organizations. LIVCD will select the combination of approaches most appropriate to achieving the desired results. Assistance provided under the Project will have discernible and positive impacts on the rural economy, measured in terms of opportunities for increased incomes, job opportunities, and rural wealth creation.

In an effort to promote the latest technology and innovations, LIVCD seeks to maximize the use of Science, Technology, and Innovation Partnerships (STIP) intended to increase the cost-effectiveness, reliability, sustainability and speed of development interventions, humanitarian assistance, and crisis response. By focusing on removing critical barriers to development progress and facilitating innovative approaches, LIVCD will support USAID's goals of developing sustainable, effective solutions. Each value chain section in the Work Plan includes specific activities that support innovations, utilizing science and technology including examples such as cold storage, trellises, a breeding center for honey, and drip irrigation. Efforts will be made to coordinate with universities and other partners that can research, validate, test, and disseminate the results of successful STIP activities.

1.5 SIX MONTH ASSESSMENT

LIVCD is comprised of three components: 1) Component One: Initial Assessment- Analyze Prospects and Select Value Chains; 2) Component Two: Value Chain Activities to Increase the Competitiveness of Lebanese Value Chains; and 3) Component Three: Accessing Value Chain Finance.

During the first six months of the project, from October 2012 through March 2013, LIVCD implemented Component 1. Project staff conducted a series of value chain assessments that identified market opportunities and the constraints and opportunities to increasing competitiveness of a given value chain. In addition, each assessment concluded with an upgrading strategy that identified a range of activities to address these constraints. USAID's decision to include the initial six month assessment phase in the LIVCD contract provided a critical opportunity to conduct thorough analyses of a number of promising value chains, plus other analyses on pertinent to the Project. The LIVCD team completed 10 full value chain assessment reports and four partial value chain reports; an additional nine further reports and documents were submitted to USAID that provided a macro level view of the rural economy, analyzed the enabling environment, NGO capacity, and access to finance. The reports also provided a summary and synthesis of findings and recommendations for specific value chains to include over the next four and a half years of the project.

Ultimately, after ongoing coordination and consultation with the USAID COR, Georges Frenn, eight value chains were approved for inclusion in the project on May 22nd, 2013.

Those value chains include six that are focused on agriculture, one on processed food, and one on rural tourism and handicrafts:

1. Pome Fruits
2. Stone Fruits
3. Grapes
4. Olive Oil
5. Floriculture
6. Rural Basket of Products
7. Processed Foods
8. Rural Tourism and Handicrafts

1.6 IMPLEMENTATION STRATEGY

LIVCD will use technical assistance, training and capacity building, and grants and co-investment funds to achieve project goals. The choice of implementation mechanism depends on the needs of individual or groups of stakeholders. LIVCD has delineated criteria for the use of its grants and co-investment funds approved by USAID COR Georges Frenn on April 8, 2013. The Project has determined that strategic co-investments will be made when it is clear that without LIVCD financial support no action will be taken by value chain stakeholders and when the use of those funds will benefit numerous actors throughout the value chain. The intent of

project financing is to ensure that the market is not distorted and only those investments that provide measurable financial and development returns are selected. Some examples might include: improving tourist destinations to increase rural income; improving production or food processing; and assisting entrepreneurs in accessing new markets. The Project requires a co-investment or cost share for all supported interventions and will leverage available funds in creating sustainable public-private partnerships (PPPs) defined as a public sector organization- usually LIVCD- working with a private sector organization and requiring each partner to contribute its own set of skills and resources to collaborate on co-designed and co-managed projects to significantly expand and deepen the impact of development assistance. PPPs promote co-investment in public goods and services that benefit both the public and private sector; encourage market entry by creating incentives or reducing the risk of investing in emerging markets; and leverage core capabilities of private sector entities and individuals to address a development challenge.¹ Based on available resources and the nature of the engagement, LIVCD will create more formal agreements where significant financial resources will be required from both sides such as upgrading infrastructure, as well as less stringent collaboration where technical assistance might be provided to assist companies to upgrade their facilities to meet ISO 22000 or achieve HAACP certification.

LIVCD will analyze each proposed investment thoroughly, utilizing feasibility studies and business plans when appropriate, and also facilitating assistance for those who lack resources to prepare these important documents in instances where MSMEs are seeking financing from banks, MFIs, government loans such as Kafalat, or other non-bank lenders. For all Project investments using co-financing, grants, subcontracts, or activity funds, LIVCD will complete cost benefit analyses calculating the anticipated return on investment (ROI) in financial terms, while simultaneously determining the development returns on the investment based on achieving the objectives of the project, meeting indicator targets, and maximizing the number of beneficiaries in rural poor areas- with a focus on reaching marginalized groups. The Project anticipates a mixture of support, which in some cases emphasizes economic and financial impact through potentially supporting larger well capitalized institutions that can help reach new or existing markets for products, while other activities may involve expanding into rural areas to assist beneficiaries who may not otherwise have opportunities to participate in the value chains that LIVCD has selected.

Lebanese Communities Affected by the Syrian Crisis

On March 23rd, 2013, USAID requested that LIVCD implement "Value Chain Interventions for Targeted Lebanese Communities. The activities of this program are designed to have an immediate impact for rural populations struggling with the influx of almost 700,000 Syrian refugees, as of August 1st, 2013, according to the United Nations. All of the assistance to these vulnerable Lebanese communities falls under the existing scope of work of the project and supports the eight approved value chains. The Syrian crisis has had an extreme adverse

¹ Partnering for Impact: PPPs and USAID's Global Development Alliance Approach

impact on many communities in Lebanon. These host communities now suffer serious challenges including inflation, limited supply of essential goods, housing shortages, and insecurity and instability. On April 15th, 2013 implementation of two grants in the north initiated LIVCD's response to addressing the crisis: 1) Providing 100 small beekeepers with 500 hives and beekeeping equipment; and 2) Free range egg production through distribution of 2,000 layers for 146 families. Since then, other LIVCD has issues additional grants, including training in handicrafts and soap production and thyme production in the North of Lebanon and free range egg production in Baalbek, Aarsal, and Hermel. All activities are conducted in cooperation with locally based NGOs, and in coordination with other donors, municipalities, cooperatives, and the private sector.

The long term goal of this effort is to provide value chain actors greater opportunities to improve the quality and quantity of products available resulting in higher income and reinvestment. In the short term, LIVCD will look for ways to improve the incomes of the poorest segments of society, especially those who live in communities that host large numbers of Syrians. Since Lebanon generally suffers from high costs of production and inadequate post-harvest handling and storage, key constraints identified in almost all of the value chain assessments, LIVCD's post-harvest investments in infrastructure and cold storage will address some of these concerns, while simultaneously providing direct assistance to host communities that are negatively impacted by border closings. Currently, a significant amount of products cannot flow through Syria by land and many farmers, traders, and exporters are forced to find alternative solutions that increase their costs even more. By helping to improve practices and increase the shelf life of products, LIVCD will further assist host communities.

A vast majority of host communities are located in the rural fringes and research has shown that vulnerable populations, including women and youth, are suffering greatly under the strain of hosting Syrian refugees. LIVCD will focus efforts, such as the thyme and handicraft grants, which work only with women and younger ladies. The Project intends to seek additional investments beyond the grant support to create and strengthen MSMEs, create jobs, and provide other economic opportunities and attempt to include them in new economic opportunities in the supported value chains. LIVCD is flexible and responsive to the constantly changing environment and will adjust assistance and target host communities by providing additional economic opportunities within the current scope of work.

Gender Considerations

LIVCD is conducting a thorough gender assessment scheduled for completion in September 2013 that will help guide specific interventions in host communities and all of the value chains. In addition, interactive training designed for specific target audiences will be completed with the assistance of subcontractor Making Cents. LIVCD intends to mainstream youth and gender activities throughout the value chains from inception, including increasing their role and participation when feasible, as well as providing financing and support for specific activities. Co-financing, training, and internships will be provided to qualified participants. Based on completed

efforts, the following areas have been identified as key constraints for women to participate in the rural economy and will be addressed in the first two years of the Project:

1. Women's work in the rural sector is usually confined to certain tasks. For example, they are more likely to work in post-harvest activities than in agricultural production directly. LIVCD is mindful of the positions women occupy in the value chain and will include them in activities accordingly.
2. LIVCD recognizes that often men are the public face in the value chain whereas women are the real participants. In the case of free range egg production, for example, it was observed that men showed up to the training sessions; however women in fact did the work. It is important for the Project to reach the real participants or beneficiaries who are actively engaged in the work.
3. It is more difficult for women to obtain financing for potential investments, large or small. LIVCD will work with financial services providers and partners to address this constraint.
4. As LIVCD collaborates with NGOs, cooperatives, and other groups, for example, to conduct an extension program, The Project may need to insist on a portion of the program dedicated to women's extension needs.

Early Investments in Value Chains

After completing the six month assessment of the rural economy in Lebanon, LIVCD continued to meet with stakeholders and analyze potential efforts to improve competitiveness and enhance economic opportunities for the poorest segments of Lebanese society in rural areas. Based on data and feedback from key value chain actors it is abundantly clear that maximizing the impact of U.S. Government resources requires substantial early investment in activities such as replacing fruit trees with new varieties that have higher demand in domestic and international markets. LIVCD intends to front load co-investments and financial support in order to maximize the positive benefits of project assistance over the life of the project. For example, the current Tfayaihi and Baytamouni grape varieties grown by most Lebanese farmers are not attractive to European buyers. Replacing these vines with higher value Red Globe and Crimson varieties can improve yields and prices resulting in increasing income from grape production by 66 percent or more.

Farmers and exporters do not realize the income gains from planting new varieties and improving cultural techniques for at least three years, and full production is realized after five or six years. Thus, harmonizing activities on improving grape production to be consistent with the demands of discerning European consumers should occur as soon as possible. The planting season begins in July 2013. The situation is similar for cherries, avocados, apples, and pears that require years to produce new fruit after new rootstock is planted.

Processed foods are also one of the most important value chains in the rural economy where LIVCD plans numerous interventions. Early co-investment in areas such as HACCP and ISO 22000, along with upgrades to equipment, facilities, and marketing will require major investments in the first two years of the project. Results will vary according to the nature and size of Project support, though LIVCD's goal is to ensure measurable output and impact within the five years of the project. Also rural tourism activities require a number of initiatives and marketing strategies that will multiply return on co-investments if completed early in the project.

LIVCD intends to accelerate awards and co-financing in the first two years in order to achieve the greatest possible overall impact. In addition, the Project anticipates additional investments required to address host communities that desperately need relief from the economic hardships plaguing them. An immediate injection of capital is required to assist the greatest number of Lebanese citizens who are struggling socially and economically, and this effort will need to be sustained for the next few years as the most likely scenario is that the situation will continue to deteriorate.

LIVCD Priorities

Implementation priorities include a number of initiatives aimed at proving to small farmers and MSMEs that co-investing with the Project will result in greater financial returns. In order to convince partners to invest resources and time, and in some cases forego current income with the expectation that new highly demanded varieties will eventually provide greater returns, LIVCD will focus on proof of concept through pilot activities such as demonstration plots then find interested actors who can assist in replicating and scaling up successful efforts.

Key activities that will begin immediately include supporting host communities in the north and Bekaa where a majority of refugees are located, with expansion to the south following soon afterwards. The Project will also emphasize replanting new highly demanded improved varieties for pome fruit, cherries, and grapes based on end market research and analysis. Small farmers will be assisted with their current crops in implementing good agriculture practices to increase quality and yields and linking them to buyers. Although the ultimate goal of the Project is to reach the poorest segments of the country in rural areas, the most effective and sustainable way to achieve this result is to integrate larger enterprises and commercial actors into the value chain. For example, grape exporters who have a virtually unlimited demand for high quality varieties in the U.K., as well as olive millers who can expand purchasing from small farmers to export olive oil for international markets.

The Gantt charts included as an attachment to the Work Plan illustrate that many of the activities will run simultaneously, however the priority projects within each value chain have been included in Section 2 below. LIVCD has identified the immediate steps to take and partners with whom to arrange co-financing, technical assistance, and other support in order to achieve immediate successes and create a foundation to build upon over the life of the project.

1.7 COORDINATION

USAID maintains a strong relationship with other multilateral and bilateral donors and continued coordination is important to LIVCD's efforts in all of the value chains. The Project will keep other donors informed about its activities, and collaborate to achieve common goals. LIVCD's coordination with other donors will minimize duplication and exploit opportunities to achieve synergies with other programs. The work of other donors in attaining policy, regulatory or legal reforms is of particular interest as LIVCD will not have direct contact with the Government of Lebanon.

A number of successful projects and initiatives have been completed by USAID in the past; while a number of complementary projects are current being implemented. LIVCD will leverage these beneficial activities and build upon the foundations in place, including work in agriculture, tourism, and access to financial services. In particular, coordination with USAID's Lebanon Investment in Microfinance (LIM) project, PACE, Expand Your Horizon, and Baladi Cap are priorities to leverage support and technical assistance.

SECTION 2.0 LIFE OF PROJECT VALUE CHAIN ACTIVITIES YEAR 1 AND 2

2.1 POME FRUIT (APPLES AND PEARS)

1. Snapshot (2010)

Pome Fruits Apples and Pears
Hectares: 15,500 total; Apples 13,500 and Pears 2,000
Production: 286,000 tons total: Apples 264,000 and Pears 22,000
Top four varieties:
<u>Apples</u>
<ul style="list-style-type: none">• Red delicious (Starking, Double Red, Top Seed, Scarlet, and Super Chief)• Golden delicious• Gala• Granny Smith
<u>Pears</u>
<ul style="list-style-type: none">• Coscia• Barlett• Passase• Crassane
Value of Production: \$84.5 million total; Apples \$77 million and Pears \$7.5 million
Exports: \$21.5 million total; Apples 88,077 tons valued at \$19.2 million (2012) and Pears 9,277 tons valued at \$2.3 million
Top three export markets:
<u>Apples</u>
<ol style="list-style-type: none">1) Egypt: 64%2) Saudi Arabia 9%3) Jordan 6%
<u>Pears</u>
<ol style="list-style-type: none">1) Saudi Arabia 24%2) Kuwait 15%3) Syria 13%
Number of farmers: Apples 10,000 and Pears 2,500
Number of farmers targeted life of project: 3,000
Average prices per kg:
Farm: \$0.33-\$1.00
Wholesale: \$1.00
Retail: \$2.00
Export: \$0.52
Main value chain actors:
Nurseries: 12
Foundations: 2
Wholesalers, Packers, Exporters, and Cold Storage operators work with a variety of different fruits and vegetables without specializing only in apples and pears

Priorities of the work plan:

- Immediate/ short term
 - Upgrade harvest and post-harvest practices, cold storage, and processing units
 - Improve production of existing orchards in terms of quantity and quality

- Long term
 - Increase production of varieties that have demand in high value markets
 - Create farmer service and reference centers
 - Develop IT tools for pest control and accounting
 - Promote certification for producers and processors

Priority communities: Akkar, Dennieh, Bcharreh, Batroun, Jbeil, Kesserwan, Chouf, Zahle, Baalbek, and Jezzine

Activities with scalability and replicability potential:

- Introduce new varieties, improved harvest and post-harvest practices
- Promote IT tools to farmers and seek partners to manage and sustain the technology

Activities with the potential to leverage additional funds from the private sector:

- Introduce new orchards with varieties that have demand in high value markets
 - Introduce new production techniques and drip irrigation
 - Upgrading cold storage, packing facilities, and small processing units
-

2. Background and Rationale

Apples

The apple value chain in Lebanon is relatively fragmented, particularly at the production and marketing levels. Total land planted in apples is approximately 13,500 ha according to 2011 FAO estimates. The average farm size is less than one hectare, and many apple farmers are engaged in a variety of additional income generating activities. Apple orchards are an attractive component of a diversified livelihood strategy since they require relatively low management and labor costs during the season compared to field crops. Lebanese apple production is modestly increasing. Unofficial 2012 estimates were around 264,000 tons. Farmers are adept at apple production and obtain yields that are high by international standards. There is strong domestic demand for fresh apples, as well as a strong and growing regional demand, with the fastest growing segment in the high quality higher priced new varieties. Estimates put Grade 1 apple production at 10- 15 percent of total production, which is mostly consumed domestically and receives higher prices, while traditionally the lower quality fruit has been exported. However, Grade 1 apples that are exported regionally to the Gulf markets do receive a premium. The largest destination of low quality apples is Egypt.

Recently, following the Syrian and the Egyptian crises, Lebanese producers and exporters were faced with new challenges; transportation by road to the Gulf was compromised because of security issues, while in Egypt where 85 percent of apple exports are sent, the sudden devaluation of the Egyptian pound decreased Lebanese exporters' revenues. Lebanon does not have sufficient production of Grade 1 apples to meet domestic demand, nor is there sufficient production of the right variety Grade 1 apples to satisfy demand of consumers in

export markets. Competitiveness is further constrained by high production costs from inefficient farming and post-harvest practices, such as over application of pesticides, inappropriate transport methods, inappropriate irrigation and fertigation techniques, and below-standard cold storage. As a result, high quality Lebanese apples are more expensive in export markets than competing products from the U.S. and South America. In addition, in the traditional export markets for low quality Lebanese produce, there is indeed demand for high quality product, however Lebanese exporters lack linkages to these high quality buyers and are further constrained by the poor reputation of Lebanese produce in these markets. As a result, despite high yields, and the fact that Lebanese farmers receive some of the highest farm-gate prices in the world, \$0.33 - \$1.00 per kg, many Lebanese apple farmers are still struggling to generate positive net income.

Pears

The Lebanese pear industry is small, with annual output estimated at around 22,000 tons. About 2,500 farmers produce on over 2,000 hectares of land. Ninety percent of pear production comes from small farmers with between three 0.3 ha and three ha of land planted with pears, and the remaining 10 percent is grown by large scale farmers. Overall, about 10-15 percent of total pear production, or 3,000 tons, is considered Grade 1. Like apples, pear orchards are an attractive component of a diversified livelihood strategy, as there are relatively low management costs during the season compared to field crops. Generally, Grade 1 pears are sold into the domestic market or exported to the Gulf while smaller pears are exported to Syria, Iraq, and Jordan. There is high demand for Grade 1 pears of all varieties, putting producers in a good position vis-à-vis buyers including supermarkets, wholesalers, and exporters, who compete for this product. There is also demand for Grade 2 and 3 pears, which comprise the vast majority of Lebanese production, for the regional export markets. Overall demand has increased due to a gap left in the market by sharp declines of Syrian pear exports that are also mostly Grade 2 and 3. Thus, there are a number of opportunities to increase sales of all qualities of Lebanese pears. However, poor production practices result in yields that are below international standards, and inefficient practices result in high production costs. The small size and poor organization in the sector makes achieving economies of scale difficult.

Lebanese producers and exporters were faced with the same new challenges as apple producers and exporters. Exports to the Gulf were made difficult because transportation by road to the Gulf was compromised, while in Egypt, where 75 percent of pear exports are sent, the devaluation of the Egyptian currency caused a sudden and large decrease in exporters' revenues.

3. Pome Fruit Value Chain Focus

LIVCD intends to work with 3,000 small and medium scale farmers and 20 companies and cooperatives to increase production of current varieties and adopt new varieties. Emphasis will be placed on increasing the quantity and quality of Grade 1 production. As apples and pears are grown over various parts of Lebanon, the project in the first and second year will focus support in the North, Bekaa, and Mount Lebanon, focused on areas where host communities

are suffering from high numbers of Syrian refugees. Also, LIVCD will promote the adoption of a set of new technologies, innovations, and best practices at the farm level including intensive production and use of dwarf varieties, especially for apples where production on trellises will be promoted along with netting to reduce climate impact. The Project will produce an interactive training curriculum illustrating fertility management, pruning, pest management, and timing of harvests in addition to IT tools to help farmers manage orchard pests and to more fully comprehend basic farm accounting.

