

# STIMULATING MARKETS AND RURAL TRANSFORMATION PROGRAM (SMART)



## FINAL REPORT

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YMCA of USA  
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# STIMULATING MARKETS AND RURAL TRANSFORMATION PROGRAM (SMART)

## ABSTRACT

In partnership with the YMCA of the USA and with funds from the United States Agency for International Development (USAID), the YMCA of Lebanon implemented an integrated production-processing-marketing supply chain program. The 3-year *Stimulating Markets and Rural Transformation (SMART)* program created job and income generating opportunities for women in rural areas of Lebanon through the establishment of food processing centers/ cooperatives\* and production farms. The women produce, process, and market food products to generate earnings as cooperative shareholders. The SMART program succeeded in providing rural women with the means for sustainable self-reliance.

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\* The centers and farms are fully licensed as official cooperatives – registered businesses – by the Lebanese government with the cooperative shares owned by the women who run them. Most of the centers are production-only facilities. One of the centers – Atayeb Al Rif – functions as the marketing, sales, and packaging arm for all the other cooperatives/centers and it is the brand name of the products produced.

**TABLE OF CUMULATIVE PROGRAM INDICATORS**

Indicator	Base line Year	Baseline Year Data	FY 2003 Target	Cumulative Over first Year	FY 2004 Target	Cumulative Over Two Years	FY 2005 Target	Cumulative over three years
New jobs created (number)	2002	400	595	438	1,055	1236	1340	1487
Agriculture extension service centers established in growth poles (number of cooperatives)	2002	12	16	14	19	18	36	37 + 1 ongoing
Agriculture extension service centers established in growth poles (number of food processing centers)	2002		16	14		25		38
Agriculture extension service centers established in growth poles (number of production farms)				1		4		5
Beneficiaries of agricultural capacity building activities (number)	2002	400	595	593	1,055	1,236	1340	2,568
People annually accessing agricultural extension center services (number)	2002	NA		875	1,000	1250	1200	2,150
Cooperatives annually accessing microfinance services (number)	2002	NA		5	8	6	12	4
Individuals annually accessing credit services (number)	2002	NA		140	200	170	280	144
Micro-finance and credit investment (\$ value)	2002	NA		71,369	100,000	108,369	140,000	88,369
New jobs created in Agri-business/Agro-industry (number)	2002	400	595	438	1,055	1236	1340	1487
New jobs for males (number)	2002			24		5	24	5 + 860 indirect jobs
New jobs for females (number)	2002	400	595	414	1055	1236	1340	1482
Increase in agricultural exports (\$ value)	2002	137,208		25,624	100,000	109,372	200,000	147,238
Increase in local agricultural sales (\$ value) (Atayeb Al Rif and Local Coops)	2002			208,131	1,400,000	441,482	2,400,000	1,018,925 + 1,000,000 Committed by Mafco

Indicator	Base line Year	Baseline Year Data	FY 2003 Target	Cumulative Over first Year	FY 2004 Target	Cumulative Over Two Years	FY 2005 Target	Cumulative over three years
Increase in local processing & production (\$ value)	2002			271,644	700,000	392,646	1,200,000	1,139,814 + 561,600 worth of ongoing production for 2006 year as ordered by Mafco
Marketing standards adopted (number)	2002	6		6	6	7	6	11
Certifications acquired (number)	2002	1		2	2	3	2	7
New marketing outlets accessed (Domestic)	2002	48		100	125	65	150	175
New marketing outlets accessed (Foreign)				4		4		7
ICT applications developed in targeted sectors (number)	2002			0		1		2
New cooperatives registered in growth poles (number)	2002	12	16	14	19	18	36	37 + ongoing
Average annual sales per cooperative (\$ value)	2002			9,155	36,842	12,100	33,333	29,976
Additional annual income per agricultural beneficiary (\$ value)	2002	1068	1176	972	1,236	864	1320	1315.44

