Growing Sustainability
An Integrated Village Development Project

El Qaraaoun pilot village

Progress Report
(1)
March 15, 2002
I-Introduction

In the context of The Rural Community Development Cluster Project of USDA, the Faculty of Agricultural and Food Sciences (FAFS) of the American University of Beirut (AUB) was granted an award by Mercy Corps/Lebanon Program (MC) to undertake the “Growing Sustainability, An Integrated Village Development Project, El Qaraaoun pilot village” project. A contract was signed between AUB and MC on December 5, 2001. The terms of reference are summarized in the project summary. The reporting obligation requires FAFS to submit Periodic progress reports on a trimestral basis. This document is the first progress report for this project.

II-Implementation strategy

As indicated by the project proposal, the implementation strategy relies on the efficient participation of the community in planning, monitoring, and evaluation. A rapid participatory rural appraisal was conducted in order to assess the needs of the local community as well as the available resources that can be exploited in the proposed activities (attachment 1). Moreover, the project's specialized teams arranged several public assemblies in the medical center of the Islamic Charitable Organization (ICO) (attachment 2). Those assemblies aimed at explaining, promoting, and identifying common problems along with the community, for the different components of the project. As a result, the project's specialized teams implemented several activities that will be discussed in the body of this report.

The activities of the project were separated into five components within each, different sub-activities are planned as shown in the outline below.

A. Improving agricultural production

B. Forage production

C. Women's association and food processing plant

D. Integrated marketing program

E. Public/Private partnership
III- Progress of activities

A. Component 1: Improving agricultural production

This component aims at improving agricultural production by the introduction of organic agriculture and new varieties that are adaptable to the village environmental conditions and which possess high market demand.

1- Introduction of new varieties (fruit tree nursery)

a. Specific objective and expected outcome

This activity will improve the production status of the farmer and guide him to choose better yielding varieties with higher market demand. It also aims at the production of certified fruit trees from registered rootstocks through the establishment of a local nursery. This nursery will also serve as a demonstration station which will assist in the production of fruit trees for the region at competitive prices.

b. Progress

The nursery was established in a fenced (movable fence) area of 5 du. The location of the nursery is going to be changed every year in order to avoid diseases.

A fully equipped drip irrigation system was installed for a capacity of 20,000 plants.

Black mulches were spread to maximize irrigation efficiency and minimize weed infestation during the early growth of the rootstocks.

10,000 GF677 rootstocks certified virus free suitable for stone fruits were imported from Spain and transplanted in the nursery (March 5-9, 2002).

10,000 apricot seeds were purchased and will be stratified and planted later during March. The GF677 and the apricot seeds are disease and drought resistant, which make them suitable for the village’s environment. The project also facilitated the import of 1000 white seedless grape plants, grafted on superior rootstocks and which do not require irrigation and hormonal addition. The project team, together with MC (Mercy Corps Lebanon), decided that these plants are to be distributed to six farmers to improve economic viability. The orchards will serve as demonstration plots to revitalize vine production in the village which was once a leading producer of
c. Problems and constraints
Due to shipment delays and environmental constraints, a loss rate of 10 to 15% of the planted GF677 rootstocks is expected.

2- Promotion of organic agriculture

a. Specific objective and expected outcome
The project intends to encourage farmers (small and medium growers) to adopt environmentally friendly agriculture production techniques as a profitable alternative. This activity is to offer growers higher cash per unit of production through the satisfaction of a market niche where competition is lower.

b. Progress (activities and achievements)
The project consultant for organic agriculture has prepared a vegetable-cropping plan for potential producers where the harvesting time will coincide with the time where the produce prices are peaking (attachment 4). Moreover, the project team is negotiating with international crediting companies to inspect and provide recognized quality seals for the Qaraoun organic produce. Most of the newly reclaimed lands (800 du.) by MC, in the southern mountainous side, constitute potential lands suitable for organic vegetable and fruit tree production. The only limitation is water availability for irrigation to facilitate profitable vegetable production and establishment of fruit orchards. To remedy this, the project's irrigation consultant, together with the village's Islamic Charitable Organization (ICO), has invited several contractors to bid for drilling a well in the. The terms of reference for the contacted companies as well as the minutes of the AUB-community meeting are attached to this report (attachment 2). The exact location of the well as well as the detailed irrigation plan for the reclaimed lands will be presented in the next progress report.