Local service providers and extension agents connected with private businesses, NGOs, or cooperatives will be trained on best practices to extend and disseminate production information and inputs in order to assist farmers in improving their productivity and quality. At the processing and cold storage level, small processors and cold storage facilities will be linked to farmers and assisted to upgrade their facilities as well as in certification. The Project will also assess external markets to better understand demand and requirements so new markets can be entered and or existing markets sales increased through better grading, packing, and storage. Early investments in replanting and processing, linked to LIVCD's processed food value chain activities, will support long term impact and assist host communities in dire need of support in the Bekaa and the north.

Priorities for the pome fruit value chain include preparing demonstration plots in host communities for farmers to visit in order to understand the importance of applying good agricultural practices. LIVCD will also prepare the curriculum for intensive production and provide training to 500 trainers in the first two years and 3,000 over the life of the project. In addition, LIVCD will emphasize identifying traders who are interested in Grade 1 produce and subsequently work with participating farmers to increase the availability of higher value pome fruit to meet this demand.

4. End of Project Vision for Pome Fruit Value Chain

Value chain actors improve quality and increase yields by leveraging business development service (BDS) providers to address critical needs in the chain, and respond to the growing regional markets by developing the necessary contacts, linkages, trade and analytical capacity to react to export market opportunities. Processors are strengthened and have improved margins, while diversified market channels are available for producers. Appropriate investments are made in rural enterprises, production upgraded using IT and interactive training tools, and a more profitable production system in place where farmers are grouped around service centers working together to create economies of scale reducing production costs and increasing Grade 1 produce. Packing, cold storage, and small processing facilities upgraded to be more efficient in management and energy use as well as fulfilling the requirement of quality certification and a seal of quality. Overall, the value chain transforms into a competitive and profitable industry that dominates regional markets in terms of quality and value, offering good returns to participants, particularly those in host communities, and stimulating reinvestment.

5. Life of Project Strategy: Objectives and Results

Axis One: Respond to growing regional market by supporting Lebanese exporters to develop contacts, linkages, trade and analytical capacity to react to export market opportunities

- Expected results: Diverse and profitable sales channels for farmers, new markets accessed, and increased exports.

Axis Two: Increase efficiency of sorting, packing, and cooling facilities

- Expected results: Increased quality and quantity, modern agriculture practices implemented that promote efficient and profitable production.

Axis Three: Support and promote small and medium processing operations

- Expected results: Increased income for rural actors and additional investments.

Axis Four: Work with lead partners to oversee regionally specific programs on improved productivity

- Expected results: Production costs reduced, higher yields of more competitive products result in increased income, and proper varieties grown for domestic and export markets.

6. Activities

The table below summarizes key information about major pome fruit activities.

Axis 1	Respond to growing regional market by supporting Lebanese exporters to develop contacts, linkages, trade and analytical capacity to react to export market opportunities
Activity 1.1	Create business and market linkages between farmers, exporters and food processors
Activity 1.2	Support exporters to develop strategic linkages with export market in the GCC
Activity 1.3	Develop market analyses and provide training on market analyses and market identification
Activity 1.4	Facilitate and support actors adopting, upgrading, or establishing quality and origin seals and promote the seal locally and internationally; Identify a regulation body to implement the quality and safety seal
Axis 2	Increase efficiency of sorting, packing, and cooling facilities
Activity 2.1	Encourage investment in upgrading post-harvest units
Task 2.1.1	Facilitate increased investments and access to finance for upgrading sorting, packing, and cooling facilities through co-investments and PPPs where appropriate
Task 2.1.2	Introduce new cooling and precooling technology and provide training on energy efficient improvements

Task 2.1.3	Link post-harvest facilities to certified producers and promote the use of quality and origin certificates
Axis 3	Support and promote small and medium processing operations
Activity 3.1	Develop business linkages between producers and processors
Activity 3.2	Provide technical support in packaging, branding, and labeling
Task 3.2.1	Identify a variety of packaging including: jars, bottles, and cartons
Task 3.2.2	Encourage collective purchase of jars and packing materials
Activity 3.3	Support diversification in apple/pear processing such as fresh juice, mixed juice, fruit puree, concentrates, and molasses
Activity 3.4	Explore opportunities to upgrade production facilities
Task 3.4.1	Identify lead facilities
Task 3.4.2	Facilitate increased investments and access to finance for upgrading facilities through co-investments and PPPs where appropriate
Task 3.4.3	Provide training on energy efficiency improvements
Activity 3.5	Assist processing facilities to require need quality and origin certificates
Task 3.5.1	Identify training needs and trainers and conduct training on topics such as Global GAP and ISO
Activity 3.6	Link processors to appropriate financial institutions
Task 3.6.1	Facilitate increased investments and access to finance for processors through the processed food value chain activities, co-investments, government programs, and PPPs where appropriate
Axis 4	Work with lead partners to oversee regionally specific programs on improved productivity
Activity 4.1	Increase production of Grade "A" Apples/Pears
Task 4.1.1	Establish demonstration plots in major apple/pear production areas to illustrate examples of technological change: Dinnieh, Akkar, Becharreh, Tannourine, Aoura, Kessourwan, Maten, Chouf, Jezzine and Central, Western and North Bekaa
Task 4.1.2	Introduce new tree varieties into the established demonstration plots based on market demand, in addition to existing trees varieties through selected partners who will sustainably manage the demonstration plots and identify local and International experts in IPM for pome fruit orchards
Task 4.1.3	Introduce new tree varieties into the established demonstration plots- based on market demand
Task 4.1.4	Organize farmer study tours to established demonstration plots to observe the establishment and structure of the orchards
Activity 4.2	Increase accessibility to quality seedlings

Task 4.2.1	Support companies to increase production of virus free apple and pear seedlings
Task 4.2.2	Support the establishment of tissue culture functional labs through co-investments and PPPs where appropriate and identify competent organizations to manage the labs
Activity 4.3	Train Farmers on appropriate orchard management
Task 4.3.1	Develop training curriculum for farmers
Task 4.3.2	Conduct training on appropriate pruning for existing and newly introduced varieties, appropriate harvesting techniques and the usage of tools for best harvest timing (e.g. refractometer), and introduce irrigation and fertigation techniques
Task 4.3.3	Facilitate developing a phone application: "Agri App" to guide farmers on best agriculture practices and provide training for farmers, input providers, NGOs, and universities on using the application to determine who will manage the application and information on a commercial basis
Activity 4.4	Reduce climate impact on production quality and quantity
Task 4.4.1	Encourage the use of netting in dwarf trees orchards to protect trees from hail and frost
Task 4.4.2	Collaborate with LIVCD Access to Finance component to explore crop insurance in Lebanon
Activity 4.5	Reduce cost of production and create economies of scale
Task 4.5.1	Train farmers on team work, communication skills, and networking
Task 4.5.2	Support the establishment of producers groups around local integrated service centers that can be managed independently by farmers groups, NGOs, or integrated into packing and cooling facilities
Task 4.5.3	Facilitate developing a phone application: "Agrical" to guide farmers on best agriculture practices and provide training for farmers, input providers, NGOs, and universities on using the application to determine who will manage the application and information on a commercial basis

7. Science, Technology, and Innovation Projects

- 1) Utilize patented planting materials with farmers and seedling producers, support high technical tissue culture laboratory and acclimatization technology, and introduce innovative cultural and field management practices to farmers;
- 2) Use IT to create an innovative field guide for agriculture practices with the private sector;
- 3) Develop a mobile phone application to guide farmers on best agriculture practices;
- 4) Support upgrades of sorting, packing, and cooling facilities and introduce cooling and precooling technology.

2.2.1 STONE FRUIT (AVOCADOS)

1. Snapshot (2010)

Avocados
Hectares: 600
Production: 8,200 tons
Top 5 varieties: <ul style="list-style-type: none">• Pinkerton• Fuerte• Reed• Ettinger• Haas
Value of Production: \$13.7 Million (2012)
Exports: 618 tons; \$1.24 Million (2012)
Top 3 export markets: <ol style="list-style-type: none">1) Saudi Arabia: 44%2) Kuwait: 12%3) UAE: 7%
Number of farmers: Total: 4,186 commercial table grape farmers <ul style="list-style-type: none">• Small: 1-3 dunums: 3,278 farmers or 89% of total farms• Medium: 3-10 dunums: 314 farmers or 9% of total farms• Large: 10 dunums-100 dunums: 103 farmers or 3% of total farms• Extremely Large: More than 100 dunums: 5 farmers
Number of farmers to be targeted for the life of project: 1,000
Average table grape price per kg: <ul style="list-style-type: none">• Farm gate: \$0.50-\$2.00• Wholesale: \$1.00-\$4.00• Retail: \$2.50-\$5.00• Export: \$2.00 - \$3.00
Main value chain actors: <ul style="list-style-type: none">• Producers: 3,700• Wholesalers: 6• Retailers: Supermarkets, fruit cocktail shops, hotels and restaurants• Other VC actors: Hariri Foundation and Debbane nursery
Priorities of the work plan: <ul style="list-style-type: none">• Immediate/ short term<ul style="list-style-type: none">○ Identify local and international nurseries who can supply certified plants○ Provide training on improved production practices○ Increase production of existing orchards through investments in irrigation and improved planting material○ Upgrade cold storage facilities

- Long term
 - Increase production of varieties that have demand in high value markets
 - Create a Lebanese avocado brand

Priority communities: Saida, Nabatieh, Tyre (South Lebanon), Akkar (North Lebanon), and Tabarja (Mount Lebanon)

Activities with scalability and replicability potential:

- Introduction of new varieties using good agricultural practices
-

Activities with the potential to leverage additional funds from the private sector:

- Planting new orchards with varieties that have demand in high value markets
 - Introducing new production techniques, irrigation methods, harvest, and post-harvest technology
 - Creating a packing center for consolidation of all Lebanese production
-

2. Background and Rationale

The avocado value chain provides LIVCD an excellent opportunity to leverage private sector investment to significantly increase acreage and yields. Cultivated area increased 55 percent in the last six years, though it is still relatively small compared to other stone fruits (600 ha vs. 6,000 ha for cherries). Nursery owners approximate that 15,000 avocado seedlings are currently sold per year and expect these figures to remain consistent or increase in the future. This equates to 8.5 percent growth in cropped area per year. Wholesale traders expect large increases in supply in the coming years, and suggest that the domestic market may become saturated leading to a potential drop in prices if new markets are not opened. Lebanon has an excellent opportunity to increase its market share in the GCC and Europe. The GCC is a small yet growing market, while Europe is a large market, with potential for growth as per capita consumption in many countries is as low as 250 grams. In addition to these markets, Lebanon's existing olive oil pressing infrastructure can support avocado oil production, which has the potential to open new markets internationally and in Lebanon's vibrant health food and cosmetics sectors.

Production areas are owned by large landowners, with orchards larger than one hectare accounting for more than 50 percent of total cultivated area. The large landowners derive income from non-agricultural sources, tend to be environmentally conscious and interested in agriculture, and take pride in having trees as opposed to buildings, on their property. Many of these landowners rent the orchards to a handful of 'wood damans' that pay annual rent correlated to the productivity of the orchard. Rental contracts are usually six years, though at other times there are no rental contracts, simply a verbal agreement between the two parties. In some cases, the landowner will co-invest in the orchard with the 'wood daman'.

In total, 1,034 avocado farmers cultivate between 0.1 and 1 hectare of land. LIVCD has the potential to increase these farmers' incomes by improving production and post-harvest handling practices and linking them to new markets. Avocados provide ample opportunities to leverage private sector investment and enter into PPPs with rural enterprises engaged in olive milling and cosmetics manufacturing.

3. Avocado Value Chain Focus

LIVCD intends to build a model of organization and collaboration between producers, aggregators, millers and industrialists in Lebanon and facilitate the creation of a Lebanese brand of avocados with actors. LIVCD will work with small scale farmers- that constitute more than 89 percent of avocado growers- to renew existing orchards by supporting implementation of innovative agricultural practices such as adoption of drip-irrigation systems, pest management, and introduction of new varieties. Co-investments will be considered to increase production, and similar to other tree crops these investments will require immediate funding in order to ensure proper management and oversight during the life of the project.

Avocados are grown mainly on the coastal areas of Lebanon; the project in the first and second year will focus support on expanding the area of cultivation through selecting adequate varieties and new techniques. LIVCD will identify success stories and organize farmer field days to replicate and scale up successful models where the climatic conditions are adequate and soil content is conducive for avocado production. In addition, the Project will work on increasing the production through extension, trainings, PPPs, and co-investments. LIVCD will prioritize developing linkages between producers and aggregators, as well as between aggregators and exporters, while facilitating international technical expertise to develop a manual for a set of new technologies, varietal characteristics, and best agricultural practices, including though not limited to fertility management, irrigation system, and pest management. Finally, support will be provided to study the feasibility to develop a new line of processed avocados such as avocado oil and cosmetic products in conjunction with the processed food value chain activities and partners.

Efforts will be made in regards to focus on vulnerable social groups such as host communities, women, and youth. LIVCD will create linkages between different stakeholders, such as local communities, private sector, NGOs, and cooperatives. These linkages are essential for the successful implementation of the project. The Project will ease access to services such as development of small agricultural investment and business support, advice, and financing for youth and women. Youth will be included in the training of trainers' activities developed in the first few months of implementation. LIVCD will also promote utilizing science, technology and innovation in creating a Lebanese brand of avocados and through improved production practices tested in conjunction with universities and private sector partners.

4. End of Project Vision for Avocado Value Chain

The avocado industry becomes a model of organization and collaboration between producers, aggregators, millers, and industrialists in Lebanon and is recognized as a reliable and high quality source of fresh avocados, avocado oil, and avocado-based cosmetics. Lead farmers possess the capacity and skills in production, harvesting, and post-harvest handling supporting small and medium scale farmers that will be linked with aggregators, millers, and processors in order to access better markets. Investments are available to upgrade existing orchards, develop milling capabilities, and to promote avocado oil among cosmetics manufacturers.

Finally, exporters have actionable market intelligence and create linkages between producers, aggregators, and exporters.

5. Life of Project Strategy: Objectives and Results

Axis 1: Increase Exports to Select Markets

- Expected Results: Increase in volume of exports of targeted products, new export markets/distribution channels opened, and new commercial linkages.

Axis 2: Increase Quantity and Improve Quality of Avocado Production

- Expected Results: Improved avocado quality, profitable and marketable avocado investments.

Axis 3: Increase Avocado Processing

- Expected Results: New market potential and exports and increased revenues.

6. Activities

The table below summarizes key information about major avocado activities.

Axis 1	Increase exports to select markets
Activity 1.1	Facilitate access to market intelligence and analysis for value chain actors through private sector organizations
1.1.1	Facilitate research to determine grading standards for select markets
1.1.2	Develop supply, demand, and price analyses for individual markets; analysis on varietal demands, wholesale and retail prices, market trends, competing countries and their export windows
1.1.3	Facilitate commissioning studies in select markets in the EU and GCC to support private sector partners in gathering and sharing information with interested farmers
1.1.4	Develop marketing strategies for select markets with exporters
1.1.5	Facilitate dissemination of intelligence to stakeholders and seek a local partner to sustain the activity
Activity 1.2	Develop business and market linkages between growers and exporters
1.2.1	Identify and support producers, aggregators, and exporters to develop improved linkages
1.2.2	Match high quality growers with high quality exporters who have developed relationships with buyers willing to pay a premium for higher quality produce
Activity 1.3	Develop market linkages between exporters and importers
1.3.1	Identify importers and exporters and develop improved linkages
Activity 1.4	Facilitate support for developing promotional materials for Lebanese avocados

1.4.1	Complete stakeholder consultations with buyers and sellers to determine needs and use of promotional materials
1.4.2	Facilitate actors developing promotional materials to market their produce and provide them to linked growers, exporters, and importers; determine the viability of continued investment in promotional materials for interested actors
Axis 2	Increase quantity and improve quality of avocado production
Activity 2.1	Provide potential co-investors with advice on suitability, marketability, and profitability of planned avocado investments
2.1.1	Develop investment prospectus and feasibility study models and disseminate to interested investors
2.1.2	Assist potential investors with specific investment plans in order to improve access to finance through Project co-investment, banks, MFIs, or government programs like Kafalat
Activity 2.2	Training on improved production practices for better productivity
2.2.1	Assess current state of production and develop gap analysis on current best practices
2.2.2	Develop training/extension materials and provide training for enrolled producers
2.2.3	Link trained producers with other stakeholders as necessary
Activity 2.3	Organize fragmented producers into production clusters and link them to aggregators
2.3.1	Identify and enroll small producers and aggregators and match them with aggregators
2.3.2	Support investment in irrigation and improved planting material for small farmers
Axis 3	Increase avocado processing
Activity 3.1	Establish market for avocado oil with support from the private sector, universities, or subcontractors
3.1.1	Test existing milling capability and oil quality for various mill types and varieties
3.1.2	Develop technical data sheets for tested oil; if characteristics are appropriate then proceed with next steps in conjunction with the processed food value chain activities and resources
3.1.3	Create promotional materials for food/industrial grade oils
3.1.4	Create linkages between producers, aggregators, millers, and potential buyers
3.1.5	Establish effective and efficient communication channels between linked entities and foster partnerships that extend beyond the duration of the Project

7. Science, Technology, and Innovation Projects

- 1) Create a Lebanese brand for avocados;
- 2) Provide training on improved and new agriculture techniques and practices and develop new varieties of avocados.

2.2.2 STONE FRUIT (CHERRIES)

1. Snapshot 2011

Cherries
Hectares: 12,149
Production: 21,000 tons
Top 4 varieties: <ul style="list-style-type: none">• Pharaoune: 69%• Nouari: 13%• Mkahal or Aleb el Teir: 6%• Benni, Irani lyali: 12%
Value of Production: \$27.9 million
Exports: 7,177 tons (2012); \$9.5 million
Top 3 export markets: <ol style="list-style-type: none">1) Egypt: 37%2) Kuwait: 20%3) UAE: 17%
Number of farmers: Total: 9,500 <ul style="list-style-type: none">• 4,750 farmers or 50% with less than 1 dunum• 4,750 farmers or 50% with more than 1 dunum, of these farmers: 57% have 1-3 dunums; 27% from 3 to 10 dunums; 15% between 10 and 50 dunums and, 1% more than 50 dunums
Number of farmers to be targeted for the life of project: 1,000
Average table grape price per kg: <ul style="list-style-type: none">• Farm gate: \$0.30-\$2.50• Wholesale: \$0.30-\$6.70• Retail: \$0.30-\$7.50• Export: \$2.00 - \$3.00
Main value chain actors: <ul style="list-style-type: none">• Producers: 9,500• Wholesalers: 70% of cherries traded through Ferzol market's 45 stands• Processors: Jam factories• Packers/Exporters: 40 to 50• Retailers: Small and large neighborhood grocers and supermarkets• Other VC actors: Nurseries
Priorities of the work plan: <ul style="list-style-type: none">• Immediate/short term<ul style="list-style-type: none">○ Provide training on improved production and post-harvest handling practices○ Improve production of existing orchards through investments and introducing new varieties○ Create demonstration plots for early and late varieties○ Upgrade cold storage facilities

- Long term
 - Increase production of varieties that have demand in high value markets
 - Facilitate investment for cold storage facilities
 - Facilitate investment of new orchards duplicating newly applied techniques in the demonstration plots

Priority communities: Kfertay, Baskinta (Metn, Mount-Lebanon), Kferdabian (Kesrwan, Mount-Lebanon) Oyoun Orghosh (Baalbek, Bekaa), Qaa el Rim (Zahle, Bekaa), Tannourine and Ehden (North)

Activities with scalability and replicability potential:

- Introducing new production techniques, irrigation methods, harvest, and post-harvest practices

Activities with the potential to leverage additional funds from the private sector:

- Planting new orchards with varieties that have demand in high value markets
 - Introducing new production techniques, irrigation methods, harvest, and post-harvest practices
 - Upgrading cold storage and packing facilities to improve the cold chain
-

2. Background and Rationale

The fragile nature and short shelf life of sweet cherries creates risk at all levels of the value chain and limits the sales window to only three days from the time cherries are harvested to the time they are purchased by the end-consumer. Improved post-harvest handling practices including hydro-cooling can significantly increase shelf life up to 40 days, thereby reducing spoilage, increasing the producer's negotiating power in domestic markets, and creating new opportunities in export markets.