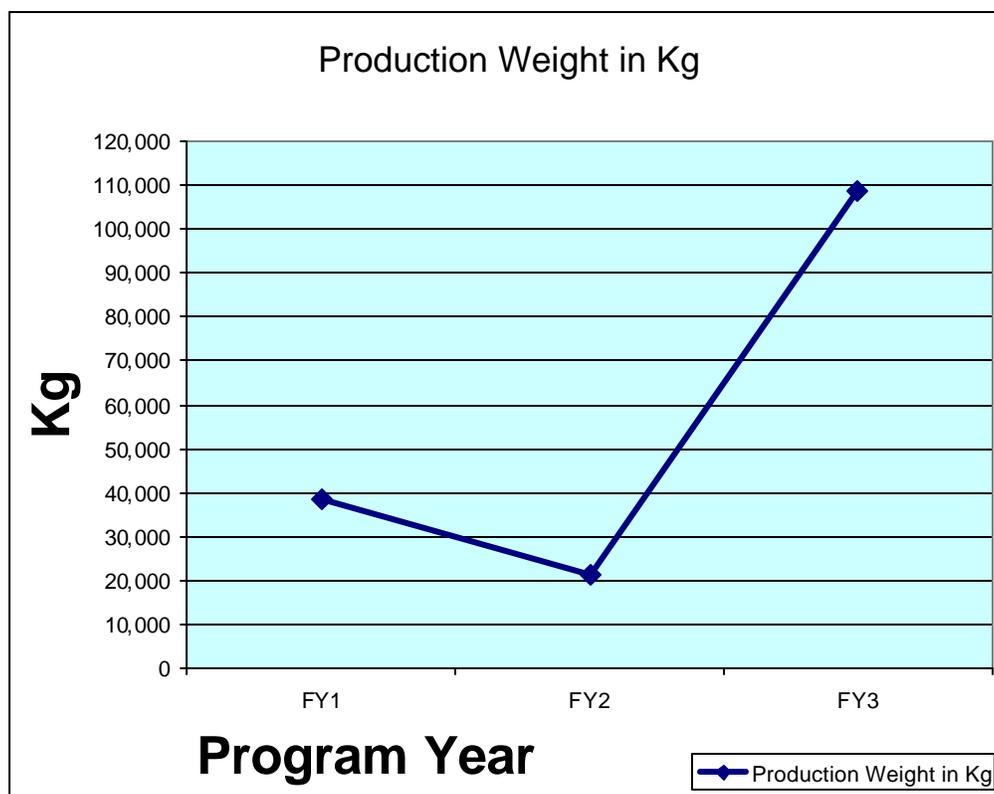
## SUMMARY OF ACHIEVEMENTS

**1. Increased Number of Jobs Created in Agriculture.** Throughout the duration of the program, the YMCA created and sustained 1,487 jobs, five of which are for males.

Cumulative Figures	FY1	FY2	FY3
<b>Number of Jobs Created</b>	38	1,236	1,487

**2. Increase in Local Production and Processing.**

	FY1	FY2	FY3	Program Total in \$US
<b>Production Worth in \$US</b>	271,644	121,002	747,168	<b>1,139,814</b>
<b>Production Weight in Kg</b>	38,530	20,898	108,442	<b>167,870</b>
<b>Raw Material Cost in \$US</b>	72,322	22,456	214,304	<b>309,082</b>
<b>Raw Material Weight in Kg</b>	37,722	30,726	317,710	<b>386,158</b>



**3. Increase in Agricultural Exports.** Exports During the program implementation reached a total of \$147,238. The major destinations included Dubai, Germany, Jordan, United States, United Kingdom, Saudi Arabia and Kuwait.

	FY1	FY2	FY3	Program Total in \$US
<b>Exports</b>	25,654	83,718	37,866	<b>147,238</b>

**4. Improved Agricultural Production Processes.** Comprehensive training packages were delivered throughout the program duration to increase the beneficiaries' technical skills in food processing and preservation and improve their managerial knowledge that affects production costs and efficiency. As such, small business management tools, costing applications and production tracking methods were developed to ensure maintaining efficient and relatively low cost production.

**5. Increased Capacity Building and Training in Agriculture.** 152 training sessions over three years targeted 2,568 women in over 46 locations across the country.

	FY1	FY2	FY3
<b>Beneficiaries of Training</b>	593	1,236	2,568

**6. Adoption of Marketing Standards and Certifications.** Eleven standards were adopted throughout the program to cater to export needs, sales requirements and market demands. These standards include Libnor (Lebanese Standards), Codex (European), HACCP (Hazard Analysis and Critical Control Points), GMP (Good Manufacturing Practices), FDA (Food and Drug Administration Number was granted), Saudi, Kuwaiti, Jordanian, British, German and Emirates. A comprehensive

brand uplifting based on these standards was affected during the last months of program implementation whereby a completely new label was designed to give the product the value it deserves.

**7. Number of New Marketing Outlets Accessed.** 175 domestic outlets are expected to increase to 250 by the end of February 2006 through a steady push-forward marketing strategy that aims at covering key accounts and supermarkets in the country. Seven foreign markets constituted the major export destinations of the program: Kuwait, Dubai, Saudi Arabia, Jordan, Germany, England and United States. Negotiations through the Mafco (Mediterranean Authentic Food Company) are ongoing to expand exports to the Europe, Australia, the Gulf region and North America. Mafco is the company that is handling all commercial aspects of Atayeb Al Rif.

**8. Increase in the Number of Cooperatives Registered in the Rural Areas.** 37 cooperatives are registered under the program. One final women group in Chehabiyeh has completed all necessary documents required by the Ministry and is only waiting for the elections to form a coop management board.

**9. Clients Using Microfinance.** Four cooperatives grouping 144 women are benefiting from loans reaching \$88,369 given by IFAD and the YMCA.