B- Component 2: Forage production
Qaraoun farmers, as well as most of the Lebanese farmers, are not used to grow green forage crops. This is mainly because they lack the expertise and the machinery to do so. The project aims at strengthening the local capacity in forage production by encouraging the practice and providing the machinery pool to do so.
1- Promotion of forage production

a. Specific objective and expected outcome
This activity aims at encouraging farmers to cultivate high quality green forage crops (barley/vetch, com, alfalfa and ryegrass). It also intends to introduce an alternative to the conventional non-profitable cereal production. Moreover, this activity will assist in the improvement of the dairy sector by providing good quality green forages.

b. Progress (activities and achievements)

?? 57.6 du of Barley-Vetch were planted in January 2002 and are going to be fertilized by the end of March for maximum output. The ICO is going to use the produce of this plot for its dairy farm (established by MC).

?? 150 du were identified as potential plots for rye grass and com production (to be planted in April, 2002). The project's specialized team will assist in providing the seeds, machinery and market for the planted produce. The target farmers are Mahmoud Azanky, Adel Debaja and Mouien Yassin.

2- Establishment of a machinery pool
This activity aims at providing the special machinery to facilitate the production process of the planted forages, from land preparation to bailing. The machine pool will also be ready for public rental.

a. Progress
The necessary machinery was ordered and it is expected to be delivered to Qaraaoun starting May 2002.

C- Component 3: Women's association and Food processing
This component aims at adding value to the produce obtained from the project agricultural activities (fruits and vegetables) as well as other NGO agricultural activities (milk from the dairy farm developed by MC). It also seeks to involve the women community and encourage their economic self-reliance.

1- Establishment of a fully equipped processing plant

a. Objective and expected outcome
The processing plant will add value to the products, extend shelf life time and provide employment for village women.
b. **Progress (activities and achievements)**

The ICO of the village is facilitating the rental of an old house in the village. The house will hold the processing plant and will serve as a Touristic marketing outlet.

The project specialized team organizes regular meetings with representatives from the women’s organization in Qaraaoun. The purpose of those meetings is to access needs and ensure participatory planning (attachment 2).

c. **Problems and constraints**

This activity will remain pending until agricultural produce is ready. However, the purchase and the installation of the equipment are in process.

2- **Backyard organic gardens**

a. **Specific objective and expected outcome**

This activity aims at encouraging households to grow organic fruits and vegetables in their house gardens. Moreover, it will increase the community’s awareness towards healthy food and environmental conservation.

b. **Progress and expected outcome**

As indicated by the PRA (attachment 1), some of the village houses grow most of their fruits and vegetables in their backyards. The project specialized team and the Woman’s Organization (WO) of the Village decided to assist (technical information, seeds and agrochemicals) five households in their garden production. Moreover, the project will offer to the WO awareness workshops to further assist in the dissemination of this activity.

The list of names of the households is attached to this report (attachment 2).

**D- Component 4: Integrated marketing program**

a. **Specific objective and expected outcome**

This activity aims at establishing a marketing program and creating sustainable marketing channels of the Qaraaoun products (dairy, organic products and cottage industry).

The project is to contract an advertisement and marketing company to create an image for the Qaraaoun products, launch a marketing campaign and facilitates profitable retail outlets in Beirut.
b. Progress (activities and achievements)

The project met and invited three of the most reputable companies in Lebanon (IMPACT/BBDO, Sachi & Sachi and Publicis.Graphics) to propose for executing this component. The contracting terms are attached to this report (attachment 6). One of the companies apologized and the others were not able to execute this campaign within the budget limit of this component. The project is now seeking the services of similar companies but with lower standards that can meet our terms with lower fees.