Typically in Lebanon, farmers tend to deliver their product individually to the wholesale market, with most deliveries under 250 kg. Aggregation occurs at the wholesale market since only a few damans and diversified packers handle cherries. The value chain is dominated by smallholders with more than 80 percent of individual orchards measuring less than 0.2 ha. However, these individually owned orchards are typically parcels that were once part of larger orchards that were divided as the land was passed down through generations by inheritance or sold in small plots. Currently, there is virtually no cooperation between farmers in terms of production or harvesting. Rivalry between producers of different families- or even within families- is a major constraint to developing a cooperative model between individual growers. An appropriate incentive scheme is required to organize these smallholder producers so that they can coalesce into a large production base and achieve economies of scale that could enhance the Lebanese cherry industry. Opportunities include extending the season and increasing marketing windows by organizing production of early, mid, and late season varieties, and investing in post-harvest handling and transport infrastructure that would facilitate access to more lucrative export markets in Europe.

Investment in orchard renewal and expansion are also limited; in fact, newer orchards are being uprooted due to diseases in the topsoil. There is very little sophistication among growers in production, harvesting, and post-harvest handling practices. Cherry producers are mostly poor, rural farmers, making this an excellent value chain for targeting a small, rural production base. Ersal, which is currently a conflict zone, includes concentrated cherry production that the World Bank estimates includes two million cherry trees. Ersal lies in the Ante-Lebanon Mountain chain along the border with Syria and continually witnesses intermittent violent conflict, both internal and related to the Syrian conflict. Although LIVCD will explore working in this area, presently due to the security situation it is not feasible.

Cherries offer great potential for increasing exports to non-traditional regional markets, with exporters suggesting that Lebanese prices are competitive in Europe and the Russian Federation. There is also possibly an opportunity to capture Syrian market share in the MENA region (especially GCC), and Iranian market share in the UAE in the short to medium term.

3. Cherry Value Chain Focus

LIVCD will work with small scale farmers - more than 50 percent of all cherry growers - to upgrade existing orchards by introducing innovative agricultural practices such as adoption of drip irrigation systems, efficient pruning techniques, and replanting new varieties. Targeted co-investments and PPPs will facilitate improving the quality and quantity of production and post-harvest facilities, such as pre-cooling and cold-storage. Cherries are grown in a variety of regions in Lebanon; the Project in the first and second year will prioritize focusing support on implementing demonstration plots for early and late varieties, respectively in Kfertay and Qaa el Rim. These models will then be scaled up and replicated in other locations where climatic conditions are adequate and soil structure is convenient for cherry production. Selected regions such as Zahle are highly affected by the Syrian crisis, and witness the highest number of registered refugees in Lebanon. LIVCD will support the host communities through sustainable agricultural development projects in order to reduce the socio-economic impact of the crisis. Significant early investments will be initiated in year one and two in order to provide the most effective returns over the life of the project since newly planted varieties will take at least three years to produce significant yields.

LIVCD will also work on upgrading existing cold storage and improving post-harvest practices through extension, trainings, and PPPs through co-investments. One immediate action is to develop linkages between producers and aggregators, as well as between aggregators and exporters. LIVCD will also provide international technical expertise to expeditiously develop a manual on new technologies and best agricultural practices. Regarding the market and marketing strategies, the Project will facilitate an assessment of external markets to study demand and requirements in order to select the most suitable variety demanded for export. Finally, LIVCD will support studying the feasibility of developing a new line of processed cherries such as dehydrated cherries and chocolate with cherries as high value added products in conjunction with the processed food value chain activities and partners.

Assistance will be targeted at vulnerable social groups such as host communities, women, and youth. LIVCD will create linkages between different stakeholders, such as local communities, private sector organizations, NGOs, foundations, and cooperatives. These linkages are essential for the successful implementation of the project. Strategies for accessing financial services will be shared with beneficiaries including seeking investment capital, business support, and other services for youth and women, both of whom will be included in the training of trainers' activities. Although, female participation in cherry production is currently low, it could be enhanced through special extension services and training related to production and post-harvest practices. Those activities are addressed as a means of improving the status of women's' participation in agricultural development of this value chain. Initiatives will also promote utilizing science, technology and innovation by introducing new cooling and precooling technology, developing new varieties with partners and international nurseries, and applying new techniques in demonstration plots for new varieties and harvesting techniques and tools for optimal harvesting time.

4. End of Project Vision for Cherry Value Chain

Inherent risk in the value chain is reduced through better organization resulting in Lebanon being recognized as a reliable and high quality source of sweet cherries by regional importers. The fragmented, rural production clusters that currently exist are transformed and utilize high quality extension materials to improve production, harvest, and post-harvest handling practices to create a prolonged marketing season. Investments in hydro-cooling and other post-harvest infrastructure required to extend product shelf life are readily available and sustainable linkages and information channels exist between production clusters, aggregators, exporters, and regionally based importers to reduce transaction costs. Finally, dehydrating and other processing technologies are utilized to generate additional domestic demand.

5. Life of Project Strategy: Objectives and Results

Axis 1: Increase Exports

- Expected Results: Increase in producer's income, grade A production, and exports.

Axis 2: Increase Efficiency of Sorting, Packing, Cooling and Processing Facilities

- Expected Results: Production costs reduced.

Axis 3: Increase Quantity and Quality of Cherry Production in Lebanon

- Expected Results: Sustainable trading linkages established between different actors in the value chain and new processed cherry products marketed.

6. Activities

The table below summarizes key information about major cherry activities

Axis 1	Increase exports
Activity 1.1	Develop an extensive market entry strategy
Task 1.1.1	Determine appropriate target markets and varieties for each market
Task 1.1.2	Determine appropriate timing for market entry
Activity 1.2	Conduct stakeholder meetings
Activity 1.3	Develop vertical market linkages to connect growers with exporters and processors
Axis 2	Increase efficiency of sorting, packing, cooling, and processing facilities
Activity 2.1	Facilitate support for upgrading post-harvest facilities in sorting, packing, and cooling
Task 2.1.1	Identify lead facilities and determine upgrades required
Activity 2.2	Train beneficiaries on energy efficiency improvements
Activity 2.3	Introduce new cooling and precooling technology
Activity 2.4	Link post-harvest facilities to certified producers
Task 2.4.1	Identify farmers to facilitate implementing certified IPM, Global GAP, and a quality seal
Activity 2.5	Assist post-harvest facilities to require traceability for products
Task 2.5.1	Identify training needs and trainers: Global GAP, ISO, and others
Activity 2.6	Link post-harvest facilities to appropriate financial institutions or other sources of financing and ancillary services for upgrading and potential new investments
Activity 2.7	Develop sustainable linkages between producers and processors through the processed food value chain activities and partners
Activity 2.8	Provide technical support in processing, packaging, branding, and labeling
Task 2.8.1	Identify a variety of packaging including: jars, bottles and cartons and encourage collective purchasing of these materials
Task 2.8.2	Support diversification in cherry processing: fresh juice, mixed juice, , vinegar, fruit puree, concentrate, molasses, and dried fruit in conjunction with the processed food value chain activities
Task 2.8.3	Develop new recipes for the products
Task 2.8.4	Promote the production of existing and newly developed recipes with market potential into production lines
Activity 2.9	Support in upgrading production facilities
Task 2.9.1	Identify lead facilities

Task 2.9.2	Explore potential for co-investments, PPPs, and access to loans from banks, MFIs, and government programs like Kafalat where appropriate
Task 2.9.3	Encourage investment in upgrading and adapted equipment
Activity 2.10	Assist processing facilities to require required quality and or origin certificates
Task 2.10.1	Identify training needs and trainers on GAP and ISO
Axis 3	Increase the quantity and quality of cherry production in Lebanon
Activity 3.1	Establish demonstration orchards in major cherry production areas (Dinnieh, Akkar, Tannourine, Akoura, Chouf, and Western Bekaa)
Activity 3.2	Introduce new tree varieties into the established demonstration plots based on market demand through selected partners who will manage the demonstration plots beyond the life of the Project
Task 3.2.1	Identify new varieties appropriate for local conditions (soil structure, weather, altitude, and water)
Task 3.2.2	Publish a production manual and disseminate results through extension services in collaboration with universities
Activity 3.3	Organize farmer study tours to demonstration plots to see the establishment and structure of the orchards
Task 3.3.1	Increase accessibility to quality seedlings for interested farmers
Task 3.3.2	Train farmers on appropriate orchard management
Activity3.4	Develop training curriculum and conduct training on irrigation and fertigation techniques, appropriate pruning for existing and newly introduced varieties, and appropriate harvesting techniques
Task 3.4.1	Disseminate training to farmers based on the manual

7. Science, Technology, and Innovation Projects

- 1) Introduce new cooling and precooling technology;
- 2) Develop new varieties of cherries with partners and international nurseries;
- 3) Upgrade production facilities using new technologies;
- 4) Apply new techniques in demonstration plots and train farmers on new pruning techniques for new varieties and techniques and tools for optimal harvesting time.

2.3 GRAPES

1. Snapshot (2010)

Grapes
Hectares: 12,149; table grapes 6,484; processing grapes including wine and arak 5,665
Production: 107,246 tons; commercial table grapes 90,246; processing grapes 17,000
Top 5 varieties: <ol style="list-style-type: none">1) Tfeifihi: 39%2) Baytamouni: 24%3) Red Globe: 10%4) Maghdoushi: 7%5) Maksissi: 3%
Value of Production: \$106 Million
Exports: 55,000 tons; \$82.5 Million
Top 3 export markets: <ol style="list-style-type: none">4) Saudi Arabia: 44%5) Sudan: 12%6) Syria: 7%
Number of farmers: 15,758, including 4,186 commercially growing table grapes <ul style="list-style-type: none">• Small: 3-15 dunums: 80% of total farms• Medium: 16-70 dunums: 17% of total farms• Large: More than 70 dunums: 2% of total farms
Number of farmers to be targeted for the life of project: 1,000
Average table grape price per kg: <ul style="list-style-type: none">• Farm gate: \$0.53-\$1.70• Wholesale: \$0.70-\$2.21• Retail: \$0.80-\$4.50• Export: \$0.85 - \$5.00
Main value chain actors: <ul style="list-style-type: none">• Producers: According to the 2010 MoA survey, 24,267 farmers grow table grapes. Of these farmers, 4,186 cultivate at least 0.3 hectares of grapes and are considered commercial grape farmers.• Aggregators: Production from small and medium farms is aggregated by dammans• Wholesalers: There are seven main wholesale markets in Lebanon. The most important market for grapes is the Ferzol market, which is located in the Bekaa, and specializes in grapes and cherries. Over 80 percent of all grapes for the domestic market pass through the Ferzol market.• Processors of table grapes: main processing of table grapes is limited to vinegar and grape molasses. Packers/Exporters: There are 12 major table grape packer/exporters• Retailers: 22,124 grocery stores and 1,085 supermarkets.

Priorities of the work plan:

- Immediate/short term
 - Replant higher value varieties in conjunction with marketing to high value markets with known demand
 - Upgrade harvest and post-harvest practices and cold storage facilities
 - Improve production of existing orchards

- Long term
 - Increase production of varieties that have demand in high value markets
 - Facilitate higher level of integration within the value chain

Priority communities: Central, North, and South Bekaa and the South of Lebanon

Activities with scalability and replicability potential:

- Introducing new varieties, improved, harvest, and post-harvest practices

Activities with the potential to leverage additional funds from the private sector:

- Planting new orchards with varieties that have demand in high value markets
 - Introducing new production techniques, irrigation methods, harvest, and post-harvest methodologies
 - Upgrading cold storage and packing facilities to improve the cold chain
-

2. Background and Rationale

Grapes are one of Lebanon's most important agricultural products with over 107,000 tons of table and processing grapes produced annually valued at \$106 million. There are 15,758 grape farms, including 4,197 commercial farms that employ 15,812 full time production workers, making grape production one of the largest agricultural employers. Lebanese grapes are a high value product that receives premium prices in domestic, Gulf, and other Arab markets.

The majority of commercial table grape production, about 55-65 percent, is exported, mostly to GCC and other Arab countries. Grapes for export are grown by medium and large-scale producers. A small cohort of Lebanese grape producers have achieved production standards sufficient to export to high value European markets, although total exports to Europe are still very small. These exporters have some degree of vertical integration, can control grape production, and can guarantee quality. In general, most grapes grown in Lebanon, whether for local consumption or for export are not produced or packed according to the standards required either by European buyers or high quality buyers in the region.

While large scale commercial operations serve export markets, the domestic market is served predominantly by small and medium scale grape farmers. The technical capacity of farmers tends to decline in relation to farm size. Smaller farmers do not follow production and post-harvest practices that would allow them to produce the quality of grapes for which demand is the strongest in both Europe and regionally. One problem that farmers face is access to irrigation water, as they place heavy reliance on groundwater that is drawn using water pumps that run on relatively expensive diesel fuel. However, the most common problem is that most

growers have no access to pre-cooling and modern cold storage facilities and during the peak season grapes sit out under the hot sun where they rapidly lose quality and storage potential. To access retail and urban wholesale outlets in Lebanon, the majority of grapes for domestic consumption flow through the Ferzol wholesale market that is a focal point of the grape value chain.

Wholesale prices of grapes are below production costs during the peak production period of August and September, and during periods when farmers are unable to ship to GCC via land due to the closure of Lebanon's border with Syria, which has occurred with high frequency since the Syrian crisis started. In order to maintain domestic prices that cover production costs for small and medium sized farmers, Lebanon must improve cold storage practices to extend shelf life and increase exports to absorb peak production when the borders with Syria are closed. Exports to European markets are shipped via sea, and are therefore not affected by the closure of the Syrian borders. In recent years, there has been a growing trend to plant new varieties that are in high demand in local and export markets. Additionally, grape production is expanding into new non-traditional areas such as the extreme north of the Bekaa Valley and deep in the south of the country. The expansion into the south is important in extending the export window for Lebanese grapes. All these factors help farmers capitalize on higher prices in domestic and international markets.

Major opportunities for the grape value chain include improving market linkages and technical practices that will increase grape exports to high value GCC and EU markets. LIVCD will work with small and medium scale farmers to introduce new innovations and technologies in production, harvest, and post-harvest practices including access to modern cold storage facilities, and will educate farmers and other value chain actors on new markets, varieties, market windows, and market requirements in terms of consumer expectations of quality, size, and color. As quality improves, LIVCD can link grape cooperatives and other small and medium scale informal groups of farmers to exporters who have already established relationships in the international markets. These interventions will improve the sophistication of Lebanese grape growers and improve competition and prices for Lebanese farmers in both domestic and international markets.

3. Grape Value Chain Focus

LIVCD aims to upgrade the value chain by improving the performance of small and medium farmers through the introduction of new technologies in production, pest management, harvest, and post-harvest practices. In addition, efforts will focus on increasing the volume of grapes reaching high value markets through increasing availability of market-demanded varieties, expanding the harvest calendar, and improving the quality of grapes. LIVCD intends to work with 1,000 small and medium scale farmers and at least 10 companies and cooperatives to improve production practices and to increase production of varieties demanded by high value markets. As grapes are grown over various parts of Lebanon, the project in the first and second year will prioritize focusing support for table grapes in Ferzol, Qaa, and Zahle, which are host communities as well Marjeyoun which itself is turning into a host community. Significant early

investments will be initiated in order to provide the most effective returns over the life of the project since newly planted varieties will take at least three years to produce significant yields.

The project will also promote the adoption of new science, technology, and innovations in establishing best practices at the farm level that include irrigation methodologies that conserve water, pruning, and pest management that insures safe practices and compliance with end-market requirements. Also, LIVCD will promote environmentally friendly new technologies in precooling and cold storage.

Local service providers and extension agents connected with private businesses or cooperatives will be trained on best practices to extend and disseminate production information and inputs in order to better service farmers in improving their productivity and quality of grapes. For example, farmers will be trained on how best to harvest and pack their grapes for transporting to cooling stages or markets for sale in order to reduce spoilage and waste. At the marketing stage, the project will facilitate assessing external markets to better understand demand and requirements to access new markets or existing markets resulting in increased sales through better grading, packing, and storage.

Grapes grown for processing cover approximately 47 percent of grape-cultivated area, with wine and arak being the major finished products. In 2010 Lebanese wineries produced over 6 million bottles of wine with an industry value of \$26 million. The Lebanese wine industry has seen steady growth in the last 15 years creating strong demand for wine grapes that are typically grown in arid areas. In addition to helping LIVCD achieve project goals, wine grapes and wine are one of the few alternative agriculture products that can compete with illicit crops in terms of income generated for growers. Also, illicit crops are grown on marginal land that cannot support most crops- wine grapes are one of the few alternative crops that can be grown on marginal and water poor land. Many farmers who grow on marginal land are some of the poorest in the country. Wine grapes will improve opportunities to partner with local private sector companies to implement activities and make investments in the grape value chain that have the potential to compete in regional and international markets. Supporting wine grapes will increase income for the rural population as well as assisting businesses including: farmers, industrial workers, agro-processors, input suppliers, service providers, retailers, and exporters involved in rural wealth creation. Due to its importance and the economic opportunities that can be created in rural areas that have limited sources of income, the project will explore working in host communities with an emphasis in the Bekaa where a vast majority of vineyards are located and the majority of Syrian refugees are located. Efforts supported in wine grapes will be made in conjunction with the processed food value chain that can also support grape jams, juices, molasses, and raisins.

4. End of Project Vision for the Grape Value Chain

The grape value chain is more tightly integrated with greater volumes of grapes flowing to higher quality export markets, and includes a greater number of small farmers benefiting from improved linkages between lead farmers, cooperatives, other informal farmer groups, and

exporters. Financing and co-financing packages through PPPs support investments in production in conjunction with exporters or other buyers and financial service providers. The following are also apparent in the grape value chain: Wide diffusion of new table grape varieties, especially among small and medium scale farmers; greater traceability from input suppliers to exporters and domestic retailers and documented levels of pesticide residues that meet international standards; improved production, harvest, and post-harvest practices; more investment in packing houses and cold storage facilities; improved packaging to meet buyers' and consumers' expectations; and increased purchase of processing grapes from small farmers in host communities.

5. Life of Project Strategy: Objectives and Results

Axis 1: Determine high value target markets, varieties, market requirements, and support farmers and exporters in entering these markets

- Expected Results: Products meet GAP requirements and are exported, private sector investment in new varieties, and new jobs created.

Axis 2: Improve vertical and horizontal linkages across the value chain

- Expected Results: Farmers, exporters, and packers exchange a large volume of products and farmers utilize improved production practices.

Axis 3: Increase sales to high value markets by working with farmers and packers/exporters to extend the shelf life of grapes through improved harvest, handling, and packaging

- Expected Results: Higher quality products and increased sales to high value markets.

6. Activities

The table below summarizes key information about major grape activities.