Center	Amount in \$US	Source	Female Recipients
Deir el Ahmar	37,000	Caritas, Personal	30
Beit el Fakess	24,018	IFAD-YMCA	61
Zghorta	24,018	IFAD-YMCA	40
Ksaybeh	3,333	YMCA	13
	<b>88,369</b>		<b>144</b>

**10. Fostering Strategic Alliances.** A wide network of alliances was built throughout the program implementation in order to increase the available resources for local contributions and expand on the network of available expertise needed for implementation. As such, the program witnessed strong partnerships with 28 local bodies such as municipalities, local cooperatives-associations or mayors. 16 strategic relations were built with 16 companies, organizations and institutes: (the International Management and Training Institute- Civil Company, UNIDO, Lebanese Agricultural Research Institute, Industry Research Institute, National General Union of Cooperatives, Stanford Research Institute, World Vision, Ministry of Agriculture, American University of Beirut, General Manufacturing and Maintenance, Mercy Corps International, Mafco, Microsoft, Centre for Research and Training for Development, IFAD, Kafalat).

#### **INTRODUCTION/BACKGROUND OVERVIEW:**

The SMART program came about through the careful planning, development and understanding that providing secure, stable, and sufficient incomes for women in rural Lebanon was vital in serving as a step toward broader economic justice. The goal was to develop and expand sustainable economic opportunities for growth and development of rural areas in regions throughout Lebanon by the creation of women-owned and women-run production cooperatives and cooperative farms.

SMART was launched on November 7, 2002 as a three-year program, ending on November 6, 2005. The total budget of the program was US\$9.1 million. US\$1.6 million (17% of the total) was

contributed by the beneficiary local community, the women themselves, and their respective municipalities.

Jointly, the cooperatives produce 80 items that are all 100% natural with no artificial colors or preservatives. Cumulative sales during the three years of the program came to \$1,018,925. As of November 6, 2005, sales contracts in the amount of US\$5.7 million have been signed for the ensuing three years, while additional contracts are being negotiated.

## **PROGRAM OBJECTIVES**

The program objectives were as follows:

- Provide job and income generation opportunities for rural women
- Add value to agricultural surplus
- Link the farmers and food processors to the market directly without the need for middle-men
- Increase agricultural productivity
- Promote natural food production

The program set out to:

- Train 1,340 women on food processing techniques
- Establish 40 food processing centers/cooperatives including one (1) marketing, sales and quality control cooperative<sup>+</sup>
- Initiate 5 production farms. (Four farms fall under corresponding women-owned cooperatives in the areas they were built. The fifth, a reed and bamboo farm, was set up alongside another USAID-YMCA project – a wastewater treatment plant. The recycled waters from the plant are used to irrigate the reeds and bamboo for the eventual manufacturing of handicrafts, as such making efficient use of the recycled water. The farm will be managed by a cooperative run by the women beneficiaries-trainees.)
- Market a range of Lebanese traditional delicacies both locally and abroad

The final outcome:

- 1,482 women trained on food processing (142 more than initially planned)
- 37 centers were established and are operational, including the marketing cooperative. Three (3) cooperatives, *Karam Saddeh*, *Nabha* and *Zraryeh*, due to political reasons, could not be completed and had to be cancelled.
- 5 farms set-up and operational
- Average monthly income per woman beneficiary at \$110

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<sup>+</sup>The number of fully functioning processing cooperatives-centers at the close of the program is 37. Three (3) of the original cooperatives for which physical structures were built, either completely or partially, and had either completed the training of the women or almost completed the training, had to be halted due to politics in the area and polarization between two political parties.

## COUNTRY BACKGROUND

Lebanon is a small country (10,452 km<sup>2</sup>) on the Eastern shores of the Mediterranean. Unlike most countries in the Middle East, Lebanon enjoys relatively high annual rainfalls and its soil is fertile. However, following a twenty-year civil war that ended in 1990, much of Lebanon's productivity and potential was severely impaired.

The agriculture sector in Lebanon, as a whole, had been in steady decline even prior to the beginning of the civil war. The war only accelerated the decline, crumbling what little infrastructure was there. With that deterioration, came a massive influx of migration out of the rural areas and into the cities. As a consequence, the issues already facing the declining industry were compounded. That agglomeration of populations seeking better sources of income and/or safety placed more of a demand on the cities than they were able to bear while the agriculture sector and rural areas lost, among other things, their human resources.



With the lack of regulations and accountability, all industries became breeding grounds for corruption and mismanagement – including agriculture. Random use of pesticides and fertilizers, unplanned grazing, pollution of artesian wells and the dumping of solid and water waste onto coastal land and into rivers were commonplace during the war; the country continues to suffer from the consequences of these war-time practices. Other problems included the improper selection of cultivated varieties of crops resulting in poor quality products that were unable to compete in the market.