E- Public - Private partnership

Previous experiences in developmental projects have shown that the public sector or the community itself lack the skill to efficiently manage the services provided to them. This poses an urgent need to find new sources of financing, technology as well as management. Private sectors, on the other hand, have the financial, technological, and managerial resources as well as the efficiency in delivering services and maintaining capital equipment at higher standards. However, privatizing the services will alienate the role of the community or the public sector whose involvement guarantees a degree of accountability, transparency, and credibility, which ensures the protection to all sections of the community.

The solution is to create a public-private partnership where both sectors assume co-ownership and co-responsibility in providing services to the community. Such an enterprise pools the best features of the two sectors: dynamism, access to finance, knowledge in technology, managerial efficiency.

This public-private partnership is going to be created in Qaraaoun village through the establishment of a private company that will be in charge of managing the services and keeping the equipment at high standards. The company will provide the extension, knowledge and resources to the farmers from seed to shelf in the market. In return, this company will earn a certain percentage of the profit and the other part will go to the will be invested in social action by the (ICO).
Attachments
Preface

Qaraaoun project is an integrated development program emphasizing sustainable agriculture and efficient natural resource management through participatory approaches. This will be achieved by improving agricultural production through a set of activities including the establishment of a nursery, introduction of new varieties, and the promotion of organic agriculture and its "niche" market. Other objectives of this project include the promotion of good quality forage crops, value-adding to the produce through the creation of a women-operated food processing plant, and the establishment of a marketing network. Prior to the implementation of any project, involving local communities in designing the policies and programs that relate to their own areas is fundamental for effective rural development. The key reasons for involving local communities are:

• Improving democracy and legitimacy for public action
• Reducing the gap between policy makers and rural communities
• Making rural policy responsive to local knowledge, needs and circumstances
• Engaging local people more directly in planning for their own futures
• Engaging local people more directly in taking action

In the light of this, a survey was done in Qaraaoun village in order to assess the village resources and the willingness of the community to participate within the context of the previously mentioned activities.

I- Introduction

This document summarizes the results of a survey conducted in Qaraaoun village over a period of four days by a team of three members representing the American University of Beirut and a member representing the Islamic Charitable Organization. The main findings of the survey provide a general overview of the agricultural systems in Qaraaoun, the main constraints encountered by farmers and solutions as suggested by them.

I-1. Broad objective of the survey
The primary objective of the survey was to assess the needs of the community, the village resources and the willingness of the community to participate in this developmental project within the context of the planned activities.

II-2. Specific objectives of the survey

- Provide an overview of the agricultural system starting with the soil and planting material and ending with the selling of the produce
- Identify the main constraint facing the farmers
- Identify the farmers' strategies and suggestions for addressing these problems and possible technical options to alleviate and solve these problems

Background

Qaraaoun village experienced a great decline in agricultural production due to the emigration of its inhabitants. For the past thirty years or more, agriculture has been in decline in this village and the major source of income of Qaraaoun inhabitants is from non-agricultural sources mostly remittances from the Diaspora. Today, emigrants are returning to their homeland, and to keep their roots attached to the village they are buying lands or reclaiming their neglected ones.

The land area in Qaraaoun is divided into three zones (See Map I): an irrigated agricultural plain, urbanized foothills and desertified mountains. Twenty or thirty years ago, the mountain used to be a good site for vineyards and the main market for the produce was Palestine but during the war the market was lost and a lot of old terraces are now neglected and vacant. The major problem encountered in the mountainous zone is water availability. Some newly rehabilitated parcels of providing a total of around 800 du of virgin lands.

a. Soil

The soils are generally red clayey not calcareous except for a zone of alluvial soil and another on of white calcareous soil (See Map II).
b. Climate

<table>
<thead>
<tr>
<th>Climate Parameter</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Rain Days/ year</td>
<td>50-60</td>
</tr>
<tr>
<td>Average Snow Days/ year</td>
<td>5-10</td>
</tr>
<tr>
<td>Frost days/ year (until March)</td>
<td>10-50</td>
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<tr>
<td>Hot days/year (&gt;30°C)</td>
<td>75-100 days</td>
</tr>
<tr>
<td>Very hot days/year (&gt;35°C)</td>
<td>10-50 days</td>
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<tr>
<td>Daily temperature variation</td>
<td>From 6-12°C</td>
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<tr>
<td>Average precipitation/year</td>
<td>560 mm</td>
</tr>
<tr>
<td>Average Relative Humidity</td>
<td>60-65%</td>
</tr>
</tbody>
</table>

* This data is based on reference from AUB library.

c. Elevation
The altitude in Qaraaoun village ranges from 750m asl in the plain up to 1300m asl in the mountain.

d. Land use
Qaraaoun area is divided into agricultural, urban and vacant lands as shown in Map III.