Axis 1	Determine high value target markets, varieties, market requirements, and support farmers and exporters in entering these markets
Activity 1.1	Determine appropriate target markets
Task 1.1.1	Identify target markets: Facilitate studying the different potential markets including all European countries, GCC, Sudan, and Asian markets, especially those that have already been successfully accessed by pioneer vertically integrated exporters and packers
Task 1.1.2	Identify within target markets, existing trade channels and consumer/shopper trends
Task 1.1.3	Identify regulatory requirements and market barriers for entry
Activity 1.2	Determine appropriate varieties for the selected target markets that can successfully be grown in Lebanon

Task 1.2.1	In the identified target markets, examine consumer demand for the different varieties of grapes, wholesale and retail prices, market trends, competing countries and their export windows
Task 1.2.2	Ascertain the suitability of potential varieties within the different microclimates of Lebanon and how the harvest calendar matches targeted markets
Activity 1.3	Collaborate with the private sector and create PPPs to increase availability of varieties that have demand in high value markets in the appropriate regions
Task 1.3.1	Solicit proposals and gauge interest from private sector companies to facilitate co-investments using the most appropriate mechanisms
Task 1.3.2	Provide business development services (BDS) to farmers in order to improve operations and add value to products
Task 1.3.3	Collaborate with the Lebanon Investment in Microfinance (LIM) Project and other financial service providers to support farmers in accessing finance to upgrade their facilities utilizing bank loans, Kafalat, microfinance, or other products
Task 1.3.4	Facilitate finance for new varieties in new plots and/or replacement of old varieties, ensuring supply of certified new varieties
Activity 1.4	Insure compliance with good agricultural practices
Task 1.4.1	Perform gap analysis to determine needs of each farm in terms of training, staffing, and facilities to implement Global GAP
Task 1.4.2	In collaboration with exporters and packers, select farms that are candidates for Global GAP certification based on market requirements and select private sector companies to provide farmers with Global GAP training
Task 1.4.3	In collaboration with selected companies, train farmers on proper production practices once vines have been planted and verify that proper practices are being implemented; Oversee implementation of Global GAP up to the pre-audit and final certification audit for qualified farmers
Task 1.4.4	Working with private sector companies and USAID projects such as Farmer to Farmer (FTF), train farmers on improved agriculture practices
Task 1.4.5	Explore co-financing alternatives necessary for farm upgrades through PPPs as appropriate with exporters, packers, and wholesalers and facilitate co-financing for pack house upgrades, including PPPs with exporters where appropriate
Axis 2	Improve vertical and horizontal linkages across the value chain
Activity 2.1	Develop improved vertical linkages between farmers and packers/exporters through collaboration with the private sector to upgrade skills of small and medium scale farmers
Task 2.1.1	Identify small and medium scale farmers organized within cooperatives or

	informal groups that are interested in working with packers/exporters, and local retailers and link them through lead farmers to exporters/packers
Task 2.1.2	Formalize collaboration between farmers, input suppliers, and exporters through contracts and agreements
Task 2.1.3	Improve production and harvesting practices by facilitating training for farmers and foremen of harvesting crews on proper production and harvesting procedures following quality protocols established by the packer/exporter
Activity 2.2	Spur the development of improved horizontal linkages among small and medium farmers
Task 2.2.1	Support small farmers who are committed to working together in formalizing their cooperation through a cooperative or informal farmer groups, or by working through a lead farmer; Hold sessions to show the benefits and challenges of cooperatives and advise interested farmers on obtaining legal recognition
Task 2.2.2	Strengthen existing and newly formed cooperatives and informal farmer groups; provide training on developing the needed internal bylaws, financial planning, and business planning
Task 2.2.3	Provide training to cooperative members and informal farmer groups in proper agricultural practices
Task 2.2.4	Assist coops and informal farmer groups to access external sources of financing
Task 2.2.5	Assist coops and informal farmer groups in developing marketing structures to obtain a higher value for domestic market sales
Activity 2.3	Encourage the adoption of improved production practices
Task 2.3.1	Collaborate with private sector companies and other USAID projects, such as FTF, to provide extension services to farmers in order to increase yields and attain higher quality produce
Task 2.3.2	Through PPPs where possible, support procurement of needed equipment for production upgrading
Task 2.3.3	Collaborate with private sector and/or universities to help farmers implement improved production methodologies
Activity 2.4	Link farmers with processors
Task 2.4.1	Collaborate with processors to develop new products such as frozen grapes and chocolate covered raisins, support farmers to improve efficiency of all products, and link farmers to cooperatives or businesses that are capable to support them
Axis 3	Increase sales to high value markets by working with farmers and packers/exporters to extend the shelf life of grapes through improved harvest, handling, and packaging

Task 3.3.1	Facilitate improvements in harvesting and post-harvest practices to increase the value of production and increase the number of higher quality grapes produced
Task 3.3.2	Facilitate co-investments in precooling and cold storage facilities- including vehicles- through PPPs where feasible, and provide training on energy efficiency improvements
Task 3.3.3	Assist in designing improved packaging for export grapes
Task 3.3.4	Train packers on best cold storage practices

7. Science, Technology, and Innovation Projects

- 1) Determine high value target markets, varieties, market requirements, create market-entry strategy, and support farmers and exporters in entering these markets;
- 2) Collaborate with universities to encourage the adoption of improved production practices, support purchase of needed equipment, and develop and implement improved production methodologies;
- 3) Increase sales to high value markets, working with farmers and packers/exporters to extend the shelf life of grapes through improved harvest, handling, and packaging and co-invest in precooling and cold storage facilities.

2.4 OLIVE OIL

1. Snapshot (2010)

Olive Oil
Hectares: Total of 55,000
Production: 100,000 tons of olives, 15,400 tons of oil: Olive oil is processed from 70,000 tons of olives converted into approximately 15,400 tons of oil, while table olives and waste make up approximately 30,000 tons.
Top five varieties: <ol style="list-style-type: none">1) Souri: 40%2) Aayrouni: 20%3) Teliani: 20%4) Baladi: 5%5) Nabali: 5%
The most common variety in the North is Aayrouni and in the South is Souri
Value of production: \$60 million
Exports: 3,201 tons of oil totaling \$13.5 million (2011)
Top three export markets: <ol style="list-style-type: none">1) U.S.: 24%2) UAE: 14%3) Canada: 13%
Number of farmers: 103,107 <ul style="list-style-type: none">• Small: 1-5 dunums: 79,253 farmers or 77%• Medium: 6-100 dunums: 14,194 farmers or 14%• Large: More than 100 dunums: 9,660 farmers or 9%
Number of farmers targeted for the Life of Project: 4,000 farmers
Average prices per kg: <ul style="list-style-type: none">• Farm (olives): \$0.40-\$1.40• Wholesale (oil): \$2.50-\$3.33• Retail (oil): \$3.00-\$9.00• Export (oil): \$3.00-\$5.80
Main value chain actors: <ul style="list-style-type: none">• Farmers: 103,107• Mills: 348 owned by the private sector, 38 owned by cooperatives• Fully integrated medium/large bottlers: 5• Commercial exporters/bottlers: 15• Brand owners/exporter with or without bottling operations: 40• Other VC actors: Local and international NGOs: 5

Priorities of the work plan:

- Immediate/short term
 - Gather market intelligence and analysis of key target markets for exports
 - Design promotional support to be offered and a marketing strategy to increase olive oil exports
 - Survey and upgrade quality focused olive mills and storage centers

- Long term
 - Adopt seal of quality and enroll Lebanese bottlers in the program
 - Facilitate investments at the milling and storage level to upgrade processing facilities and improve the quality of oil produced
 - Increase olive orchard productivity utilizing training and technical assistance through the establishment of service production centers

Priority communities: Zgharta, Koura, Jezzine, Hasbaiya, Akkar, Marjayoun, and Rachaiya

Activities with scalability and replicability potential:

- Adoption of seal of quality by bottlers
- Upgrade of olive mills and collection and storage centers
- Establish service production centers including trainings and technical support

Activities with the potential to leverage additional funds from the private sector:

- Upgrading of milling and bottling lines at the producer level
 - Upgrading operations in order to acquire seal of quality
 - Promotional support to increase exports
-

2. Background and Rationale

Olive production covers over 20 percent of agricultural land in Lebanon, and accounts for over seven percent of agricultural GDP. Olive production and processing occur in all regions of Lebanon, though it is mostly concentrated in the north, south, and Mount Lebanon, with areas in the north and Mount Lebanon particularly, hosting a high concentration of Syrian refugees. The vast majority of olive producers operate with very small plots of land- under five dunums, although there are a few producers who grow on large tracts of land. Many olive orchards are not actually managed by the land owners, who often live in urban areas, but by specialist 'wood damans' who oversee olive production and harvesting in return for payment in processed oil or cash from the landowners. A significant amount of the larger plots of land cultivating olives belong to monasteries or expatriates living abroad who have long-term relationships with wood damans. Despite the proven advantages of irrigated olive orchards, ninety five percent of olive farms are rain fed due to the high cost of installing irrigation networks and difficulty in accessing water.

Olive oil milling is conducted mostly by small-scale mills in the zones of production. These include both traditional mills and an increasing number of upgraded facilities using modern technology. The major difference between the equipment and facilities is that traditional mills extract oil with hydraulic pressing that produces a cloudy, opaque oil that is in high demand in Lebanon, despite its lower quality as determined by international standards, while modern mills

use horizontal centrifuges to produce more transparent oil that results in superior performance in separating water and solid matter. Modern mills with their greater mechanization are also less labor intensive.

Lebanon's high cost of olive production has negative consequences for its competitiveness in international markets. To compensate for this constraint, Lebanon imports inexpensive oil from Syria, where the cost of production is much lower. Since the onset of the Syrian crisis in 2010, stakeholders have reported an unprecedented volume of Syrian oil imports flowing into the Lebanese market that is reducing the demand for Lebanese oil and placing downward pressure on prices in some market channels. This trend has profited bottlers, who mix lower priced Syrian oil with Lebanese oil to reduce costs and sell into both domestic and international markets. Lebanon does not impose any traceability or labeling requirements with regards to origin, making it easier to blend oil imported from abroad that may be lower quality.

Lebanese producers benefit from high levels of protection, including a 70 percent tariff on European imports of olive oil which will remain in force for the foreseeable future, protecting Lebanese producers from European imports. In addition, the country maintains free trade with Greater Arab Free Trade Agreement (GAFTA) countries. Lebanon exports over \$13.5 million of olive oil, mostly to GCC countries and countries with a large Lebanese diaspora such as the U.S., Canada, and Australia.

The donor community has made substantial investments in upgrading milling equipment within the olive value chain, and more recently, the Ministry of Agriculture (MoA) has been developing programs to improve technical extension and farmer registration. Despite these efforts, many farmers lack awareness of efficient olive production techniques. Systems for ensuring quality testing and traceability of oil are not widely available. In fact, Lebanese consumers do not have a high awareness of the main international olive oil quality standards or product origins, which minimizes the incentives for farmers and processors to improve their practices.

Despite the complexity of the olive oil value chain there are a few meaningful ways LIVCD can engage with stakeholders to improve productivity and sales. LIVCD can work with bottlers and brands, both large scale and artisanal, to strengthen market linkages in key export markets, creating strategies to stimulate demand while also pushing more Lebanese olive oil into this high value channel. The Project can also facilitate creating a new label or promoting the use of existing origin labels and quality seals that are not being used to increase returns to producers and processors of high quality olive oil that is purely Lebanese. This label will be owned or hosted in a quality control and certification company such As Bureau Veritas or other suitable company. The seal will increase consumer confidence in bottled oil and support a price premium for certified Lebanese oil. With higher volumes of exports and a more robust domestic retail market for olive oil, producers and millers will be incentivized to improve practices and storage capacity, improving the overall quality and increasing sales throughout the value chain.

3. Olive Oil Value Chain Focus

LIVCD interventions in the olive oil value chain aim to expand the sales of branded and bottled Lebanese olive oil in the domestic and export markets, and provide support for improved milling, storage and production to olive growers. Project activities will be focused on olive concentrated areas in the North of Lebanon that are high affected by the influx of Syrian refugees host communities and will also target the South of Lebanon. The disruption of Syrian olive oil export sales channels due to the political and economic sanctions imposed on the country since the onset of the crisis has had a severely negative impact on the sales and marketing of Lebanese olive oil. The absence of Syrian export channels is causing a market flood and dumping of very cheap and lower quality Syrian oil in the Lebanese market, which is negatively affecting Lebanese olive growers that are not able to compete with the cheaper products at the domestic level. Large proportions of this oil are also being bottled and re-exported under Lebanese labels, which is reducing even further Lebanese olive oil share in export markets.

Immediate priorities for LIVCD include facilitating improvements at the olive milling and storage stage in order to upgrade existing equipment and milling practices and standards to increase high quality oil production. Also, farmers and damans will be trained on improved agricultural practices including orchard management and harvesting techniques in order to optimize land productivity. These changes will result in a stronger, more modern sector with improved linkages between growers, processors and markets resulting in more stable incomes for all actors and increased employment opportunities. To foster these results, LIVCD will facilitate the development of a new, or use an existing, quality seal to be adopted by olive oil bottlers in order to create marketing incentives for high quality Lebanese olive oil. It is expected that a group consisting of three to five bottlers will first adopt the seal program and pave the way for a greater number of adopters in upcoming years to increase access to markets. The Project will also analyze and study potential export markets in order to understand product requirements and price levels needed to expand export linkages. Activities will harmonize with LIVCD's processed food value chain efforts.

Initiatives will also concentrate on facilitating increased investments in up to 20 quality-focused mills to produce greater volumes and percentages of high quality, extra virgin olive oil through improved standardization of olive milling and storage. These technological and management enhancements are expected to positively impact up to 4,000 small and medium growers by increasing the quality of oil produced and stored. Other innovations include linking service centers with universities or agricultural schools to offer practical scientific training in olive production to students.

Finally, LIVCD will support training and technical assistance for up to 400 farmers to improve their field and agricultural practices in order to decrease the cost of production and improve orchard productivity through establishing production service centers. Agricultural students and oleiculture researchers will also be linked with these centers to provide hands-on practical experience and opportunities.

All of the proposed activities for the olive oil value chain require immediate investment in training, supporting upgrading of milling and bottling lines at the producer level, upgrading operations to acquire the seal of quality, promotional support, and market analysis. By making strategic co-investments and supporting PPPs in the first two years, LIVCD will realize a greater return on investment and an increase in reaching indicator targets in the value chain that impacts the greatest number of beneficiaries in host communities.

4. End of Project Vision for Olive Oil Value Chain

An increase in consumption and sales of Lebanese olive oil domestically and internationally achieved through the adoption of new labeling schemes certifying quality and origin. Promotional and advertising campaigns raise awareness of the attributes of the seal accompanying the launch and usage of such labels- leading to improved market conditions that raise the volume of Lebanese olive oil sold into both the domestic bottled and branded export market segments. This increase in demand for higher-quality Lebanese oil from commercial actors subject to international norms strengthens vertical linkages between growers, mills, and bottlers. These linkages are centered on more efficient milling and storage options, along with the creation of service centers to offer improved production techniques to farmers. Farmers from Syrian host communities are able to sell their production surpluses into the growing higher priced market channel and benefit from the increased demand for Lebanese oil that meets international quality standards. Producers, both farmers and wood damans, who adopt the new productivity enhancing technologies also benefit from increased revenue along with millers and bottlers.

5. Life of Project Strategy: Objectives and Results

Axis One: Create new market incentives favoring Lebanese olive oil through the use of a seal of quality and origin

- Expected results: New and increased distribution channels and seal as a marketing tool.

Axis Two: Facilitate increased investments and improvements in quality of olive oil through improved standardization of olive milling and storage

- Expected results: Improved oil quality along with longer storability and availability.

Axis Three: Improve olive tree productivity

- Expected results: Improved orchard productivity and decreased cost of production.

6. Activities

The table below summarizes key information about major olive oil activities.

Axis 1	Create new market incentives favoring Lebanese olive oil through the use of a seal of quality and origin
Activity 1.1	Hold stakeholder consultations to create consensus on a labeling strategy and facilitate stakeholders' acquisition of established/adopted labeling scheme
Task 1.1.1	Facilitate meetings and workshops with appropriate public sector actors and selected key stakeholders to agree on a unified vision for possible olive oil labeling and certification and review previous work and similar certification programs; Identify a regulation body to implement the quality and safety seal (quality control company)
Task 1.1.2	Enroll key stakeholders "first movers" in the seal scheme
Activity 1.2	Facilitate the launch of a promotional campaign in key markets overseas and domestically to increase sales of Lebanese olive oil
Task 1.2.1	Support partners to gather market intelligence and analysis of key target markets and design promotional support and a marketing strategy to increase olive oil exports
Task 1.2.2	Facilitate increased access to markets through providing marketing and promotional support to increase sales of Lebanese olive oil at the domestic and export level
Task 1.2.3	Facilitate creating a communication campaign to promote Lebanese olive oil domestically and increase olive oil consumption per capita
Task 1.2.4	Facilitate the establishment of tasting panels with universities or other institutions
Task 1.2.5	Support participation of bottlers and exporters of high quality Lebanese olive oil at trade shows
Task 1.2.6	Provide assistance in marketing the Lebanese tourism and food industry together with LIVCD Rural Tourism value chain activities (eco-tourism, visits to mills during harvest and milling season)
Task 1.2.7	Identify, enroll, and organize business and ancillary service providers to participate in the project and deliver services to bottlers and brand owners especially at the marketing and distribution level
Axis 2	Facilitate increased investments and improvements in quality of olive oil through improved standardization of olive milling and storage
Activity 2.1	Support improvements in processing at mills
Task 2.1.1	Identify quality focused mills and assess gaps in order to develop a plan to address gaps and potential improvements to increase extra virgin output

Task 2.1.2	Establish vertical linkages between improved mills and medium to large scale farmers and bottlers
Activity 2.2	Facilitate identifying and supporting centers for improved olive oil storage and collection
Task 2.2.1	Identify potential olive oil collection and storage centers
Task 2.2.2	Build capacity of identified centers and support them with business planning, training, technical assistance, co-financing, and access to financial services through banks, MFIs, government programs such as Kafalat, or other sources
Task 2.2.3	Build capacity and improve storage and collection facilities including lab testing capabilities (including ISO, HACCP, GMP, and others)
Task 2.2.4	Facilitate vertical linkages with farmers and bottlers to improve efficiency
Axis 3	Improve olive oil productivity
Activity 3.1	Facilitate support for local production service centers to improve olive tree productivity
Task 3.1.1	Identify potential local production centers in high density olive planting areas and determine gaps in service and develop upgrading strategies
Task 3.1.2	Assist potential centers with business planning, operational modeling, and institutional capacity building
Task 3.1.3	Facilitate increased investments for improvements needed at the centers
Task 3.1.4	Facilitate and support linkages between service centers and other key stakeholders of the value chain (input providers, universities, millers)
Task 3.1.5	Facilitate extension services and financial management support: provide technical assistance to olive producers in production practices and appropriate use of inputs, improved product quality, farm accounting, and traceability
Task 3.1.6	Establish demonstration fields through the center
Activity 3.2	Link the service centers with universities or agricultural training schools to offer practical training on olive production to students
Task 3.2.1	Design and produce communication tools (brochures, online presence) for centers
Task 3.2.2	Develop internship and collaborative programs between centers and agricultural departments at universities in Lebanon to increase students' awareness and interest in oleiculture

7. Science, Technology, and Innovation Projects

- 1) Create and adopt a seal of quality labeling strategy and facilitate stakeholders acquisition of the adopted scheme;
- 2) Support improvements of olive mills by providing technological upgrades for milling and storage and bottling equipment;
- 3) Link service centers with university or agricultural training schools to offer practical scientific training in olive production to students.