In 2002, the Lebanese government allocated US\$23 million (less than 1% (0.71%) of its total budget) to the agriculture sector, US\$16 million less than the year before.<sup>1</sup> The reason behind the limited funds has been due, in large part, to Lebanon's mushrooming debt and the government's unending battle to service that debt while focusing, above all else, on developing its urban infrastructure.

The agriculture sector in Lebanon has been faced with another setback – competition. Neighboring countries like Syria subsidize their farmers' fertilizers, pesticides and seeds, and as a result, they are able to import their fruit and vegetables into Lebanon at far lower prices than local farmers can meet.

Due to the mass migration of people power out of the rural areas and into the cities, the industry suffers from severe labor shortages. Although 53% of Lebanon's population is female, the role of women in the rural areas, in particular, has been relegated to the house and the role of nurturer - uncompensated and severely underappreciated. Involving women in the workforce to alleviate the chronic problems related to local labor shortages within the agriculture industry is not readily accepted.

The underlying problem in the country remains its instability – both politically and as a consequence, economically. In the last few years, Lebanon has been walking on political eggshells as it grapples with internal political change and mounting tensions due to the lack of changes in the political system and the floundering economy. The most recent political tremor to rock the country came on February 14, 2005 with the assassination of the former Prime Minister, Mr. Rafik Hariri. Lebanon has, since then, been wading precariously around political land mines. The uproar by the citizens of Lebanon, the changes in the power infrastructure in the country, parliamentary elections, ensuing assassinations and failed attempts of political and social figures, all threatened Lebanon's already shaky stability.

The prospect of the country teetering precariously on the brink of war once more exacerbated the dire economic conditions and halted any economic gains that Lebanon had hoped to achieve prior to the assassination. The number of tourists that Lebanon depends on so much in the summer months dropped off for the summer 2005 season, stymieing the economy further. And with the parliamentary elections that followed, the tensions in the country intensified. Political figures – relics from Lebanon’s war – were brought back into the fold and the tensions mounted while Lebanon’s economy continued to spiral. On the local level, municipal elections polarized regions splitting them down party lines, affecting most local businesses. All of these factors threatened to derail the progress of the SMART program, but were carefully and successfully negotiated by the program’s management team and training and the completion of the activities continued as planned.

## THE PROGRAM SEEDS

In 1997, with funding from USAID through the Integrated Rural Development Program (part of USAID’s Rural Community Development Cluster initiative), the Agricultural Income Generation for Women Component was launched and implemented by the YMCA of the USA and YMCA of Lebanon. The program’s goal was to build capacity within the food processing industry by initiating small processing facilities and establishing a sales and marketing unit whose role was to market and to sell the products of the small processing facilities. The total budget initially allocated was \$283,253; 476 women benefited from training, 32 women groups and/or cooperatives were formed, and 6 production facilities were initiated.

Under the program, the women went on to produce a wide range of Lebanese traditional foods selling them at local fairs and exhibitions. As the demand for the products in the market grew, USAID contributed an additional US\$7.5 million toward the establishment of a stand-alone women’s income generation program with new food processing centers – the SMART Program. Additional women were given the opportunity to train in safe, clean and modern processing techniques and to take ownership of a business. The sales and marketing center was upgraded to meet product demand.

The program tapped into traditional, gender-based skills and not only built on them but gave them value. The skills they tapped into – cooking and food processing and preservation – are passed down from grandmother to mother and daughters for household use. The art of food processing and preservation in the region is valued as a local tradition rich in history, cultural pride and values, and is shared across confessions. One challenge was to transform the women’s cooking and food preservation know-how into scientifically-based, standardized food processing techniques while still maintaining the ‘traditional’ taste and feel of the products. Another challenge was convincing the women’s spouses and community that providing opportunities for women out of the house and in the workplace could be beneficial for everyone.

<b>Training</b> on food processing	Basic <b>production</b> during training	<b>Sales</b> at fairs and exhibitions of produced goods	Increase production to meet demand: food <b>processing</b> <b>centers</b> established	New <b>training</b> <b>developed</b> on scientific techniques for food processing	New markets needed to match the growing supply: <b>marketing</b> <b>cooperative</b>	<b>Sales</b> locally and abroad in compliance with international food standards
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The YMCA designed the SMART program to create economic opportunities for the development of potential growth poles throughout Lebanon. The program focused its efforts on merging rural and

industry cluster activities in targeted economic growth poles to create and sustain income and employment opportunities in agri-business through the systematic application of the integrated production-processing-marketing chain model. Through the SMART program, regional, national and international markets were identified and contracts signed and others negotiated for future sales. Products developed under the Atayeb Al Rif brand name have been secured on supermarket shelves worldwide.

The SMART program drew on its broad network of strategic partners including NGOs, the business sector, governmental branches and offices, research and educational institutions, and community-based organizations to realize the successes it did in the concerned industry and with the creation of the women-owned and -run cooperatives.