Results

1. Land tenure

Most of the owned lands are small parcels (1-2 du) scattered in the different zones of the village. As a result of this, most of the farmers find it unprofitable to invest for commercial production and they produce for their domestic use. Large-scale farmers lease big pieces of land (20-150 du) in order to produce commercially.

2. Water availability and irrigation

Water is a major constraint facing the farmers who own lands in the mountainous zone of the village where most of the reclaimed lands are found. Water is not available from any source and there is an urgent need to drill a well. As a result of this, people grow rainfed crops and trees such as olive trees, wheat and barley. When water is needed for the new seedlings, farmers buy water at the rate of 15000-25000 LL/4m³. As for the plain, irrigation water is taken from wells ranging in size from 2” to 8”, the irrigation system adopted by farmers who grow vegetables is the drip irrigation system.
3. Source of planting material

Most of the farmers get their planting material from local nurseries in the area mainly from Chtoura. However, they are not sure about the real source of their planting material and they prefer to have a nursery in their village.

4. Main agricultural enterprises

a. Crops: due to the lack of experience and considering the water problem, most of the inhabitants adopting agriculture are choosing crops that do not require a lot of care and in the same time rainfed. On the other hand, old farmers grow vegetables in addition to the old olive and almond orchards they have.

a. 1) Olives

Olive production is the most common in Qaraaoun due to the hardiness of the tree. They are suited for production all through the village, from the plain to the mountain. Olive orchards for this community are less demanding in terms of cultural practices and care. It was noticed that most farmers have the same production system.

In general, pests are not a problem in olive orchards except for few cases of Verticillium sp., as a result few farmers spray their orchards. Fertilizers are usually applied in February. Some farmers apply manure when it is available, but the majority uses 17-17-17 NPK fertilizer and urea (46%)

Olive orchards are harvested manually at the end of October. Labor is available at the cost of 15,000 LL/day. Part of the harvested produce is for fresh consumption and the other is for oil production. There are 9 olive presses in the area and the residues of pressed olives are not used at all.

One of the

The olive varieties used are: "Italian" for oil extraction, and "Baladi" and "French" for fresh consumption; however, most of the farmers mix the entire yield which results in average production of 1 Kg of oil from 4-6 Kg of olive. The average production is around 200 Kg/tree.

In case of small orchards (1-2 du), the yield is allocated among the family members and friends. Bigger orchards pose the great problem of selling the produce and especially the oil. Fresh olives are mostly sold in the village and the neighborhood at an average price of 2000 LL the Kg and the oil is sold upon request from specific customers. The selling price of oil is 50 $/ 20 L, a price that returns no profit to the farmer and sometimes it is a loss.
According to the farmers, Qaraaoun’s oil is one of the best quality oils in Lebanon although their olives are low in oil content. They pointed out an urgent need to provide the right market for it. One of them suggested Beirut market as a target for the Qaraaoun’s oil.

a. 2) Almonds
The old almond orchards have been neglected in the past 2 or 3 decades and their production has declined dramatically and was not profitable to the farmers especially that the varieties grown are no more in demand.
Five years ago, the “ferek” variety was introduced to the village and it was a success for its better productivity and demand in the market in addition to the fact that it is rainfed. Some farmers find it a better choice than the olives, especially that the price of the small green “freek” almonds is higher. Most of the new almond orchards are not in full production yet and the yield is not very high. The yield of small orchards is allocated among the family, while the yield of big orchards is sold in the village itself where the almonds sell for higher prices than those proposed by the wholesale market of Kab Elias.
Aphids are the main pests encountered in almond orchards, and to control it most farmers spray chemical pesticides, most commonly Lanate, at the budding stage followed by other applications later in the season. Old and experienced farmers spray winter oil and Copper Sulfate directly after pruning. Fertilization, on the other hand, is usually in January. The mostly used fertilizer is 17-17-17 NPK.