2.5 FLORICULTURE

1. Snapshot (2011)

Floriculture
Hectares: 288 ha (2010 MoA census)
Production: \$22 million (cut flowers, bulbs, potted plants, and foliage)
Top five varieties: <ol style="list-style-type: none">1) Roses, Bekaa and Mount Lebanon2) Gerbera, Bekaa, South, and Nabatieh3) Dahlia, Mount Lebanon, North, and the South4) Astromelia, Mount Lebanon, North, and the South5) Other ornamentals, Mount Lebanon, North, and the South
Value of production: \$22 million
Exports: \$1.4 million
Top three export markets: <ol style="list-style-type: none">1) Iraq: 39%2) Jordan: 15%3) Syria: 15% <p>* cut flowers, bulbs, potted plants, and foliage</p>
Number of farmers: 565 flower farmers (2010 MoA census) <ul style="list-style-type: none">• Small: 1-5 dunums: 405 farmers or 72%• Medium: 5-25 dunums: 140 farmers or 25%• Large: More than 25 dunums: 20 farmers or 3%
Number of farmers targeted for the life of the project: 150
Average prices (per rose stem): <ul style="list-style-type: none">• Farm: \$0.20• Wholesale: \$0.27• Retail: \$0.67-\$1.00• Export: \$0.27-\$0.30
Main value chain actors: <ul style="list-style-type: none">• Nurseries: 2• Independent distributors: 2• Farmers: 565• Wholesalers/Input suppliers: 10• Specialty flower shops: 3,000• Supermarkets: 80 (only 1-2% of total sales)• Venues, hotels, and restaurants: unknown (about 6% of sales)• Exotica: (about 16% of sales)
Priorities of the work plan: <ul style="list-style-type: none">• Immediate/short term<ul style="list-style-type: none">○ Study and identify potential export markets and develop market strategy

- Increase income of floriculturists in the Bekaa by expanding linkages with export markets
- Create improvements at the production and post-harvest levels
- Long term
 - Develop and commercialize a Lebanese endemic plant species
 - Improve the nursery and post-harvest levels
 - Expand linkages between producers and local retail markets

Priority communities: Baalbek, Jbeil, Saida, Aley, Batroun, Zahle, and Keserwan

Activities with scalability and replicability potential:

- Upgrading and retrofitting of production facilities
 - Establish nurseries and upgrade post-harvest facilities
-

Activities with the potential to leverage additional funds from the private sector:

- Improvements and upgrades to nurseries, production, and post-harvest facilities
-

2. Background and Rationale

In 2011, Lebanon purchased over \$48 million in floriculture products, \$24 million of which was comprised of cut flowers, bulbs, potted ornamental plants, and foliage, while \$24 million included other live plants. Although nearly all live plants and bulbs are imported from Holland, 90 percent of flowers and foliage are produced in Lebanon. Over 72 percent of the total 560 floriculture farmers cultivate less than five dunums of land distributed throughout the country, with a higher concentration in the Bekaa, Mount Lebanon, and the north, which are areas highly affected by the presence of Syrian refugees in host communities. Although this is considered small-scale production, flower farming on any size plot of land still requires significant capital investment compared to other agricultural crops because farmers must install and maintain greenhouses.

In terms of floriculture species, Lebanon's diverse terrain enables production of a wide variety of plants, including roses, which are one of the most common and highest value products. Demand for floriculture products, particularly cut flowers, peaks in March for Lebanese Mother's Day, and remains high over the summer and during the Christmas season. Demand is closely linked to rates of tourism and the summer wedding and party season; not surprisingly sales of flowers have steadily decreased since 2011 due to the crisis in Syria. Compared to other agriculture value chains, floriculture is subject to a higher level of market risk which is why LIVCD will first start by conducting a thorough market analysis of potential export regional markets before engaging in developing and upgrading activities at the production and post-harvest level.

The Lebanese floriculture sector is characterized by a concentration of market power in the hands of a relatively small number of wholesalers- with two major dealers dominating an estimated 60 percent of the market. These wholesalers engage in a variety of value chain activities including production, wholesale, importing, and exporting. Unlike other value chains where the wholesalers' roles are confined to purchasing products from producers and selling to

retailers or exporters, the pervasive market power of these two floriculture wholesalers stems from their capacity to import agricultural inputs such as seeds, cuttings, and mother plants from Holland, then distribute them to producers. In addition, these large wholesalers have extensive buyer networks, which increases turnover and reduces rates of spoilage at their facilities. Transactions between farmers and wholesalers are consignment based, and farmers claim that wholesalers under-compensate farmers by selling their products at low prices and claiming high loss rates that may or may not reflect actual rates of spoilage.

Small scale flower farmers are in a precarious financial position. Capital investment costs for greenhouses are substantial, flower prices are volatile, and as much as 30 percent can be lost through spoilage and wholesaler fees. Although access to working capital and reasonable investment funds are available, many small scale farmers who have used debt to finance the considerable fixed investment requirements of greenhouses risk losing their assets during market downturns. Finally, small scale farmers lack access to technical assistance due to the lack of public extension services and the limited impact of multiple donor-funded projects working on floriculture. Most farmers have nowhere to turn for technical production and marketing assistance.

After identifying promising markets, LIVCD will improve and strengthen the floriculture value chain in Lebanon by increasing the volume and quality of flowers produced, creating direct linkages between farmers and retailers in domestic and international markets that limit the control of wholesalers, and introducing distinct, indigenous flower species that will boost the image of the Lebanese flower industry and support price premiums.

3. Floriculture Value Chain Focus

Under the floriculture value chain intervention, LIVCD will prioritize working with 150 small and medium scale farmers and a number of distribution and exporting companies to increase the sales of floricultural products in export markets focused on the GCC, as well as domestically. Given Lebanon's wide range of microclimates, floricultural production is spread out all over the country with greater concentration in Baalbek, Jbeil, Saida, Aley, Batroun, Zahle, and Kesrwan which is where most of LIVCD activities will focus. These areas are also heavily affected by the influx of Syrian refugees in host communities, particularly in the North and Bekaa. LIVCD's suggested intervention will start by identifying and analyzing potential export markets in the region to ensure an outlet to the otherwise deteriorating local markets due to the degrading security and political situation in the country. The research will assess market demand including minimum specifications and requirements to enter these markets.

Following the market assessment, the Project will stimulate the adoption of advanced infrastructure by 20 small and medium greenhouse owners and facilitate the establishment of five post-harvest facilities to ensure quality output is provided through export channels. These particular investments require immediate support and efforts will be made to ensure the improvements are completed in the first and second year of the Project.

LIVCD will also facilitate a science, technology, and innovation component composed of the identification and commercialization of an endemic Lebanese flower species to be produced in Lebanon and marketed through the identified sales channels, while also facilitating dissemination of improved greenhouse technology from universities and other experts to assist growers in maximizing quality and yields with their existing infrastructure.

4. End of Project Vision for Floriculture Value Chain

The floriculture value chain undergoes significant upgrading following the identification of regional export markets. These new markets significantly expand and export sales flow through a new channels consisting of direct farmer sales to retailers and exporters and to integrated production/retail/exporting firms, who expand their sourcing relationships to include smaller floriculture producers adopting improved practices. With an expansion of these more vertically integrated channels, the market power of the small number of wholesaler/producer/exporters who currently dominate the market will be substantially reduced. This situation results in a much more equitable value chain governance structure, including a decline in the prevalence of consignment sales that transfer most market risk to farmers. More sales directly from farmer to retailers and exporters will be completed on a firm price cash basis. These transaction modalities will lessen the risk to farmers, and be reflective of lower loss levels throughout the value chain, driven by better production practices and a more stable export market. This will be facilitated by improved cold chain infrastructure at the Beirut airport.

Small producers are dispersed all over the country in host communities , particularly in the Bekaa, Mount Lebanon and the North, with less than four dunums of land, co-invest or take small loans for upgrading greenhouse infrastructure enabling them to become more profitable, reversing current patterns of marginal and extremely variable profitability among these stakeholders. Post-harvest facilities ensuring consistent product quality are established in order to meet export market requirements and provide opportunities to integrate disadvantaged groups such as women and youth into the value chain. Finally, Lebanon has at least one unique indigenous flower type as an export product for which Lebanese flower growers and exporters will be the only international source.

5. Life of Project Strategy: Objectives and Results

Axis 1: Develop marketing strategy and expand upon market linkages in export markets, as well as linkages between producers and retailers in the domestic market to help producers capture higher prices

- Expected Results: Increased in incomes and volume of products sold in domestic and export markets, new jobs created, and greater investment in the value chain.

Axis 2: Improve quantity and quality of flowers produced by small and medium-scale floriculturists

- Expected Results: Increased productivity, increased business linkages and access to markets, and exports of new species.

6. Activities

The table below summarizes key information about major floriculture activities.

Axis 1	Develop marketing strategy and expand upon market linkages in export markets, as well as linkages between producers and retailers in the domestic market to help producers capture higher prices
	EXPORT MARKET
Activity 1.1	Gather market intelligence and analysis of key target markets for exports
Task 1.1.1	Gather market intelligence and develop a market strategy
Activity 1.2	Share export market analysis findings with producers and exporters and build their capacity in reaching these markets
Task 1.2.1	Host the findings in a reliable institution and disseminate the results
Task 1.2.2	Hold trainings for exporters to raise awareness and share findings of market strategies and export market specifications
Activity 1.3	Facilitate increased presence of Lebanese exporters at international floriculture trade events
Task 1.3.1	Identify trade shows of interest, potential participants, prepare and train participants for the events, and assist them during and after the event
Activity 1.4	Build linkages between producers and exporters
Task 1.4.1	Identify lead farmers and farmers and link them with exporters benefiting from marketing and promotional support
Activity 1.5	Support promotional campaigns in export markets
Task 1.5.1	Facilitate the development of a marketing plan and promotional material for each export market
Task 1.5.2	Support actors or institutions in implementing the promotional plan in targeted export markets
Activity 1.6	Facilitate upgrading cold storage facilities at the Beirut airport
Task 1.6.1	Support the establishment of a network of floriculture sector actors and actors from other LIVCD value chains that have a stake in improving the cold chain infrastructure for floriculture at the Beirut airport; working with this network, encourage investments to upgrade other cold storage facilities
	DOMESTIC MARKET
Activity 1.7	Improve linkages between producers and market channels in the domestic market to help producers capture higher prices
Task 1.7.1	Analyze local market needs and opportunities at the retail level
Task 1.7.2	Identify lead farmers to grow demanded species
Task 1.7.3	Facilitate linkages between lead farmers, growers, and distribution companies

Task 1.7.4	Support and build new or existing distribution companies
Task 1.7.5	Develop a marketing plan and promotional materials for the domestic market and implement the plan
Axis 2	Axis 2: Improve quantity and quality of flowers produced by small and medium-scale floriculturists
Activity 2.1	Identify and enroll farmers, business, and ancillary service providers
Task 2.1.1	Identify and enroll potential beneficiaries and assess their needs and bottlenecks to be addressed in order to improve production quality and quantity
Task 2.1.2	Identify and link business and ancillary services with qualified growers
Task 2.1.3	Support implementation of business and ancillary services assistance with qualified growers and facilitate co-financing and PPPs where appropriate
Task 2.1.4	Facilitate access to finance and capacity building training for beneficiaries and assist in preparing feasibility studies and business plans
Activity 2.2	Improvements at the nursery level
Task 2.2.1	Assist in building capacity and technical quality of floricultural nurseries
Task 2.2.2	Improve access for producers to nurseries and high quality planting material
Activity 2.3	Improvements at the production and post-harvest level
Task 2.3.1	Support improvements in small and medium scale farm production, infrastructure, and practices
Task 2.3.2	Support improvements in post-harvest practices and systems (grading, sorting, packing, and cooling) and provide training on energy efficiency improvements
Task 2.3.3	Support establishment and improvement of demonstration plots
Activity 2.4	Support Identifying and commercializing viable indigenous flower species
Task 2.4.1	Collaborate with an academic institution or technical experts to identify 10 potential species and proceed with longevity tests (perishability)
Task 2.4.2	Support testing and cultivation, propagation, and registration of the selected species, and explore the possibility to place a royalty on these species
Task 2.4.3	Identify lead farmers to select farmers to cultivate the new species and link the lead farmer with buyers through marketing support

7. Science, Technology, and Innovation Projects

- 1) Build capacity and technical quality of floricultural nurseries using modern technology;
- 2) Support improvements in small and medium scale farm production infrastructure and practices;
- 3) Identify and commercialize indigenous flower species, cultivate, and register the selected species, and explore the possibility of placing a royalty on all sales.

2.6 RURAL BASKET

1. Snapshot

Rural Basket
Hectares: Pine nuts 27,000 and Cultivated Thyme 2
Production: Pine nuts 1,200- 1,500 tons (MoA 2005) and Thyme 1,000 tons; 13.7 million free range eggs
Top 2 varieties: <ol style="list-style-type: none">1) Pinus Pinea2) Oreganum Syriacum
Value of Production: Pine nuts \$16.5 million - \$25.8 million (MoA 2003-2005); Thyme \$11.5 million from wild harvest; Free range eggs \$4.6 million
Exports: Pine nuts- 200 tons valued at \$1.9 million (2009); thyme 48 tons valued at \$48,000
Top 3 export markets: <u>Pine nuts</u> <ol style="list-style-type: none">1) Middle East2) North Africa3) GCC <u>Thyme</u> <ol style="list-style-type: none">1) Europe2) U.S.
Number of farmers: 1,200 thyme
Number of farmers to be targeted for the life of project: 670
Average price per kg: <u>Pine nuts</u> <ul style="list-style-type: none">• Bulk: \$37.00• Retail: \$45.00 <u>Thyme</u> <ul style="list-style-type: none">• High quality: \$13.00• Low quality :\$7.00 <u>Eggs</u> <ul style="list-style-type: none">• Wholesale: \$0.17 per egg• Retail: \$0.33 per egg
Main value chain actors: <ul style="list-style-type: none">• Retailers: 22,124 grocery stores and 1,085 supermarkets.• Cooperatives and private sector: Approximately 150
Priorities of the work plan: <ul style="list-style-type: none">• Immediate/short term<ul style="list-style-type: none">○ Identify existing initiatives and enterprises and conduct technical training○ Facilitate co-investments to upgrade small processing units○ Improve the quality of production○ Develop market intelligence, penetration, and linkages

- Long term
 - Encouraging collective purchases of inputs and services
 - Facilitate access to finance and certification
 - Identify additional host communities and other products that are economically viable

Priority communities: Akkar, Hermel, Batroun, Jbeil, Chouf, Jezzine, and Marjoun

Activities with scalability and replicability potential:

- Develop systems for collective purchasing of services and inputs
- Create new processed products based on different basket items
- Facilitate market linkages between producers, traders, and processors
- Support initiatives that link producers to end users (farmers markets, door to door sales, web based shops, fairs, and exhibitions)

Activities with the potential to leverage additional funds from the private sector:

- investments in infrastructure, planting material, processing machines such as grading, drying, packing, and sorting
-

2. Background and Rationale

Lebanon has diverse and valuable resources that can be utilized by LIVCD to target marginalized rural populations to increase their household income and raise their overall standard of living. The rural agricultural set of products includes: honey, pine nuts, *Origanum Syriacum*, commonly referred to as Lebanese thyme, free range eggs, and capers. These products are uniquely suited to advance the economic opportunity for poor rural populations because of low investment costs, high market demand, and the potential for production within households that can provide substantial income. Each of these items has unique product flows from production to retail, and differing opportunities for intervention; however a common element among all of the products is their potential to benefit impoverished rural households. The land area defined as rural represents 93 percent of Lebanon, and is home to 20-25 percent of the total population. Geographic areas of host communities facing adverse consequences from an influx of Syrian refugees will be given priority for interventions. There are opportunities to improve and increase production for families already actively producing, while simultaneously adding new producers into the market. In addition to targeting rural populations as a whole, rural women and youth can specialize in some of these products and help increase income for their families. During implementation, additional products may be identified and added to the rural basket based on prior approval from USAID.

The rural basket analyzed below has the potential to generate from \$50 to \$1,000 per month in household income. The wide range of this figure is due to the fact that the profitability of these products varies widely, as some products can be produced in smaller or larger quantities, and can be sold through a variety of marketing channels, though profitability will vary significantly depending on the selected market channels. There are opportunities for even greater income generation if products are produced and sold together. Small producers do not have the resources to go into large scale production and capture potential cost advantages, yet by

producing a variety of niche products with low investment requirements that are aggregated they can bring in greater revenue with small scale production.

3. Rural Basket Value Chain Focus

LIVCD intends to work with 670 small and medium scale producers, processors, collectors, companies, and cooperatives to increase quality and productivity currently existing and support developing new enterprises. The project in the first and second year will focus on identifying successful initiatives in local communities impacted by the Syrian crisis offering different technical and managerial trainings, as well as encouraging co-investments for MSMEs and PPPs to upgrade production systems. A significant amount of financial and technical support is required in the first two years in order to address the numerous requests and immediate issues in host communities. Most of LIVCD's current assistance responding to USAID's request to address the Syrian crisis is in the rural basket with grants for free range egg production and thyme, there are a number of other proposals in the basket that LIVCD is considering that can also be scaled up and replicated resulting in immediate assistance producing greater revenue and nutritious produce for home consumption- particularly egg production that is an excellent source of protein.

Priority activities will mainly be located in Akkar, Hermel, Chouf, Jezzine and Marjaoun, where local communities are suffering dramatically from the impact of Syrian refugees and focused on improving the quality and quantity of selected items in the basket. Useful technology and innovations will be promoted such as adopting new machines and tools for production as well as simple IT tools to help producers manage their enterprises. New products will be developed labeled and promoted in the domestic market and consolidated whenever possible to provide small farmers with significant volumes to attract buyers. The project will facilitate marketing assistance to help producers assess local external niche markets to better understand demand and requirements to increase sales increased through better quality and consistency. When necessary, complementary activities in LIVCD's processed food value chain will be shared with actors in the rural basket to promote growth and access to markets.

The rural basket value chain is the most flexible and appropriate to reach large numbers of marginalized rural poor in host communities. LIVCD will place a heavy emphasis on replicating and scaling up successful initiatives such as free range eggs, supporting small scale growers in accessing equipment and co-investments, and linking bankable projects to MFIs, government programs such as Kafalat, and other lenders where appropriate. This value chain will continue to evolve over the life of the project as new ideas and items are considered to be added to the basket, however significant early investments will occur as early as possible in host communities within the first two years of implementation in order to mitigate the devastating impact of the Syrian crisis. These critical investments were not anticipated during the proposal or the beginning of the project in October 2012 and. Therefore, require expedited and increased funding considerations.

4. End of Project Vision for Rural Basket

The rural basket creates opportunities to increase income and add jobs without substantial investments and improves and increases production for families while continually adding new producers into the market. Information technology and interactive training tools serve small producers and processors to be efficient and to identify market opportunities. Rural women and youth specialize in some of these products and help increase income for their families. Newly established market linkages including a diversity of direct sales opportunities are prevalent, while new rural products and recipes- certified for quality and origin- provide new possibilities to increase sales and export authentic Lebanese recipes.

5. Life of Project Strategy: Objectives and Results

Axis 1: Increase sales and distribution at local and export markets

- Expected Results: New market potential and exports, increased revenues.

Axis 2: Provide institutional and technical training for identified actors

- Expected Results: Higher quality and quantity of products enter the market, and increased revenues are generated for producers.

Axis 3: Develop a sustainable mechanism to insure easy access to finance and needed inputs

- Expected Results: Greater access to financial services and increased investments by small farmers.

Axis 4: Identify committed producers, collectors, and distributors to initiate an integrated approach leading to defining the basket items and building the value chain based on local specialties and potential growth

- Expected Results: Product diversification and new producers entering the market.

6. Activities

The table below summarizes key information about major rural basket activities.