The program expanded and sustained economic growth poles in Lebanon by:

- ⇒ Stimulating and developing marketing opportunities for rural-based agri-business and agro-industries.
- ⇒ Developing human resources along with the building of physical structures in the rural areas helping to improve the women's competitiveness.
- ⇒ Introducing value-added products, new methods of production, technology and a framework within which they could produce and benefit.
- ⇒ Transforming rural areas into sites of economic activity and increased income for the local communities.
- ⇒ Fostering industry linkages between urban and rural areas through integration strategies – empowering rural areas to support businesses and attract capital.
- ⇒ Expand the production and employment base around existing clusters of agricultural activities.

## **EXPANDING ON THE SUCCESS OF THE INCOME GENERATION MODEL**

The YMCA developed a process to convert a local-level cottage industry into a viable and sustainable national, regional and international economic development venture. Through the support of USAID, the YMCA developed a means for the creation and establishment of the all natural, preservative free, Atayeb Al Rif brand name products. The program developers worked closely with local producers, farmers and the women who process the goods, to create links with strategic partners and to assist in the set-up, establishment and ultimate marketing and sales of the Atayeb Al Rif brand name. The Atayeb Al Rif products are now being sold at supermarkets in Lebanon, regionally (UAE and Kuwait), and internationally (UK and USA), while access to new markets continues to be negotiated.



*Spinney's Supermarket -  
Atayeb Al Rif products Promotion*

The SMART program applied the following approaches to secure the women-owned businesses' sustainability long after the last training session had concluded:

***Investment by Local Communities:*** The program supported capacity building at the processing/production cooperative level. Local institutions were brought into the development fold either by contributing financially into the project or investing physically or technically. Local committees were formed to support the program and the ultimate development of the women-owned and -run cooperatives. But the most significant gesture on the part of most of the local communities was their support of the effort in cash or in-kind. By so doing, the women owned cooperatives were assured local support and, most importantly, buy-in and the creation of a sense of ownership and pride by the local community.

***Infrastructure Development and Maximizing Existing Potential:*** The SMART program developers implemented an economically viable program taking into account the associated costs and benefits, prospects for growth, sustainability, job creation, in addition to the long-term positive effects of economically empowering women in rural Lebanon. The program put into place a strategic plan to increase the women's competitiveness in the market. It also identified the environmental impacts and proposed mitigating measures in order to integrate both the environmental and social dimensions into a comprehensive development plan. It merged traditional local-industry with sound business practices to include quality control, market surveillance, branding and research and development. Also, by creating a physical space – a building in which the women could work and conduct their business – they created a tangible entity outside of their own kitchens – an actual business enterprise. Moreover, the program developers established a supply chain that linked the farmers with the cooperatives and the cooperatives to the market.

***Introduction and Promotion of Value-Added Approaches:*** The YMCA introduced new approaches to maximize the value of produce and make effective use of resources that were not being exploited prior to the program. These included new approaches such as the introduction of new varieties of root stocks and the processing of surplus fruit such as apples, in order to extend their shelf life. The conversion of excess apples into jams, compotes and vinegar allowed the farmers to recover their costs and generate a profit where in previous times the surplus was wasted. The program developers improved the processing and production methods of the farmers by improving on their varieties and their harvesting methods, and by establishing fully-furnished standardized equipment cooperatives to process consistent, quality goods.

## **PROGRAM SUITABILITY AND COMPATIBILITY**

The SMART program offered the women the opportunity to make money by tapping into an arena with which they were historically and culturally familiar (food processing) with a new component – revenue generation. The women were offered a chance to turn their domestic skills into a business. Also, where fresh fruit and vegetables were previously wasted due to an inability to sell or process them, the SMART program offered the women a chance to add value to that agricultural surplus by transforming the raw products into traditional Lebanese delicacies with an extended shelf life.



*Women processing apples*

The Atayeb Al Rif brand's new partnership with an exclusive distributor company, MAFCO (Mediterranean Authentic Food Company), will take advantage of opportunities in various segments of the market both nationally and internationally. For the Lebanese living in the diaspora, for example, the delicacies represent a taste and nostalgia for home, something they may not have the time for, access to, or even the know-how to make at home. In addition, the Lebanese in the West tend to be more aware of the trend toward "natural" and they understand the economic situation of the country, in particular as it pertains to women. That knowledge alone makes them an ideal target audience for the purchase of Atayeb Al Rif products – both their nostalgia and their willingness to support small business enterprises owned by rural Lebanese women. Other sales prospects include Arab states beyond the Levant area, for example the Gulf States. Lebanese delicacies are extremely popular in the Gulf countries due to the populations' familiarity with Lebanon as a vacation hub. There is also a sizeable and growing non-Arab, Western population that is familiar with Lebanese cuisine and the health benefits associated with it, which further expands the sales prospects.