a. 3) Apples
There is only one apple grower in Qaraaoun. The 15-year old orchard is 8 du in size, located in the plain region, and irrigated from a well. The planting material is from Chtoura nursery and the varieties grown are the Golden and Starken and he believes that these are no more of great demand in the market. He stores his produce in a refrigerator in Machghara since the sole refrigerator in the village is used for potato storage. He sells the produce in the village at a price of 75 LL/ Kg. He uses chemical fertilizer and he tried to apply manure but found it less effective. The main pests he encounters in his orchard are the woodborer and the aphids and he sprays chemical fertilizers to control them. The same farmer is also in charge of a peach orchard (858 trees) of which he takes good care especially in pruning.

a. 4) Vegetables and Potatoes
There are three commercial vegetable growers in Qaraaoun who lease large pieces of land from 30 to 150 du. The cost of lease of the ploughed land is 80 $/ du. Irrigation water is taken from wells located in the land and
applied in drip systems. In addition to the potatoes, the mostly grown vegetables are: tomato, cucumber, squash, pepper, green bean, cabbages, cauliflower, pea, and melon. The seeds are from different companies and coops.
The produce is sent to Kab Elias Market and the prices fluctuate according to the season and the demand. However, the prices are not very encouraging and this is mainly due to the competition from imported products.

a. 5) Forage production
Forages, mainly wheat and barley, are grown only in rotation with the vegetables and they are not a main crop on which farmers depend. The wheat is sold and the hay is used as feed for the animals.

a. 6) Fruit trees
It is very common to find a variety of fruit trees dispersed within the main orchard. One can find some apricot, peach, apple, walnut and other trees in any orchard. These are mainly for home consumption and not for commercialization.

b. Livestock: Livestock is not a common enterprise in Qaraaoun. Currently there are two main commercial producers left.

b. 1) Cattle production
The unique cattle enterprise is established in the mountainside at the elevation of 1250m. The herd consists of 40 heads (German, French, and American breeds), 24 of which are dairy cows. The farmer grows wheat and barley as feed and he supplements it with concentrate (soya, cotton seeds and com) and vitamins. The main reason for which he does not ensile or try other forage crops is because of the high cost of producing such feed.
He has no serious problems in his herd because he takes good care of it. As for the vaccines, he gets them from the ministry of agriculture and he cures his cows without the need for any vet.
The average milk production in his farm is around 200 Kg/day, which does not allow him to sell to dairy processing plants. He sells the milk in the village at a price of 1000LL for the Kg, and he processes in his house upon request from the customers.

b. 2) Poultry production
There is also one poultry producer in Qaraaoun. The flock consists of 6000 laying hens and the eggs are sold in the village and in the shops of neighboring villages. The manure is sold to banana growers in Saida.
5. **Organic agriculture**

Some farmers are not familiar with the terminology, but they turned out to be growing organically in their home gardens. When the team explained to them the advantages of such practices in terms of better selling prices and lower production cost, most of the farmers showed interest in shifting to organic production as long as the guidance and the market are provided. Potential plots for organic agriculture are located in the mountainside where most of the lands are virgin lands. However, the problem is the lack of water in that area.

6. **Forage production**

None of the farmers grows forage crops such as alfalfa, ryegrass and vetch but they all showed interest when informed about their profitability. They are willing to grow these forage crops as long as the market is provided.