Axis 1	Increase sales and distribution at local and export markets
Activity 1.1	Provide support for improved branding, packing, differentiation of products, and certification
Activity 1.2	Support initiatives that link producers to end users (farmers markets, door to door sales, web based shops, fairs, and exhibitions)
Activity 1.3	Facilitate market linkages between producers, traders, and processors
Activity 1.4	Conduct regional and national market study and strategy to identify and target niche markets and assist beneficiaries to continue performing market analysis
Activity 1.5	Develop/adopt a seal of quality and origin including developing related standards for specific items in the basket and promote the seal locally and

	internationally
Activity 1.6	Develop new processed products based on different basket items in conjunction with LIVCD's processed food value chain
Axis 2	Provide institutional and technical training for identified actors
Activity 2.1	Identify technical training needs for upgrading production for the different basket items selected
Task 2.1.1	Train producers, collectors and workers on best practices
Activity 2.2	Identify institutional training needs
Task 2.2.1	Train processors, cooperatives, aggregators, and distributors on management, financial, and manufacturing practices; marketing, sales and distribution; branding and product differentiation; and accessing financial services
Axis 3	Develop a sustainable mechanism to insure easy access to finance and needed inputs
Activity 3.1	Facilitate access to finance for investment needed to develop downstream and upstream activities
Task 3.1.1	Facilitate co-investments in processing equipment through PPPs where appropriate for investments in infrastructure, planting material, and processing machines such as grading, drying, packing, and sorting
Activity 3.2	Develop accounting templates and feasibility studies for small producers to be able to use for loan submission and accounting registration
Activity 3.3	Develop a system for collective purchase of services and inputs
Axis 4	Identify committed producers, collectors, and distributors to initiate an integrated approach leading to defining the basket items and building the value chain based on local specialty and market potential
Activity 4.1	Identify interested and committed producers, collectors, and distributors in different geographic areas
Activity 4.2	Conduct stakeholder meetings to define the basket items, in addition to oregano and egg production
Activity 4.3	Conduct stakeholders meetings to set roles, responsibilities, and objectives
Activity 4.4	Train different actors in capacity building
Task 4.4.1	Identify trainers and training material and develop scopes of work

7. Science, Technology, and Innovation Projects

- 1) Develop/adopt a seal of quality and origin including the development of related standards for specific items in the basket;
- 2) Develop new processed products based on different basket items.

2.6.1 RURAL BASKET (HONEY)

1. Snapshot (2010)

Honey
Hectares: National, all over Lebanon except Beirut
Production: 1,361 tons in 2011
Top three varieties: <ol style="list-style-type: none">1) Citrus blossom: 40%, harvested in April2) Honey dew (Oak): 30%, harvested in June3) Mountain: 30%, harvested in September
Value of production: \$26 million
Exports: 26 tons
Top three export markets: <ol style="list-style-type: none">4) Saudi Arabia: 10 tons, 38%5) UAE: 6 tons, 23%6) U.S.: 3 tons, 12%
Number of beekeepers: 5,546 (MoA 2011) <ul style="list-style-type: none">• Small: less than 25 hives: 3,532 or 64%• Medium: between 26-50 hives: 1,014 or 18%• Large: More than 50 hives: 1,000 or 18%
Number of farmers targeted for the Life of Project: 2,500 farmers
Average prices per kg: <ul style="list-style-type: none">• Farm: \$10.00• Wholesale: \$11.00- \$13.00• Processors: \$15.00-16.00• Distributors: \$22.00-24.00• Retail: \$25.00-\$30.00• Export: \$14.00-21.00
Main value chain actors: <ul style="list-style-type: none">• Input suppliers: 10• Packers/exporter: 8• Wholesalers: 30• Small and medium groceries: 17,992• Supermarkets, bakeries, health stores, and restaurants: 27,366• Service providers: 9• Cooperatives and NGOs: 11
Priorities of the work plan: <ul style="list-style-type: none">• Immediate/short term<ul style="list-style-type: none">○ Increase production and sales in local and export markets○ Introduce new technology such as breeding activities

- Long term
 - Increase exports and displace imports
 - Increase production and income for beekeepers
 - Improve high quality honey to meet international standards

Priority communities: Akkar and Dannieh in the North, Rashaya and Manssoura in the Bekaa, Jezzine in the South, and Jbeil and Kesserwan

Activities with scalability and replicability potential:

- Introduction of pilot center to improve production through new technology
-

Activities with the potential to leverage additional funds from the private sector:

- Breeding centers, exports, quality and safety seal, and product development
-

2. Background and Rationale

Lebanon produces relatively low volumes of honey- about 1,400 tons per year- with a market value of between \$21 and \$26 million annually. Despite these low sales figures, the honey value chain engages a large number of rural poor Lebanese households that can participate in honey production because initial investment costs are fairly low, honey is produced in the first season, and farmers do not need to own or lease land for the bees. In addition, these activities involve female workers and can attract the younger generation. Cooperative labor sharing arrangements during harvesting among rural households further reduces barriers to entry to beekeeping which provides income for over 5,500 rural households. Since technical knowledge of harvesting, honey extraction, and hive colonization practices are an essential part of honey production, beekeeping is usually limited to Lebanese households specifically.

Recently, Lebanese branded honey has increased in volume and received increased exposure in domestic retail distribution networks. Honey exports to high value GCC markets and the U.S. are also increasing, as commercial brands transition from bulk to branded exports in Saudi Arabia, and expand within and beyond ethnic markets in the U.S. The upswing in commercial branded honey volumes has been bolstered by investment and upgrading of quality testing facilities, as well as growing consumer confidence in Lebanese brands and retail markets. Current Government of Lebanon policies to promote higher product standards in the honey market should accelerate movement towards branded honey that can incorporate quality control procedures in production.

Because of Lebanon's diverse terrain, honey production occurs in every region of the country. The North (Minnieh- Dannyeh, Akkar) has the highest number of beehives, as well as beekeepers, followed by Nabatiyeh and Tyr in the South, and Baalbek in the Bekaa. Honey related activities are mainly concentrated in host community areas with high Syrian refugee presence. Beekeeping is an activity that is well adapted to small household levels of production and accompanying investment costs.

The donor community has been continually engaged with honey producers, though interventions have focused mainly on small-scale cooperatives that are often formed for the sole purpose of receiving funding and equipment. Although these initiatives may have had a positive

impact in terms of strengthening the productive capacity of small beekeepers, the results of assistance in marketing have been negligible, as cooperatively marketed honey remains insignificant both as a percentage of total production and as a percentage of commercially marketed honey. A tremendous opportunity exists for LIVCD to target commercial honey producers who have not received assistance from donor projects. By helping commercial honey producers establish the needed vertical links with smaller household-level beekeepers to source honey and take advantage of market linkages to seize opportunities in both export and domestic markets, LIVCD will boost incomes for all stakeholders in the value chain, and channel profits into host communities.

3. Honey Value Chain Focus

LIVCD's primary focus is to immediately increase sales in local and exports markets through building linkages between processors and importers, developing marketing plans, PPPs, and co-investments to access export markets. The Project will also support processors increasing sales in the domestic market through PPPs, leading to increase sales and displacing imports in the local market. By collaborating with the main honey exporters, and others, to enter new markets and channels, LIVCD will directly increase income for at least 300 sourcing beekeepers. Immediate activities will also support processors to increase their processing capacity and in implementing safety and quality certification to meet export regulations and ensure a reliable and high quality of honey that builds consumers' trust in Lebanese branded honey. Support to beekeeping cooperatives in the form of processing equipment and technical assistance through PPPs within rural areas in host communities is also a priority in order to mitigate the impact of the Syrian crisis in host communities. Honey production is beneficial since it can occur in many locations without major upfront infrastructure investments.

LIVCD will be working with 2,500 beekeepers to increase honey production and meet market demand- with an emphasis on beekeepers in rural areas within host communities. LIVCD intends to support production increase through technical assistance and training on five main topics, and will involve training of trainers to ensure that the knowledge remains with qualified trainers within each cooperative or association. The Project also plans on increasing production of 400 existing beekeepers, and initiating support for 100 new young and female beneficiaries by distributing hives and equipment, and linking these beekeepers with exporters and processors to ensure a viable market for the honey produced. LIVCD anticipates providing numerous investment opportunities for small beekeepers in the first two years of the project in order to maximize the impact of host community assistance.

A feasibility study will be conducted to identify technical requirements and return on investment necessary to implement a breeding center in Lebanon on a commercial basis. Depending on the results of this study, LIVCD will consider supporting the center through a PPP. If a breeding center does not appear to be feasible, the Project will provide training for beekeepers on breeding techniques to increase their production. This activity is the key technology and innovation for the value chain.

4. End of Project Vision for Honey Value Chain

Lebanon becomes a high quality producer of honey using new technology in breeding techniques and receives brand recognition from domestic and international consumers. Targeted improvements and expansion of honey quality testing boosts consumer confidence and increases access to international markets. Demand for Lebanese honey grows, resulting in strengthened vertical linkages between small and medium-scale honey producers and commercial brands. Finally, improved technical and managerial practices channel profits into rural communities within host communities, increasing incomes for all stakeholders in the honey value chain.

5. Life of Project Strategy: Objectives and Results

Axis 1: Sustain and increase production of honey flowing into the branded channels through improved linkages between commercial branded honey processors/exporters and small beekeepers, increasing production through new technology and PPPs

- Expected Results: Farmers benefit from increased production and additional revenues and commercial cooperatives are strengthened.

Axis 2: Strengthen key actors in the domestic branded honey market segment

- Expected Results: Increased sales in domestic and export markets leading to displacing imports. Strengthen processing capacity, implementing safety and quality certification.

Axis 3: Supporting Lebanese honey exports

- Expected Results: Linkages with export channels through marketing support.

6. Activities

The table below summarizes key information about major honey activities.

Axis 1	Sustain and increase production of honey flowing into the branded channels through improved linkages between commercial branded honey processors/exporters and small beekeepers
Activity 1.1	Facilitate technical assistance and training to beekeepers through extension service providers and value chain actors including cooperatives
Task 1.1.1	Identify business and ancillary service providers to deliver services to value chain participants
Task 1.1.2	Identify and enroll small rural beekeepers and provide technical assistance and training to 2,500 beekeepers in honey production
Activity 1.2	Expand the number of hives in production by small and medium beekeepers

Task 1.2.1	Develop and implement activities to target identified needs providing equal opportunities for all beekeepers and beneficiaries such as breeding activities
Task 1.2.2	Expand the number of hives in production by small and medium beekeepers; Promote the entry of 500 new beekeepers into honey production
Task 1.2.3	Facilitate co-investments and PPPs where appropriate for investments in hives and equipment
Task 1.2.4	Identify, enroll, and organize business and ancillary service providers for participation in the project and delivery of services to value chain participants
Axis 2	Strengthen key actors in the domestic branded honey market segment
Activity 2.1	Facilitate market linkages for beekeepers and commercial honey brands
Task 2.1.1	Identify commercial brands to support with technical assistance
Task 2.1.2	Build a data base of major processors and aggregators presenting potential to be enrolled
Task 2.1.3	Identify beekeepers to supply local brands
Task 2.1.4	Build linkages between the producers and commercial brands
Activity 2.2	Strengthen commercial brands in the local market
Tasks 2.2.1	Capacity building for commercial companies
Activity 2.3	Capacity building and marketing support for commercial brands in the local market
Task 2.3.1	Provide support in developing promotional plans and materials, implementing activities, and upgrading packaging and labeling
Activities 2.4	Facilitate market linkages for beekeepers and cooperatives
Task 2.4.1	Identify cooperatives and informal farmer groups with commercial brands selling in local retail markets
Task 2.4.2	Build a data base of major cooperatives and informal farmer groups with commercial brands presenting potential to be enrolled
Task 2.4.3	Identify beekeepers to supply additional honey for cooperatives and informal farmer groups
Task 2.4.4	Build the linkages between beekeepers with commercial cooperatives
Activities 2.5	Capacity building for cooperatives and informal farmer groups with commercial brands
Activity 2.6	Facilitate sources of investment finance, including foundations and microfinance providers to put together “beekeeper finance packages” that can be used to spur investment particularly in underserved areas
Activity 2.7	Support implementing a quality and safety seal: ISO 22000
Task 2.7.1	Facilitate meetings and workshops with appropriate public sector actors and

	selected key stakeholders to agree on a unified vision for possible labeling and certification, and review previous work and similar certification programs; Identify a regulation body to implement the quality and safety seal (quality control company)
Task 2.7.2	Identify commercial brands willing to implement the quality and safety seal and partners to develop standards
Task 2.7.3	Identify certified labs that will execute tests required
Task 2.7.4	Facilitate co-investments through PPPs where appropriate
Task 2.7.5	Conduct an awareness campaign on quality and safety seals
Axis 3	Supporting Lebanese honey exports
Activity 3.1	Facilitate developing needed testing capacity for export market tests in Lebanese honey laboratories
Task 3.1.1	Identify testing laboratories such as QCC, IRI, LARI, and Chambers of Commerce
Task 3.1.2	Engage with honey testing laboratories to upgrade capacity so that facilities can test for antibiotics and pesticides residues to the level of precision required by European and other markets
Task 3.1.3	Professionalize marketing plans of exporters who have the potential to export in sufficient quantities
Activity 3.2	Market Intelligence: Analyze export market opportunities in the identified target markets and study consumer demands for different high added-value products that processors have the ability to competitively produce
Task 3.2.1	Facilitate market analysis for the Gulf (UAE, KSA, Qatar, and Kuwait), U.S., Canada, Europe, Brazil, and Iraq
Task 3.2.2	Develop a market strategy for each selected location
Activity 3.3	Upgrade product specifications
Task 3.3.1	Identify product specifications to meet market opportunities and demand
Task 3.3.2	Conduct workshops to introduce to processors new products and their potential in different markets
Task 3.3.3	Identify processors willing to upgrade products and support them in developing new products that meet market demand
Task 3.3.4	Upgrade packaging and labeling to meet market requirements
Activity 3.4	Marketing support in export market
Task 3.4.1	Facilitate support in developing promotional plans and materials and implement promotional activities
Activity 3.5	Facilitate market linkages with importers
Task 3.5.1	Identify target markets, trade shows, and processors, along with NGOs and cooperatives willing to invest in trade shows, and support them before, during, and after the events

7. Science, Technology, and Innovation Projects

- 1) Develop a breeding center that will produce high quality queen bees or train beekeepers on self-breeding using imported queen bees;
- 2) Raise the Lebanese honey quality to international standards implementing techniques for meeting antibiotic and pesticide levels;
- 3) Implement quality and safety certification for honey producers since currently no Lebanese honey producers are certified.

2.7 PROCESSED FOODS

1. Snapshot (2010/2011)

Processed Foods

Registered food industrial companies: 2,000 total with 736 companies employing 5 or more workers

Number of companies to be targeted (LOP): 200

Production (2011): Top 5 Sectors:

- Soft drinks and drinking water (ISIC 1104): \$442 Million
 - Manufacture of bakery products (ISIC 1071): \$258 Million
 - Processing and preserving of fruits and vegetables (ISIC 1030): \$250 Million
 - Grain mill products, starches, and starch products (ISIC 1060): \$238 Million
 - Dairy Products (ISIC 1050): \$193 Million
-

Value of Production: Value produced by the 736 companies with five or more employees: \$1.75 billion; Total value of food production is estimated to be between \$2.2 and \$3 billion.

Exports: \$419 million in 2012

Number of workers: Total: 20,607

Main value chain actors:

- Producers
 - Aggregators: Production from small and medium farms is aggregated by dammans (middlemen) who typically deliver the produce to the processors.
 - Supporting industries such as packaging and equipment companies
 - Processors
 - Distributors
 - Retailers
-

Priorities of the work plan:

- Immediate/short term
 - Identify targeted high value markets and market channels and develop products to meet required demand
 - Support processors in overcoming constraints to market entry
 - Increase direct procurement from farmers
 - Long term
 - Assist processors in improving their product quality and process efficiencies by adopting modern manufacturing systems such as 'Lean Manufacturing'
 - Build long term sustainable relationships between processors and farmers
 - Increase investments by processors in rural areas
-

Priority communities: Bekaa: Zahle industrial zone, Deir Al Ahmar region, Saida, and Tripoli

Activities with scalability and replicability potential:

- Increased direct procurement from farmers;
 - Improved collaboration between larger processors and smaller ones including cooperatives,
-

-
- Improved access to export markets
-

Activities with the potential to leverage additional funds from the private sector:

- Contract manufacturing between processors
 - Factory upgrades that aim to improve efficiency and meet international standards
-

2. Background and Rationale

Lebanese exports of processed foods increased at an annual average rate of 13 percent from 2009 through 2012 from \$303 million to \$419 million. There is the potential for continued increases in the next few years as a result of the Syrian crisis that has impacted the competing Syrian food industrial sector. Lebanese processed food exports averaged seven percent of total exports between 2009 and 2012, which represents a reduction from 11.5 percent from 2000 and 8.6 percent in 2008. As a comparison, Lebanon imports three times the value of processed foods that it exports; reaching a value of \$885 million in 2009 and \$1.2 billion in 2012.

Based on a survey conducted in 2007 by the Syndicate of Lebanese Food Industrialists (SLFI) and UNIDO, there are 736 registered food processing enterprises in Lebanon that employ five or more workers. This represents 18 percent of all industrial companies retaining 20,607 employees, or 25 percent of the total industrial workforce. In 2007 these companies had an output of \$1.75 billion with 27 percent of the country's total value added. According to SLFI estimates, there are over 2,000 food processing companies today in Lebanon. If all of these food processors are taken into consideration- including those that employ less than five workers and those that are not registered- then according to the Chambers of Commerce, the output of the processed foods industry exceeds \$3 billion, which would account for seven percent of Lebanon's total GDP.

The following processed foods by ISIC code were analyzed during the assessment phase and will be considered for Project interventions:

Section C Manufacturing

Division	Group	Class	Description
Division 10			Manufacture of food products
	101	1010	Processing and preserving of meat
	102	1020	Processing and preserving of fish, crustaceans and molluscs
	103	1030	Processing and preserving of fruit and vegetables
	104	1040	Manufacture of vegetable and animal oils and fats
	105	1050	Manufacture of dairy products
	106		Manufacture of grain mill products, starches and starch products
		1061	Manufacture of grain mill products
		1062	Manufacture of starches and starch products
	107		Manufacture of other food products
		1071	Manufacture of bakery products
		1072	Manufacture of sugar
		1073	Manufacture of cocoa, chocolate and sugar confectionery
		1074	Manufacture of macaroni, noodles, couscous and similar farinaceous products
		1075	Manufacture of prepared meals and dishes
		1079	Manufacture of other food products n.e.c.
	108	1080	Manufacture of prepared animal feeds
Division 11			Manufacture of beverages
		1101	Distilling, rectifying and blending of spirits
		1102	Manufacture of wines
		1103	Manufacture of malt liquors and malt
		1104	Manufacture of soft drinks; production of mineral waters and other bottled waters

3. Processed Foods Value Chain Focus

LIVCD will focus on upgrading the value chain by expanding exports and displacing imports in the local market, while improving collaboration and better integrating small actors. The project will achieve these objectives by providing processors with strong market intelligence and helping them address constraints that limit their ability to expand operations and target high value markets.

LIVCD aims to upgrade the processed foods value chain by supporting processors in adopting new operational technologies such as 'Lean Manufacturing'. The project will also partner with the private sector through PPPs to introduce new technologies that will assist actors in improving their competitiveness. In addition, efforts will focus on promoting adoption of a set of new technologies and best practices at the farm level, which include irrigation methods that conserve water, pruning, and pest management that ensures safe practices and optimal final products that meet processors' requirements, while improving collaboration between processors and farmers. For example, farmers will be trained on methods for harvesting, grading and transporting produce in order to reach the processor in the proper condition and eliminates waste. These specific activities require rapid up-front investment, focused in Lebanese communities impacted adversely by the Syrian crisis. Investments in the first two years of the Project will provide an immediate boost to small famers and processors that can take advantage of market distortions including demand for makdous that can be filled from local processors purchasing eggplant from famers, as well as developing new products such as low cost fruit spreads to replace imports in bakeries and developing industrial processing of pickles that are a

huge industry in Lebanon. Immediate assistance will involve certification through technical assistance and training and lead to longer term objectives such as developing new products and upgrading equipment to improve the overall quality of Lebanese processors.