The SMART program's goal and objectives coincide with both USAID's strategic objective of expanding economic opportunities in Lebanon and with the international trend of nurturing agricultural income generation schemes. The program was also in-sync with the shift in the international market toward producing all natural, preservative- and additive-free foods. The YMCA worked extensively to establish solid links between the processing, production, and marketing phases of the products' lifespan – creating a "from seed to sale" strategy.

Although the politics in the country in the last year have been less than stable, affecting business and the economy overall, the training of the women continued and negotiations for the sale of Atayeb Al Rif products by MAFCO has been secured. Lebanese, and those aware of Lebanon and its politics, are also familiar with the cuisine and are even more inclined to support Lebanese products in an effort to show their solidarity.

## **CHALLENGES FACING THE INDUSTRY OVERALL**

Several important constraints exist that adversely influence the agribusiness/agro-industries sector in Lebanon. The YMCA's SMART program was designed to address the limitations the country is facing and it developed strategies and capacities to lessen their effects through direct intervention and action. This included the development of networks and linkages to overcome or mitigate their influence. The following were the most common areas of concern at the outset:

- **Political:** Social fragmentation and polarization due to severe political tensions in Lebanon's multi-religious and multi-sect society.
- **Socioeconomic problems:** The overwhelming debt that Lebanon is facing and the inability to secure access to critical resources to stimulate development of the rural areas coupled with the need for clear market strategies, support and incentives to farmers by the government are at the heart of the problems faced by the sector.
- **Technical inadequacies:** The lack of modern equipment and know-how by the farmers is a direct consequence of the lack of resources and incentives by the government. Poor harvesting and post-harvest methods and antiquated production processes dominate the industry. Inputs (seed, fertilizers, etc.) are low quality and labor costs are high; good farm management practices are almost non-existent.

- ***Institutional capacity limitations:*** Due to the shortcomings of the industry there is a lack of credit services made available to farmers. The lack of regulations and quality control systems and no accountability are the rule, not the exception, in the sector.
- ***Environmental challenges:*** Misuse of water, land, and natural resources is rampant.
- ***Competition of subsidized agricultural products:*** The penetration in the Lebanese market of subsidized, low cost and high-volume produce from neighboring countries undercuts the market share for local producers.
- ***Agriculture Development Constraints:*** Lebanese farmers face serious problems including high costs of production and low revenues. The market stagnation due to the influx of subsidized products from neighboring countries; high cost of inputs and equipment; an inadequate irrigation infrastructure; and a political climate that does not allow for progress are all factors that affect the industry overall.

## PROGRAM COMPONENTS

Achieving the SMART program's objectives required a carefully mapped design and strategy. Six components, distinct in process yet interrelated in function, made-up the program's foundation. The following core components served as the foundation for the SMART program for expanding economic opportunities: 1) local community approach, 2) training, 3) cooperative formation, 4) physical rehabilitation, 5) equipment, and 6) marketing.

### ***1) Local Community Approach:***

Selecting a community was based solely on socioeconomic criteria such as unemployment rates, poverty and agricultural production and potential. Around 88 communities were initially contacted with the idea. The YMCA conducted a broadbased approach to identify prospective communities in order to ensure that successful conditions would be in place for implementation of the centers. This required sensitivity and adaptability by the YMCA to changing conditions taking place on the local level; including the insurmountable ones created by political developments. In the end, 37 centers and five farms were established. With every prospective community, the program officers were faced with challenges – some small and some insurmountable. The small issues were resolved and the program continued as planned. There were times, however, where the program developers worked out small compromises for the sake of the program. In a few villages, men insisted on attending the training sessions fearing what their wives might learn. When they were invited to attend the training as observers and they got to see, first hand, that their spouses were learning how to cook and run a small business, their husbands agreed to allow the project to resume. It was when the challenges became political and/or religious in nature that negotiations threatened to break down; in three communities this did occur, hence 3 less centers than originally expected.

When communities stop seeing the program and goals of the project as benefiting everyone, and only see the end result as helping one group over another, then no matter what happens, the outcome promises endless trouble and wasted time and resources. It was in situations like that that the decision had to be made to move on, identify another village willing to work toward realizing the



*Town hall meeting*

goals of the SMART program, and continue from there.