**Conclusions**

As a result of the conducted survey, it was concluded that the community in Qaraoun is ready to cooperate in order to improve their livelihood. Their problems and suggestions fit within the context of the activities planned by the project. The adoption of new production system such as organic agriculture, new forage crops, and providing the market for their production will improve their situation.
Map I

(2m Satellite Image
Layout under development)
Map II

( Soil Map
Layout under development )
Map III

( Land Use map
Layout under development )
Attachment 2

(Community Based Meetings)
Growing Sustainability
An Integrated Village Development Project
El Qaraaoun Pilot Village

Minutes of the community participatory meeting

Date: December 20, 2001
Place: Jamhieh Health Care Center, Qaraaoun
Attendance:
   AUB Team: Dr. Salma Talhouk, Mohammad Jamil, Mahmoud Dalli, and Rania Touma
   MCI: Mr. Mousallam Mansour
Purpose of the meeting: Community vision to the horticultural aspect of the project.
Material Provided: A leaflet explaining the objectives of the project in Arabic.

The President of Jamhieh introduced the team members and the project to the attendees. Mr. Mohammad Jamil explained the purpose of the project and the participation of the community. Then Dr. Salma Talhouk explained to the community the importance of their participation and that all what she wanted from the meeting was to discuss with them their problems and vision concerning the horticultural aspect of the project.

Main problems as defined by the farmers
- Selling the produce: Some varieties (Apples for example) that they have are not of high demand in the market so they sell for low prices.
- High cost of pest control
- Water shortage especially in the mountainside of the village and in the newly rehabilitated lands
- Lack of orientation and expertise in the field
- Competition in the market
- Small pieces of lands are owned, which doesn’t encourage farmers to invest.

Suggestions by the community
- Strategy to sell produce
- Drilling a well in the mountainside to irrigate the rehabilitated lands
- Establishing a nursery for the production of fruit trees and ornamentals since there is only one in Qaraaoun and it is for ornamental flowers only.
Create partnerships to join the small parcels of lands
Introduction of alternative crops and the President of the Women Association suggested medicinal plants and organic agriculture
Loans
Subsidy from the Ministry of Environment and Agriculture
Reviving fruit trees production and especially apples
Honeybee production
Ornamental flowers production
Introduction of new varieties with high demand in the market
Soil analysis

Main crops that used to be grown and the major problems faced
- Olives. They are the most common now since they are less prone to disease and they are rainfed. The productivity is not bad (~200 Kg/tree), but again the problem is with the marketing. When not sold fresh, olives are processed into oil. Oil content in their varieties is low (every 4-9 Kg of olives give 1Kg oil). The oil is not selling well.
- Stone Fruits especially almonds. They abandoned their trees because of high cost of production and the low productivity. Five years ago, they tried the “ferek” variety of almonds and it was a success according to them.
- Grapes, also abandoned for the same reasons. In the past, they used to export to Palestine but now with the current market prices it is no more profitable.
- Apples, but the varieties used are no more of high demand in the market. There is only one apple farmer in Qaraoun and he grows traditional varieties such as Golden, Starken, Mouachah.
- Figs are also abandoned now.

Attendees
Mounir Al Okdi (teacher)
Khalil El Jil (teacher)
Adel Dbejeh (farmer)
Safa Issa (farmer)
Walid Al Bidaneh (truck owner)
Hussein Hijazi (trader)
Adnan Hamdan (farmer)
Mohammad Askar (farmer)
Ahmad Dahrouj (trader)
Mariam Dahrouj (member of Women Association)
Zeina Hatem (Member of women Association)
Moein Yassin (agricultural engineer)
Nidal Omeis (president of the Women Association)
Fatima Hallak (member of the Women Association)
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Minutes of the participatory meeting

Date: February 6, 2002
Place: Jamhieh Health Care Center, Qaraaoun
Attendance:

- AUB Team: Dr. Mussa Nimah, Mohammad Jamil, and Mahmoud Dalli
- Jamieh members: Abou Zayd Omeiss, Mouein Yassine, Ahmad Hatem, and Najib Yassine.

Purpose of the meeting: Explore the benefits and probabilities of water uses in Qaraaoun.