Local service providers and extension agents connected with private businesses or cooperatives will be trained on best practices to extend and disseminate processing information and best food safety practices to better serve processors in improving their productivity and quality. At the marketing stage, the project will assess external markets to better understand market demand and requirements to enter new markets and increase sales in existing markets. LIVCD intends to work with 200 food processors including cooperatives across the country, focusing support in the first and second year on regions affected by the Syrian crisis, in particular Zahle , Deir Al Ahmar, Saida, Mount Lebanon, and Tripoli. The Project will also generate new job opportunities for youth and women through different activities, for example, through collaborating with vocational schools to upgrade their programs and introducing skilled new entrants to the processed foods sector. Most of the processed food factories employ a high percentage of women to sort and operate the equipment, while many women are farmers in host communities and are specialists in tasks like pruning and thinning. The Project will look for ways to expand female participation in income generating activities.

4. End of Project Vision for Processed Foods Value Chain

The processed food value chain expands by increasing exports to existing markets through high value channels, entering new markets, and replacing imports in the local market. The value chain increasingly integrates small and medium processors with better vertical and horizontal cooperation among actors. To achieve this vision, the project succeeds in:

- Taking a coherent, multifaceted, market pull approach at the export level that focuses on high value channels that Lebanese products have a high potential to succeed in;
- Seeking relevant market intelligence and identifying the most appropriate market entry channels in new markets and preparing food processors to enter target markets through these channels;
- Assisting food processors in the local market in replacing imported food items that Lebanon can competitively and sustainably produce;
- Supporting small and medium food processing enterprises in customizing products in terms of variety, quality, packaging, technical, and regulatory requirements in order to adapt to market expectations;
- Increasing participation of small and medium processors through financing and co-financing packages through PPPs in conjunction with the private sector;
- Increasing procurement of local inputs and integrating MSMEs in the processed food value chain through manufacturing contracts, co-manufacturing, and other schemes;
- Maximizing project impact by leveraging existing resources already developed by donor-funded projects, especially those funded by USAID;

- Creating new science, technology, and innovation partnerships with universities, researchers, and the private sector to test new products and technology and replicate and scale up based on successful results.

5. Life of Project Strategy: Objectives and Results

Axis 1: Facilitate support for needed market intelligence and help processors enter new markets and expand in existing ones

- Expected Results: New markets successfully targeted, new products introduced, increased sales volume and value of production, jobs created, and new investments.

Axis 2: Support SLFI or another institution in establishing a market intelligence unit that serves the food processing industry

- Expected Results: More quality services provided to an increased number of members, and association's revenues increase.

Axis 3: Help Lebanese food processors improve efficiency and meet international food safety standards

- Expected Results: Improve processors' competitiveness and capacities, cost reduction and increased profits, and private sector investment leveraged.

Axis 4: Increase participation of farmers, small firms, and cooperatives in the processed food value chain

- Expected Results: Increased linkages and revenues for small farmers and companies.

Axis 5: Promote new investments in the processed food value chain in rural areas with appropriate partners

- Expected Results: Private sector investment and PPPs created and access to equipment and production capacities increased.

6. Activities

The table below summarizes key information about major processed food activities.

Axis 1	Provide needed market intelligence and help processors enter new markets and expand in existing ones
Activity 1.1	Determine appropriate target markets and market channels
Task 1.1.1	Study the different potential markets, including GCC, Iraq, Europe, Russia, U.S., and South America
Task 1.1.2	Identify in target markets, existing trade channels and consumer/shopper trends such as: ethical products, healthy products targeting aging population,

	free-from products, and natural products
Task 1.1.3	Identify regulatory requirements and market barriers
Activity 1.2	Determine appropriate products for the selected target markets that can be competitively produced in Lebanon and create market-entry strategies
Task 1.2.1	In the identified target markets, study consumer demands for different high added-value products that Lebanese processors have the ability to competitively produce
Task 1.2.2	Verify which Lebanese processors can, and are interested to, produce the identified products
Task 1.2.3	Create market entry strategies with key stakeholders for the different markets and coordinate disseminating the information with processors
Activity 1.3	Support processors in developing products that meet market demand
Task 1.3.1	Conduct workshops to introduce processors to new products and their potential in different markets
Task 1.3.2	Train processors on proper methodology of product development
Task 1.3.3	Create tasting panels and other necessary systems for product development
Task 1.3.4	In collaboration with Regional Chambers (Pilot Plants), support processors in developing new products
Task 1.3.5	Facilitate co-finance through PPPs where appropriate introducing new products and new fruit and vegetable varieties
Task 1.3.6	In collaboration with LibanPack and/or other organizations, support processors in creating appropriate packaging and labeling that meet market requirements in terms of design and declarations
Activity 1.4	Support processors in creating successful market linkages
Task 1.4.1	Train processors on the requirements of new markets
Task 1.4.2	Link processors with brokers, importers and distributors and guide them through their communication and collaboration
Task 1.4.3	Identify main trade shows in target markets and processors willing to invest in attending the shows; support processors in attending trade shows
Activity 1.5	Co-finance joint production promotion in target markets
Task 1.5.1	Provide support in developing promotional plans and materials and implementing activities including "Lebanese Cuisine" events and in-store promotions
Axis 2	Support SLFI or another institution in establishing a market intelligence unit that serves the food processing industry
Activity 2.1	Build the capacity of SLFI or other institution's management

Task 2.1.1	Identify current availability of marketing intelligence, from both formal and informal systems and public and private sources
Task 2.1.2	Explore supporting SLFI or other organization to become self-sustainable through the introduction of new value-added, paid services to members
Task 2.1.3	Facilitate support to create strategies to attract new membership through a good communication strategy and a membership drive
Activity 2.2	Collaborate with the Qab Elias Vocational School
Task 2.2.1	Ensure proper and efficient utilization of available equipment and collaborate with processors to develop and produce products using the school's facilities
Task 2.2.2	Link students with factories for apprenticeships, support students in job placement after graduation, and provide training to students
Axis 3	Help Lebanese food processors upgrade the value chain through improved efficiency and adherence to international food safety standards
Activity 3.1	Improve productivity through better utilization of resources
Task 3.1.1	Facilitate in assisting processors in building capacity of their staff in all aspects of manufacturing operations- quality, maintenance, logistics, production management including KPIs, inventory management and constraint management
Task 3.1.2	Facilitate support to select companies in developing Lean Sigma systems to maximize utilization of resources; equipment, labor, facilities, and material
Task 3.1.3	Facilitate financing, including PPPs when appropriate to support automation upgrades in manufacturing equipment
Activity 3.2	Assist with facilitating processors in meeting international food safety requirements
Task 3.2.1	Provide training and awareness sessions for food processors on food safety requirements
Task 3.2.2	Assist in facilitating extension services in the implementation of GMPs , HACCP, and ISO 22000
Task 3.2.3	Support processors in accessing finance and facilitate co-investments, using PPPs when appropriate, to upgrade their facilities to meet international food safety standards
Task 3.2.4	Improve access to USAID-supported laboratories in the regional chambers
Task 3.2.5	Upgrade regional chamber labs to be able to perform required tests
Activity 3.3	Assist processors in meeting international food labeling requirements
Task 3.3.1	Review labels of selected exporting processors and provide recommendations for improvement
Task 3.3.2	Support processors in developing food nutrition labels for target markets

Axis 4	Increase participation of farmers, small firms, and cooperatives in the processed foods value chain
Activity 4.1	Increase procurement of local produce
Task 4.1.1	Identify opportunities whereby direct procurement from farmers is advantageous to processors in terms of quality, price, and needed quantity
Task 4.1.2	Identify farmers with the capacity and interest in growing identified crops and assist in establishing linkages between processors and potential farmers capable of meeting identified opportunities
Task 4.1.3	Assist both sides in reaching contractual agreements to secure the rights of each party and provide both sides technical and managerial support to ensure successful linkages
Task 4.1.4	Support farmers in collaboration with processors to access financial services
Task 4.1.5	Help processors develop new products that utilize oversupply of fruits and vegetables such as grapes (molasses, raisins, chocolate covered), cherries (dried and chocolate covered), apples (molasses and chips)
Activity 4.2	Support the development of joint ventures between cooperatives and micro-processors on one side and brand owners on the other
Task 4.2.1	Identify products produced by cooperatives and small processors that can be successfully marketed by large brand owners
Task 4.2.2	Where economically advantageous, encourage contract manufacturing arrangements between micro-processors and cooperatives on one side and medium and large processors on the other side
Axis 5	Promote new investments in the processed food value chain in rural areas with appropriate partners to upgrade the value chain
Activity 5.1	Identify underutilized donor-funded equipment and cooperatives or other entities that can benefit from the equipment and maximize their utilization
Task 5.1.1	Perform a survey of all processing equipment and facilities available in rural areas that have been donated or purchased by donor-supported projects- especially USAID-funded projects, and identify underutilized resources
Task 5.1.2	For each identified piece of equipment or infrastructure, and where possible, create plans to increase the utilization based on equipment and facility condition and need by other cooperatives or MSMEs
Activity 5.2	Use PPPs to co-invest in rural areas requiring processing equipment to supply partners with demanded products
Task 5.2.1	Collaborate with medium and large processors to determine their interest in co-investing in equipment for small and micro-processors in rural areas
Task 5.2.2	Develop feasibility studies to justify the investment in equipment

Task 5.2.3	Facilitate co-investments in processing equipment through PPPs where appropriate and provide training on energy efficiency improvements
Task 5.2.4	Develop contractual agreements between investing processors and benefiting rural micro and small processors
Task 5.2.5	Provide technical support to rural processors to ensure successful product development and launch

7. Science, Technology, and Innovation Projects

- 1) Provide needed market intelligence and help processors enter new markets and expand in existing ones by developing new products and co-financing new fruit and vegetable products and equipment;
- 2) Assist food processors to improve efficiency and meet international food safety standards by supporting automating upgrades;
- 3) Assist processors in meeting international food safety requirements through co-investments and upgrading testing labs in regional chambers of commerce;
- 4) Increase participation of farmers, small firms, and cooperatives in the processed foods value chain by increasing procurement of local produce and helping develop new products that utilize oversupply of fruits and vegetables.

2.8 RURAL TOURISM

1. Snapshot (2011)

Rural Tourism
Number of actors: 2,649 businesses employing 22,295 people in rural tourism
Number of actors targeted for the life of project: 2,000
Number of tourists in Lebanon 2012 (rural and metropolitan): 1,365,845
Main value chain actors: <ul style="list-style-type: none">• Eco-tour operators: 35• Hotels and lodging: 637• Agriculture related tourism: 130• Municipalities: 200• Local guides: 300• Craftsmen: 1,000• Sports and leisure operators: 31• Archaeological and natural reserve sites: 155
Priorities of the work plan: <ul style="list-style-type: none">• Immediate/short term<ul style="list-style-type: none">○ Local level planning and network building and upgrading○ Increase quality of services and attractions offered by rural tourism businesses• Long term<ul style="list-style-type: none">○ National strategy and action plan and creation of a national level network○ Design and implement quality standards for rural hospitality businesses○ Promoting rural tourism internally and abroad through a national marketing campaign
Priority communities: Jbail, Batroun, Jezzine, Bcharre, Baalbek, West Bekaa, Saida, Zahraneh, and Zahleh
Activities with scalability and replicability potential: <ul style="list-style-type: none">○ Creating and implementing local strategies and action plans at the municipality level○ Building networks and upgrading institutional support for rural tourism actors○ Innovative business models local guides, bed and breakfasts, and rural leisure facilities○ Adopting quality standards for hospitality services
Activities with the potential to leverage additional funds from the private sector: <ul style="list-style-type: none">○ Investments in PPPs for regional or local rural leisure facilities like La Maison de la foret in the Jezzine area○ Developing new rural tourism products such as destination hiking trails or seaside activities○ Developing local products that promote the rural image such as high quality olive oil bottled in pottery bottles found in Rachaya

2. Background and Rationale

Lebanon is a country of contrasts, where natural beauty sits beside chaotic development and expansion of cities. The population in Lebanon is a mosaic rather than a ‘melting pot’, where homogeneous groups dominate regionally. Lebanon has always been considered a unique country to visit and promotional materials show the diversity of tourist experiences and the generosity of its people. Although the Lebanese economy is service-oriented and the main economic sectors are banking and tourism, the Ministry of Tourism has an extremely small budget compared to other government agencies. The lack of resources from the government results in miniscule information and statistics on the tourism sector and makes analyzing and upgrading the tourism value chain challenging. As a result of this situation, Lebanon's natural beauty and cultural heritage as the basis for a robust tourism industry has not reached its potential. Lack of government oversight also means that standards and guidelines are not readily respected by stakeholders, including tourists. One prime example is that although a Charter for Responsible Tourism in Lebanon was declared in 2008, it has not yet been implemented.

Rural Lebanon is not well developed and lacks infrastructure for tourism, yet it represents excellent value for the experience travelers are seeking. Realization of this value cannot occur unless a strong vision is created and a good management plan for tourism in rural areas is established with all of the actors participating in each link of the chain. Furthermore, rural tourism initiatives often involve young dynamic rural entrepreneurs and have great potential to induce economic opportunities for women in areas such as bed and breakfast managers, local and traditional food cooperatives, and tourism operators.

Rural tourism growth is based on stakeholder led processes of upgrading capacities of local institutions- including municipalities, natural reserves, local food networks, and hospitality networks. It also provides small and micro businesses economic opportunities and employment. Therefore, it can provide opportunities for communities hosting Syrian refugees to develop short term coping strategies in response to economic pressures caused by the Syrian crisis, while at the same time helping create long-term resilient economic and institutional networks that can sustain, adapt, and innovate in times of crisis.

3. Rural Tourism Value Chain Focus

As noted above, strategic planning and institutional involvement are necessary conditions for the development of rural tourism. The LIVCD project will encourage the creation of synergies designed to create rural tourism “destinations” through implementing strategies and action plans. At the local level, interventions will be customized based on the location with an emphasis on the enthusiasm and resources committed by municipalities. The first step includes facilitating the development of the strategic document and then leveraging partners and co-investments to support its implementation. In areas where stakeholders have undergone strategic planning, LIVCD will support implementation of prioritized elements. Through these activities, LIVCD is hoping to reach a total of 20 localities and destinations, such as coastal municipalities: Addousieh (Caza of Saida Al-Zahrani), Anfeh (Koura’s Caza of Koura), Jbail

(Caza of Jbail); hilly municipalities: Maad (Caza of Jbail), mountainous municipalities: Ehmej, (Caza of Jbail), Jezzine union of municipalities, Hadath al Jebbeh (Caza of Bchare), Assia and Tannourine (Caza of Batroun); and municipalities in the Bekaa valley: Deir Al-ahmar, Anjar, West Bekaa network (Saghbine, Amiq, Kefraya).

LIVCD assistance ranges from supporting rural tourism infrastructure, such as open public/private spaces serving as focal points such as la “maison de la Foret” in the Jezzine area, to linking localities to existing rural attractions and activities like the Lebanon Mountain Trail (LMT) and other hiking routes. LIVCD also anticipates identifying clusters or interregional themes from which rural tourism products can be developed, including eco-friendly maritime tourism sites (Anfeh, Addousieh, Jbail), old Roman routes (Via Appia from Byblos to Anjar, through, Maad, Ehmej, Deir Al-Ahmar, Baalbek). In addition, the Project will facilitate establishing a stakeholder’s advisory committee that can serve as a think tank for new ideas on technology and innovation or the design of new routes and destinations.

LIVCD will focus on establishing a collegial environment assisting stakeholders in networking and working together to develop a national strategy. A strong rural tourism sector, in which actors coordinate and cooperate, will stimulate and prepare for launching a marketing campaign to promote rural tourism in Lebanon targeting both domestic and foreign tourists. Finally, the Project will provide support to businesses including training and coaching of more than 30 rural hospitality services to increase the quality of services and meet international certification requirements. In addition, LIVCD will work on the training of local guides and help them develop sustainable business plans in coordination with local institutions and municipalities.

The handicraft sector is considered as part of the rural tourism value chain, it will therefore receive the necessary assistance from LIVCD in order to upgrade and innovate. Potential for intervention in handicrafts include: supporting the Rashaya Pottery Cooperative in order for them to increase production, train new craftsmen, develop new products, introduce innovative design, and create new business linkages. While LIVCD intends to expand handicraft activities, it is essential to preserve its traditional characteristics and minimize mass production of products. Innovations might include: upgrading of pottery items through introducing painting and design of new products and upgrading soap production technology to reach a critical mass allowing for export.

The Project will work in partnership with the private sector and academic institution, including the Faculty of Tourism and Hospitality Management of the Lebanese University and the School of Hospitality and Tourism of Balamand University, to implement innovative research results in pilot sites and then scale them up to benefit the entire value chain. Innovations and technology might include: access control to natural reserves, remote sensing forest management techniques, Web 2.0 electronic platform for information exchange and reservation, and quality standards in hospitality services.

In order to attempt to mitigate the negative consequences from the Syrian crisis and prepare for the future recovery of the tourism industry in Lebanon, LIVCD intends to emphasize realistic and

practical approaches for the near term. Activities include strategic planning for local domestic actors in order to create specific priority projects in rural destinations, ideally resulting in improved infrastructure and institutions that can provide services and experiences demanded by visitors. Improving the quality of organizations, infrastructure, and human resources immediately is necessary to take advantage of the situation when the environment improves and the sector recovers. The key target market for LIVCD in the first two years is local domestic and diaspora tourists who continue to return to Lebanon usually in the summer and holiday season.

4. End of Project Vision for Rural Tourism Value Chain

Improved supply of products in the rural tourism sector results in capturing a larger share of the domestic and diaspora tourist market segments for those who are already familiar with rural Lebanon, and that present a value added, as compared to the more popular attractions. Increased demand in the Middle East segment, especially Saudis and Kuwaitis, for rural tourism activities by adapting products that fit their behavior patterns. A protected natural and cultural base of rural tourism through raising awareness and engaging the local community is apparent as domestic and diaspora tourists continually explore new locations in Lebanon utilizing local services, guides, and accommodation. The handicraft sector is vibrant and continues to provide high quality merchandise as artisans expand their businesses and train future producers on traditional craftwork.

5. Life of Project Strategy: Objectives and Results

Axis One: Support stakeholders to design a national strategy and action plan and advocate for its implementation by increasing demand and implement some key elements of the action plan

- Expected results: Increased demand for rural tourism products and packages and increased competitiveness of rural businesses.

Axis Two: Create synergies within the rural tourism value chain

- Expected results: New tourism packages developed and increased number of tourists in rural areas.

Axis Three: Upgrade local actors and increase the quality and quantity of products and services

- Expected results: Increased capacity and value of products and services and increased income of beneficiaries.

6. Activities

The table below summarizes key information about major rural tourism activities.