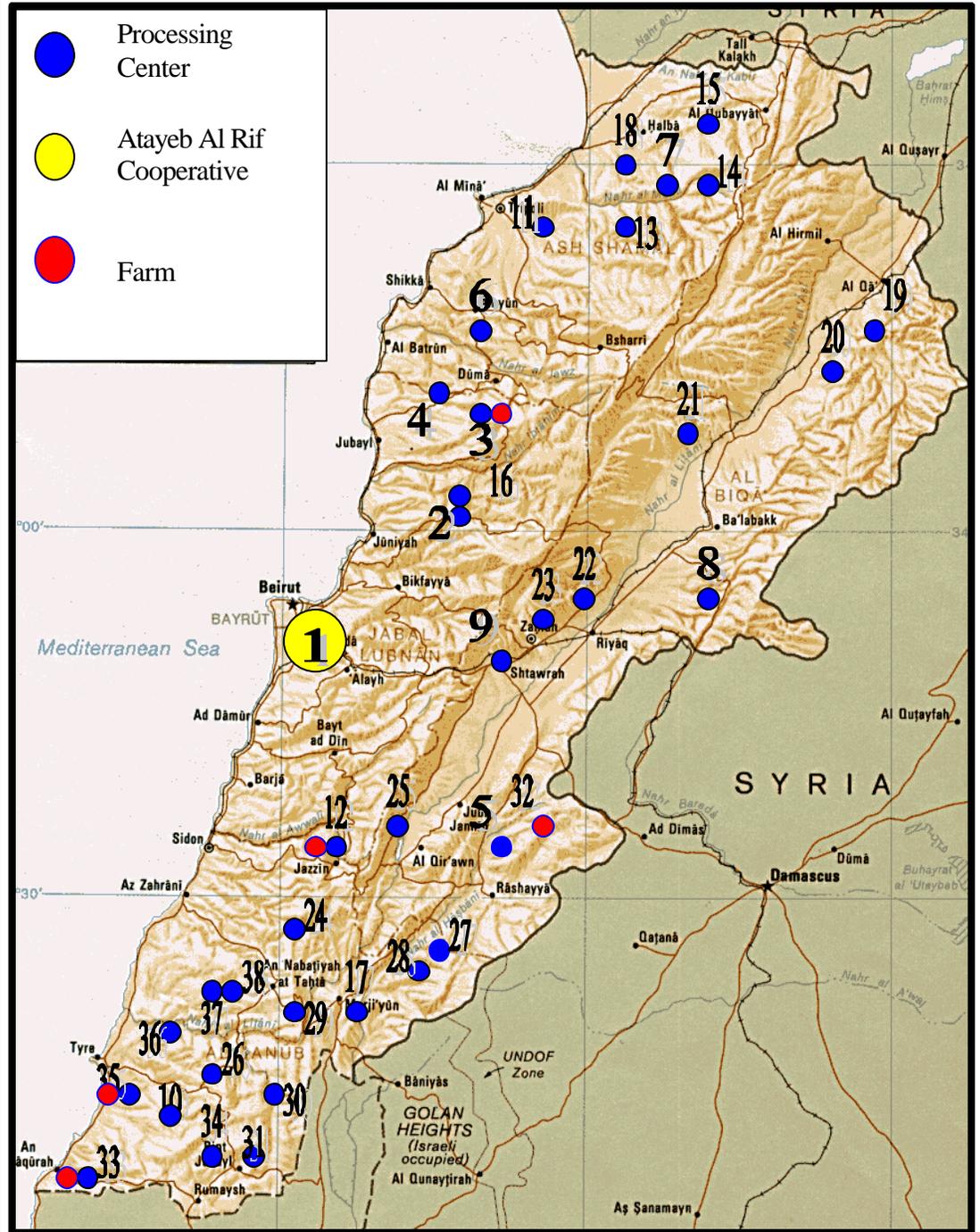
Once a community was identified, one of four countrywide YMCA Field Coordinators would approach a community leader – a municipal council member, religious cleric, or an active community person – and present the project idea to them. Leaders aware of the YMCA track-record often welcomed the plan. Quite often, the communities themselves would approach the Field Coordinators with an expressed interest in the program.

Before a program could begin, an official request from the community itself had to be drafted and submitted. From there, a local committee of key players would be established. A typical committee was made up of the core local decision makers, major contributors, partners on the village level and, most importantly, the prospective women stakeholders. The women that joined the committee were critical in the development and ultimate success of the program as they were the ones who were expected to take over the operations of the women's cooperative.

The local community would then be asked to contribute its own resources, in cash or in-kind, toward the program. The local contribution served to expand the available resources dedicated to the program, but most importantly it ensured community ownership and buy-in. It established an informal, binding, contract. The entire program's success was based on mutual cooperation between the donor agency and the implementing organization on the one side, and the local community on the other. Once a community had committed their own resources to the program, it established a personal stake in it, the relationship to the program changed altogether.

## SMART Food Processing and Production Farms Locator Map

1. Atayeb Al Rif
2. Kfarzebian
3. Kartaba
4. Lehfed
5. Aayha
6. Beit Shlela
7. Rahbeh
8. Ham
9. Jdita
10. Hariss
11. Zghorta
12. Bater
13. Beit el Fakess
14. Fneydek
15. Tekrit
16. Mayrouba
17. Ibel el Saki
18. Jdeidet el Qayteh
19. Fakiha
20. El Ain
21. Deir el Ahmar
22. Fourzol
23. Wadi el Arayesh
24. Arabsalim
25. Khirbet Anafar
26. Chehabiyeh
27. Ain Atta
28. Khelwat
29. Arnoun
30. Chakra
31. Ain Ebel
32. Yanta
33. Dhaira
34. Debel
35. Deir Qanoun Ras el Ain
36. Deir Qanoun el Naher
37. Ksaybeh
38. Kfarsyr