The potential location and size of the well were discussed and the following conclusions and recommendations were made:

- The well should be located in the highest point possible in the mountainous zone in a way to irrigate 400-500 du of land ranging in altitude between 900 and 1200 m.
- Dr. Nimah suggested that the well size be 3-5 inches
- Dr. Nimah recommended that the cost of drilling be by m³ of water obtained and not by depth since locating water is not easy and the amount obtained is unpredictable. The area that is going to be irrigated from is well is 800 du which needs 5000 m³ water every year. This would be provided by a 4 inch-well with a flow of 70m³/hour operating 20 hours/day.
- The highest well (5 inches) in Qaraaoun is at 350m and it is used for drinking water.
- Dr. Nimah recommended building a reservoir close to the well. This would help to supplement the required amount of water in August and September when the water level in the well is at its minimum.
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Minutes of the meeting with Hashem Enterprise

Date: January 28, 2002
Place: Chtoura
Attendance:
AUB Team: Dr. Rami Zurayk, Mohammad Jamil, and Mahmoud Dalli.
Hashem enterprise: Mr. Fares Hashem.

Purpose of the meeting: Establishing public-private partnership

Dr. Zurayk discussed the different objectives of the project and the importance of establishing a public-private partnership to the sustainability of the project.

Mr. Hashem recommended that the community be informed about this idea. He required a business plan for the project.

Dr. Zurayk asked to assign a lawyer who would set the rules and regulations for such a partnership. He also inquired about the possible inputs that Hashem Enterprise can provide as well as the cost.

Potential partners were identified: The Islamic Charitable Organization of Qaraoun, Hashem enterprise.
Minutes of the meeting with the Women Organization

Date: March 13, 2002  
Place: Qaraoun  
Attendance:  
   - AUB Team: Rania Touma  
   - Women’s Association: Mrs. Nidal Omeiss (head of the organization), Mrs. Fatima Hallak (treasurer of the organization)  

Purpose of the meeting: Organic production in women-managed home gardens and women workers for the food processing plant.

Some activities of the project were planned to be implemented by women in order to involve them in the community. The Women Organization was chosen to help in two aspects: organic vegetable production in home gardens as a means to disseminate the idea in the village and the provision of labor for the food processing plant.

As a result of this meeting, some names were suggested for both activities and interviews were made with five household willing to apply organic agriculture in their home gardens. At a later stage, interviews will be made with potential workers in the food processing plant.

Names of the participants in the home gardens activity:
   - Mounir El Okdi  
   - Fatima Hallak  
   - Hayfa Omeiss  
   - Nadia Yassine  
   - Ikram Nasser
# Attachment 3

## Seedless grapes beneficiaries in Qaraoun village

<table>
<thead>
<tr>
<th>Name</th>
<th>Number of plants</th>
<th>Location of land</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mashhour Yassine</td>
<td>210</td>
<td>Reclaimed land in the mountainside</td>
</tr>
<tr>
<td>Elie Abou Fares</td>
<td>210</td>
<td>Ain Kfar Malad in the mountainside</td>
</tr>
<tr>
<td>Abdul Rahman Tarif</td>
<td>200</td>
<td>In the plain</td>
</tr>
<tr>
<td>Ali Dabeja</td>
<td>200</td>
<td>Eastern side of the mountain</td>
</tr>
<tr>
<td>Adel Dabeja</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Najib Yassine</td>
<td>100</td>
<td>Wadi Samad in the mountainside</td>
</tr>
</tbody>
</table>
Attachment 4

Timing of organic vegetable production

The onset of organic vegetable production is planned to start when the market prices are at their peak. Monthly averages of vegetable prices from June 2000-June 2001 were obtained from the “Central Administration for Statistics”.

As suggested by the graphs below, production is planned to start mid-summer for some winter vegetables and late winter-early spring for other vegetables.