Axis 1	Support stakeholders in the rural tourism value chain to design a national strategy and action plan and advocate for its implementation (increase demand); Implement some key elements of the action plan
Activity 1.1	Develop and implement a rural tourism national strategy and action plan draft and empower stakeholders to advocate for its implementation
Task 1.1.1	Facilitate the development of the national strategy and action plan by the national working group
Task 1.1.2	Support stakeholders to advocate for public /private, recognition and support of the strategy
Task 1.1.3	Implement the strategy through partnerships and co-investments of prioritized elements of the national action plan
Activity 1.2	Implement a national marketing campaign
Task 1.2.1	Develop a national marketing campaign for rural tourism in Lebanon
Task 1.2.2	Support implementing the marketing campaign through partnerships and co-investments
Axis 2	Create synergies within the rural tourism value chain
Activity 2.1	Create synergies and encourage collective action at the local level, through the development and implementation of local strategies and actions plans
Task 2.1.1	Support the development of regional level rural tourism strategies and action plans
Task 2.1.2	Facilitate Implementing elements of the regional strategies through partnerships and co-investments
Activity 2.2	Support synergies and collective action between national level leading stakeholders, including: Dhafee Network, LMT, Beyond Beirut, tour operators, and NGOs
Task 2.2.1	Set up a sector "think tank" involving the main national actors
Task 2.2.2	Complete a diagnosis, review, and analysis of the current situation and select areas of intervention
Task 2.2.3	Support actors in developing and implementing new tourist packages in selected areas through partnerships and co-investments
Axis 3	Support upgrading local actors and increase the quality and quantity of products and services
Activity 3.1	Provide business and ancillary services support to increase the quality and quantity of products and introduce new products to businesses integrated or

	willing to integrate rural tourism networks
Task 3.1.1	Provide business and ancillary services support to craftsmen and artisans
Task 3.1.2	Provide support to agribusinesses, including - and not limited to - traditional and local food cooperatives or farmers willing to introduce on-farm accommodation
Task 3.1.3	Provide support to hospitality businesses through partnerships and co-investments
Activity 3.2	Provide institutional capacity building training, coaching, and technical assistance training to businesses integrated or willing to integrate rural tourism network
Task 3.2.1	Provide training and technical assistance on networking, coordination, and collective action
Task 3.2.2	Provide technical assistance for loan applications and access to finance through banks, MFIs, Government programs such as Kafalat, or other financing means

7. Science, Technology, and Innovation Projects

- 1) Cooperate with universities and researchers on developing technology and innovation for rural tourism and pilot them in pilot communities.

SECTION 3.0 LIFE OF PROJECT

CROSS CUTTING ACTIVITIES

YEAR 1 AND 2

3.1 ACCESS TO FINANCE AND GRANTS

1. Background and Rationale

Although financial services in the context of microfinance typically focuses on debt financing, or simply borrowing funds to start or improve a business, LIVCD believes that the full range of available products must be examined and considered. Establishing savings accounts, purchasing insurance when available and appropriate, and other more sophisticated strategies such as letters of credit, or factoring accounts receivable are also useful strategies that can, if used effectively, help maintain cash flow and allow businesses to operate more effectively. In addition, for the very poor, utilizing a mix of financial services can help reduce the impact of external shocks such as a poor agriculture harvest season, delays in payments from buyers, and other family financial obligations such as an unexpected death, a wedding, or paying school fees. Without the proper combination of financial tools, major adverse events can be devastating, wiping out small businesses, while simultaneously placing a tremendous burden on families resources and a limited asset base.

The one overarching goal of LIVCD's access to finance component is to provide reliable, clear, and accurate information for beneficiaries who are considering financial services to help strengthen their enterprises. Accessing credit is important; however the most beneficial outcome of improving small scale production at the household level and running efficient MSMEs may be to build equity rather than just borrowing and repaying. Assets are not only resources that people use to build livelihoods they often provide them the capability to survive and take action.²

There is a fundamental question whether the goal of accessing finance should be to reach every potential poor person. There are individuals who do not wish to access finance under any circumstances due to beliefs and past experience, while there are also assuredly others who should not be provided finance due to an inability or desire to repay, along with insufficient foresight and knowledge about particular investments and business operations. LIVCD's objective is to address access issues without pressuring or forcing rural farmers and

² Getting Assets Right in Macro-Social Analysis Presentation, World Bank

microenterprises to enter into contracts they are not comfortable with or do not fully comprehend.

Not all poor people are budding entrepreneurs, for people living in poverty a savings account- even a very small one- is a good start. Although not all individuals are creditworthy and can qualify or even desire to borrow, everyone is deposit worthy and wants assets.³ Easier access to banking services and savings will move the rural poor into situations in which higher incomes are possible, by providing alternatives for their enterprise and their family finances. Access to finance in appropriate situations will stimulate reinvesting in farms, agribusinesses, and other enterprises that will result in increased competitiveness of products and growth.⁴

For those individuals who are interested in learning about the costs and benefits associated with available financial services, LIVCD will facilitate introductions to available bank and non-bank lenders and most importantly educate beneficiaries about the real costs and potential positive outcomes associated with these services.

Based on recent guidance from USAID and the expansion of the Lebanon Investment in Microfinance (LIM) Project, LIVCD will not be working directly with MFIs to provide funding to expand lending. Efforts will focus on creating sustainable public-private partnerships (PPPs) defined as a public sector organization- usually LIVCD- working with a private sector organization and requiring each partner to contribute its own set of skills and resources to collaborate on co-designed and co-managed projects to significantly expand and deepen the impact of development assistance. PPPs promote co-investment in public goods and services that benefit both the public and private sector; encourage market entry by creating incentives or reducing the risk of investing in emerging markets; and leverage core capabilities of private sector entities and individuals to address a development challenge.⁵

2. Life of Project Strategy: Objectives and Results

Activity 1: Facilitate finance for value chain actors and maximize co-investment in PPPs

Activity 2: Develop new products and services to meet the requirements of rural borrowers

Activity 3: Develop and manage a small grant component

Activity 4: Strengthen relationships between finance providers and value chain actors

3. Activities

The table below summarizes key information about major access to finance activities.

³ Women, Microfinance, and Savings: Lessons and Proposals, December 2001, Rebecca M. Vonderlack and Mark Schreiner.

⁴ Finance in Value Chain Analysis-A Synthesis Paper, October 2008, DAI.

⁵ Partnering for Impact: PPPs and USAID's Global Development Alliance Approach

Access to Finance

Activity 1: Facilitate finance for value chain actors and maximize co-investment in PPPs; leverage appropriate business linkages and ancillary services

- Assess the individual financial needs of value chain actors to increase financing for their MSME activities.
- Assist value chain actors in access financing from available sources in Lebanon including banks, MFIs, Government programs such as Kafalat, input suppliers, and others to increase their business activities, resulting in increased domestic investment, output, and employment.
- Facilitate preparing loan applications, feasibility studies, and business plans for MSMEs to apply for loans from financial service providers or LIVCD grants.

Activity 2: Support Lebanon Investment in Microfinance USAID-funded project in developing new financial products and service if needed

- Collaborate with LIM to create products appropriate for farmers and agribusinesses taking into consideration risks, harvesting calendars, and required grace periods if needed.
- Explore possibilities with LIM and service providers on offering warehouse receipts, factoring, leasing, crop insurance, forward contracts, and equity financing to interested value chain actors.

Activity 3: Develop and manage small grants component

- Assess the gap in access to finance and award grants in targeted value chains to institutions and MSMEs utilizing financial, project indicators, and approved grant criteria.
- Provide grants through a competitive process throughout the life of the project based on applications that will improve competitiveness of Lebanese products, increase exports or import replacement, expand MSME activities within value chains, create jobs, and increase income for small farmers- with an emphasis on women and youth where practical.

Activity 4: Strengthen relationships between finance providers and value chain actors through training and technical assistance, and train loan officers and other MFI staff on agriculture and agribusiness initiatives

- Provide finance training and technical assistance to farmers, grantees, and other value chain actors in order to build relationships between lenders, borrowers, and investors in conjunction with the LIM project.
- Create a farm management and bookkeeping manual to train farmers on basic finance and accounting concepts and the importance of maintaining records.
- Invite loan officers and potential investors to participate in value chain tours on farms and in factories, and organize workshops in cooperation with financial services providers and potential beneficiaries to explain the application process, required documentation, and terms and conditions of loans.
- Provide capacity building for organizations based on institutional capacity building assessment findings.

3.2 INSTITUTIONAL CAPACITY BUILDING

1. Background and Rationale

The institutional capacity building component of LIVCD aims at building critical skills of Lebanese stakeholders, and leaving in place a permanent cadre of skilled local firms, associations, foundations, and organizations that can support the development and long-term stability of Lebanon's rural economy. This component is divided into two main parts:

1) Program Management Capacity Building: Some institutions in Lebanon lack structure, capacity, vision, or resources to have sustainable impact on agribusiness or tourism, yet they have strong advantages like existing programming, dedicated staff, field presence, local knowledge, and a mandate to implement change. LIVCD Capacity Building activities will identify organizations in the commercial agriculture and tourism sectors with the capacity and desire to expand or improve, and offer assistance to build their capacities as regional and national facilitators and services providers. The project will improve the skills of local partners and grantees in managing USAID-funded projects. The training will focus on contractual rules and regulations, business conduct and ethics, project management, financial administration, communications, and monitoring and evaluation.

2) Technical Capacity Building: This component intends to involve all stakeholders in project activities through coaching and mentoring Lebanese counterparts. Interventions will be designed to ensure a consistent flow of technical assistance and training to target value chain actors that are directly linked to the upgrading strategies and work plans. Based on numerous meetings with an array of institutions since LIVCD began working, there is a dire need to work with organizations and MSMEs who in general have very weak management structures-often run by one individual, few documented policies and procedures for important areas such as finance, procurement and human resources, and in many cases enterprises who are not able to calculate basic costs at the production level in order to determine profitability and required prices for products to break even.

LIVCD will build on recent support from USAID to the rural sector through agricultural and other related economic development projects, coordinating closely with the PACE, Expand Your Horizon, and Baladi Cap projects to develop a full assortment of support. Existing resources from USAID projects in Lebanon and elsewhere will be leveraged to fine tune tools, training materials, and organization capacity assessment documents. The results of these efforts coincide with LIVCD's goal of partnering with the private sector to increase incomes of the rural population by strengthening organizational management and efficiency, as well as expanding the number of MSME's that can compete in selected markets, improving linkages between firms and other actors throughout the value chain by providing networking training and events for businesses to cooperate in improving their own institution in addition to the overall competitiveness of selected value chains. LIVCD will also strengthen MSME's advocacy towards improving the business environment for selected value chains.

Building human and institutional capacity is integral to LIVCD’s strategic investment in the rural areas and value chains. A focus of the activities includes building the capacities of organizations to have a greater chance in defining and fulfilling their mission and purpose. Most organizations need further development or improvement to ensure maximum effectiveness and long term-sustainability.

In addition, LIVCD will support including youth and gender strategies into ongoing value chain assessments and upgrading strategies. The identification and implementation of cross-LIVCD youth and gender inclusion strategies will be designed to ensure that LIVCD’s value chain initiatives have a positive impact on gender disparity and foster opportunities for youth participation.

2. Life of Project Strategy: Objectives and Results

Axis One: Institutional Capacity Building

Axis Two: Value Chain Specific Technology Transfer Trainings

Axis Three: Cross-Cutting Gender and Youth Inclusion Mandate

3. Activities

The table below summarizes key information about major NGO capacity building activities.

Axis One: Institutional Capacity Building and training for NGOs, businesses, and other associations in the value chains
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Activity 1: Develop menu of institutional capacity building offerings

- Identify key topics and design interactive training with technical content; provide TOT on delivery of institutional capacity building offerings.

Activity 2: Develop cross-cutting orientation and self-assessment content

- Design a value chain upgrading strategy focused workshop for partners and a self-assessment tool.

Activity 3: Facilitate assistance for selected organizations and identify and select future partners linked to VC upgrading

- Continue supporting the current organizations and identify, map, and recruit additional organizations that can contribute within the selected value chains.

Activity 4: Deliver customized institutional capacity building trainings

- Prepare individual institutional capacity building plans and deliver a series of customized trainings.

Activity 5: Deliver value chain upgrading related technical trainings

- Identify technical assistance priorities for each value chain and develop and adapt effective training content.

Activity 6: Provide coaching and support to organizations on value chain activities

- Identify coaching and follow-up support needs for each value chain, and provide customized support.

Axis Two: Value chain specific technology transfer trainings

Activity 1: Work with value chain leads to identify training needs

- Define technology transfer priorities, training format, and modalities for beneficiaries.
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Activity 2: Work with value chain leads to define training strategy

- Determine the training tools that will be used in technology transfer, create additional tools, and identify trainers.
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Axis Three: Cross-cutting gender and youth inclusion

Activity 1: Orient LIVCD Staff with the overall gender and youth mainstreaming approach and strategies

- Provide an orientation and workshop to all staff on gender and youth inclusion to identify and address barriers to access, carry out value chain specific appraisals, and develop and implement youth and gender mainstreaming activities.
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3.3 COMMUNICATIONS

1. Background and Rationale

LIVCD Communications activities intend to raise public awareness of LIVCD interventions, and facilitate information sharing among stakeholders. The different events, conferences, and media coverage will help build a network of partners (local communities, private sector, and diaspora) and will encourage actors to be involved and invest in local projects to improve the likelihood of sustainability. By engaging and informing local communities, LIVCD will induce a behavioral change and increase involvement of actors at the local level. Efforts will also support the circulation of information among the team and partners to exchange technical knowledge, best practices, and lessons learned by using the latest available technologies and tools. In addition, LIVCD will support selling products developed under the various value chain activities, through promotional, media, and on-line campaigns, for domestic and export markets.

Providing USAID with all required deliverables and reports including: weekly, quarterly, annual, and other ad hoc requests will be a significant part of the work plan activities. Emphasizing successes through documented success stories and public outreach initiatives in conjunction with USAID staff will be an ongoing exercise, and LIVCD will explore the possibility of using technology such as a project website, Facebook, and twitter to disseminate information to the public and partners subject to USAID approval. If a website is approved by USAID, LIVCD intends to create a robust and interactive site where the large repository of information currently housed in TAMIS can be shared, including success stories, edited value chain assessments, training materials, presentations, and partner contact information can be accessed by the general public. All communication and outreach activities will be submitted to USAID for clearance before they are disseminated to the public through the press or television.

2. Life of Project Strategy: Objectives and Results

- Axis 1: Project Communications: Raise Public Awareness on LIVCD projects and value chain activities

Expected results: Awareness increased regarding activities in rural areas and a network of investors and partners compiled.

- Axis 2: Knowledge sharing among stakeholders

Expected results: Mutual exchange of best practices among projects and improved tools and methodologies shared.

3. Activities

The table below summarizes key information about major Communications activities.

Axis One: Project communications - raise public awareness on LIVCD projects and value chain activities (pending USAID clearance for all public media)

Activity 1.1 Ensure good visibility of LIVCD through institutional communications

- Generate media coverage through visits to projects and media tours.
- Produce and disseminate printed and audio-visual material, including: program brochures, documentaries, and newsletters.

Activity 1.2 Support the promotion and sales of LIVCD products and specific value chains

- Facilitate support for related stakeholders to organize a media campaign to market specific sectors, and support exhibitions/fairs for specific regions and products.

Activity 1.3: Encourage local communities, diaspora, and investors' participation in LIVCD activities

- Plan and organize conferences, workshops, and other events, in partnership with the Chambers of Commerce, SLFI, and other organizations in order to build a network of investors and partners.
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Axis Two: Knowledge sharing among stakeholders

Activity 2.1: Facilitate circulation of information among the team and partners

- Circulate information among team members and prepare internal newsletters to share best practices and successes among the team and partners.

Activity 2.2: Make use of new technologies to facilitate stakeholders' access to technical information

- Facilitate integrating agricultural applications on mobile phones for farmers through partners, in conjunction with LIVCD market intelligence efforts, and support partner websites for information sharing to assist in creating a sustainable business.
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3.4 MARKET INTELLIGENCE & MONITORING

1. Background and Rationale

Marketing intelligence provides value chain actors with information to identify opportunities and make planning and investment decisions to exploit those opportunities. Market intelligence includes information about prices and volumes, market channels, and associated demand parameters (variety, season, quality, packaging, and other specifications), competing sources of supply and seasonality of production and trade, and relevant government regulations of production, trade, and other relevant areas. LIVCD will support the development of a market intelligence service with a sustainable, commercial business model to provide reliable and actionable information to rural value chain actors.

2. Life of Project Strategy: Objectives and Results

Axis One: Develop marketing intelligence system to support LIVCD interventions and stakeholders

- Expected results: Market information is compiled, analyzed, and made available to value chain stakeholders to support them in identifying and pursuing market opportunities; business service providers of marketing intelligence are identified.

Axis Two: Support Sustainable Marketing Intelligence Service for Targeted Value Chains

- Expected results: Relevant marketing intelligence (prices, volumes, production/supply, and other information relevant to identification and pursuit of market opportunities) available to value chain actors on a sustainable basis.

3. Activities

The table below summarizes key information about major Market Intelligence activities.

Axis One: Marketing intelligence support for value chain activities in LIVCD targeted value chains

- Identify and consolidate marketing intelligence from LIVCD value chain assessment and ongoing value chain intervention work.
- Identify business service providers of marketing intelligence, both current and potential.
- Develop a marketing intelligence information system for LIVCD, including database and information products.
- Disseminate marketing intelligence to value chain stakeholders through specific value chain work plan activities.
- Conduct an information needs assessment: Determine information needs of stakeholders at different points in the targeted value chains.
- Determine data availability: Identify sources of marketing intelligence, identify business

service providers to deliver marketing intelligence services, and develop PPPs.

- Link and build on existing databases like TASDIR completed under the QCC Project and managed by the Federation of Chambers of Commerce, Industry, and Agriculture (www.cci-fed.org.lb)

Axis Two: Support sustainable marketing intelligence service for targeted value chains

- With service provider partners, assess potential business models to provide marketing intelligence services on a sustainable basis. Consider value chain actors' information needs, preferences, and different potential fee structures.
 - Provide technical assistance and in-kind assistance to business service provider to set up or tailor service.
 - Link marketing intelligence service providers and potential clients in each value chain.
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SECTION 4.0 PROGRAM MONITORING AND EVALUATION

The LIVCD Performance Management Plan (PMP) is designed to provide project management and USAID with timely, relevant information about project activities and progress towards achieving results and impact. The PMP will define indicators that provide measures of change for each result in the LIVCD Result Framework, and a monitoring system for the collection, analysis, and dissemination of monitoring and evaluation information. Data collection for establishing indicator baselines will be completed in conjunction with USAID and DAI standards and best practices. The implementation of program activities and priorities is closely monitored by the M&E Specialist, who will transmit data to the centralized database, and the summarized data will be used by LIVCD for project management purposes about strategies and activities related to the implementation of the Work Plan. Data may also be shared with beneficiaries to promote self-analysis and discussion.

4.1 METHODOLOGY AND TOOLS

LIVCD's methodology will identify needs, understand the range of solutions, and stimulate reactions and applications of successful innovative approaches. LIVCD will utilize an array of tools developed by DAI and applied successfully to similar projects around the world. Specific tools that LIVCD plans to use for establishing baseline indicators and monitoring performance over time include:

- **Baseline Survey.** LIVCD will collect all of the information required to obtain accurate and reliable baseline data. In addition, the baseline assessment will allow technical experts to gather information and measure changes over the life of the project.
- **Direct observations.** LIVCD is able to count, measure, or document figures that can be verified based on regular reporting validation and crosschecks.
- **Key informant interviews.** In-depth discussions with beneficiaries who are knowledgeable on specific topics will be conducted to verify changes over time and ensure that indicator targets are being achieved.
- **File and document review.** Reviewing data that was previously collected and is available from the government, USAID, other international organizations, beneficiaries, on-line, or other sources. This type of review offers a relatively quick method to validate data that has already been collected with an eye toward minimizing the need for any additional data collection and the costs associated with that effort.
- **Case studies.** These narratives capture success stories of what worked and what did not work, innovative ideas, lessons learned, and challenges.

4.2 LIVCD CAUSAL MODEL