A tentative seasonal calendar for organic vegetable production was prepared and it is presented in this attachment.
<table>
<thead>
<tr>
<th>Item Description</th>
<th>Acquisition date</th>
<th>Cost $</th>
<th>Vendor</th>
<th>Location</th>
<th>QTY</th>
<th>Condition of item</th>
</tr>
</thead>
<tbody>
<tr>
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<td>January 2002</td>
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<td>Midware Data System</td>
<td>Mobile</td>
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<tr>
<td>Desktop Dell Optiplex PIV</td>
<td>March 2002</td>
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<td>System Equipment Telecom. Services</td>
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<tr>
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<td>Burotek</td>
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<td>Ecosystem</td>
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<td>Brand new</td>
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<td>10000m capacity Water Reservoirs</td>
<td>March 2002</td>
<td>2400</td>
<td>Nassar</td>
<td>Nursery in Qaraaoun</td>
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<tr>
<td>Mobile fence</td>
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<td>4800</td>
<td>Ghazi Mayta</td>
<td>Nursery in Qaraaoun</td>
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Attachment 6
Marketing terms of reference
Introduction

There is a clear need for sustainable rural development in Lebanon. Remittances from migration and emigration form the basis of local rural economy. Neglect and over-exploitation are the main pressure on natural resource management strategies. Agriculture, the main resource management strategy in the rural areas, is currently at a near standstill, due to its poor economic viability. This is mainly due to the lack of extension, value-adding processing, and marketing.

There have been a large number of development projects in rural Lebanon. Success has, at best, been qualified. Most of the projects have not addressed development through an integrated model. Rather, they have implemented costly infrastructure or capacity building programs independently from each other. Few have included the creation of tangible economic revenues as part of the project outputs. This project draws on the fragmented success of rural development projects, and aims at closing the loop between material assistance, capacity building, and the improvement of local economy.

Objective

The goal of this project is to provide a model of integrated village development in El-Qaraaoun village, South Lebanon, based on cooperation between academia and local community with the aim to address natural resource management, environmental degradation and better the chances for sustainable development. This pilot will establish the necessary human and material infrastructure to serve as a hub for facilitating development in the region. Activities will be implemented over the period extending between December 2001-June 2003. It is expected that these activities will result in the creation of a development momentum that will help drawing in the other villages of the clusters. The facilities that will be created by the project will be used for implementing similar projects in surrounding villages.

Implementation plan

In this project, we propose to target selected needs by implementing a set of interconnected activities:

- Introducing “niche” agricultural production by training farmers to produce environmentally safe crops, including organic crops.
Facilitating access to agricultural inputs by establishing a community nursery and a compost-making facility.

Well drilling to provide sufficient water for irrigation.

Enhancing the productivity of the dairy farm and encouraging further investments by introducing forage cropping as a source of feed.

Adding value to the produce from both the organic farms and the dairy farm through the creation of a women-operated food processing plant. This will be pivotal in enhancing the socio-economic status of women.

Achieving high sales and significant returns by establishing a marketing network based on sound planning.

Implementation of an Integrated Marketing Program in Qaraaoun

The income generation activities developed by NGOs and CBOs in Qaraaoun, such as the dairy farm, the organic production and the cottage industry need a marketing outlet in order to be sustainable. This project includes a marketing component that will call on professional expertise to outline a strategic vision, establish a marketing and management plan and initiate its implementation.

It is intended to establish new and direct marketing channels where the Qaraaoun people, especially farmers, can sell their products at better prices and be informed about market demand.

Outputs expected from the marketing program of the project

- Arranging private organizations/NGO partnership for marketing.
- Brand name and marketing plan for all the outputs of the project.
- Advertising campaign implemented.
- Producer-retail outlet network operational.
- Cold storage and transport chain facilitated.
- Farmers trained in management of small business and basic accounting.

Scope of work

The Qaraaoun project, American University of Beirut (AUB), is seeking the services of a marketing, advertising and public relations consultant who will collaborate closely with AUB in order to develop and implement an integrated information and promotion action plan.

The consultant is required to perform the following:
2. Setting a marketing strategy for the next two years
3. Producers-retail outlets network establishment by bringing together the different stakeholders and facilitating an agreement for cooperation.
4. Training and implementation for the marketing strategy.
5. Development of a brand name and of an image for the project’s products (including artwork).
6. Products advertisement campaign in greater Beirut. Details of the size of the campaign will be agreed upon following submission of the proposal by the company.

The consultant should meet with the Qaraoun Project director to develop a full understanding of the project. The consultant is also required to present a proposal that explains the suggested action plan along with a realistic and fair estimate of the required budget.