## SMART Food Processing Centers and Production Farms Locator Map

**Table of Proposed Original Center Locations and the Final List (as per end of program)**

#	Proposed Center Locations	End of Program Center Locations
1	Aadshit	Aayha
2	Aandkit	Ain Atta
3	Abdilleh-Sghar	Ain Ebel
4	Ain Atta	Arabsalim
5	Ain Ebel	Arnoun
6	Arnoun	Bater
7	Beit el Fakess	Beit el Fakess
8	Beit Mellat	Beit Shelala-Kfarhelda
9	Beit Shelala	Chakra
10	Braykeh	Chehabiyeh
11	Debel, Aouzah, Beit Lif	Debel
12	Deir el Ahmar	Deir el Ahmar
13	Deir Qanoun el Naher	Deir Qanoun el Naher
14	Deir Qanoun Ras el Ain	Deir Qanoun Ras el Ain
15	Derdghaya	Dhaira
16	Dhaira	Ebel el Saki
17	El Ain	El Ain
18	Fakiha	Fakiha
19	Fneydek	Fneydek
20	Fourzol	Fourzol
21	Ghouma	Ham
22	Jesnaya	Hariss
23	Karam Saddeh	Jdeidet el Qayteh
24	Kartaba	Jdita
25	Kefraya	Kartaba
26	Kfardebian	Kfardebian
27	Kfarhelda	Khelwat
28	Kfarsyr	Khirbet Kanafar
29	Khelwat	Kfarsyr
30	Kobayat	Ksaybeh
31	Ksaybeh	Lehfed
32	Lehfed	Mayrouba
33	Mansourah	Nabha
34	Mhaydseh	Rahbeh
35	Rmeish	Tekrit
36	Sir el Gharbieh	Wadi el Arayesh
37	Tekrit	Zghorta
38	Wadi el Arayesh	
39	Zghorta	
40	Zraryeh	

Centers are arranged only alphabetically with no specific substitution or relocation order	
Cancelled Locations	17
New Locations	14

**Table of Centers and the Different Category of Trainees**

#	Center	Mouhafaza	Category
1	Ain Atta	Bekaa	GII
2	Aayha		GIII
3	Deir el Ahmar		GII
4	El Ain		GI
5	Fakiha		GI
6	Fourzol		GII
7	Ham		GIII
8	Jdita		GIII
9	Khirbet Kanafar		GIII
10	Nabha		GIII
11	Wadi el Arayesh		GII
12	Bater	Mount Lebanon	GIII
13	Kartaba		GIII
14	Kfardebian		GII
15	Lehfed		GIII
16	Mayrouba		GIII
17	Beit el Fakess	North	GI
18	Beit Shelala		GII
19	Fneydek		GI
20	Jdeydet el Qayteh		GIII
21	Rahbeh		GIII
22	Tekrit		GI
23	Zghorta		GI
24	Chehabiyeh	South	GIII
25	Deir Qanoun el Naher		GI
26	Deir Qanoun Ras el Ain		GII
27	Dhaira		GI
28	Ain Ebel	Nabatiyeh	GI
29	Arabsalim		GIII
30	Arnoun		GIII
31	Chakra		GIII
32	Debel		GIII
33	Ebel el Saki		GIII
34	Hariss		GIII
35	Kfarsyr		GII
36	Khelwat		GI
37	Ksaybeh		GI

Group	Description	Number of Centers as per proposal	Revised Numbers
GI	women trainees & production facility	12	11
GII	women trainees, no production facility	16	8
GIII	no women trainees and no production facility	12	18
Total		40	37

## 2) Training:

Once a selected community expressed its willingness to participate and contribute toward the program, the preliminary fieldwork could begin. Building on the rural women's food preservation skills - the training team worked on refining and adding to that capability. The first training session covered the foundations – all matters relating to food safety preparation and hygiene. The women could still produce their exquisite, traditional food, with the added confidence and value of a safer and more hygienic environment – an environment promising access to mass-market sales versus what the norm of individual or family consumption. Other basic training topics included marketing, cooperative management, accounting and formation, computer literacy and quality control. By the end of their intensive training program, the women began to assume full control and responsibility of their cooperative business. to receive refresher sessions and specialized training throughout.



*Women in training*

The women continued

## 3) Cooperative Formation:

Forming the cooperatives was the cornerstone of the program and a significant factor in its sustainability. On the individual level, the establishment of the formal, legal, entities provided the women with self-confidence and independence they had not been afforded beforehand. The women gained the responsibility and capacity to decide on the fate and direction of their own cooperatives and farms, with no interference from men or village officials. The first step toward the women actually achieving their economic independence came about immediately following their training. The women who had expressed an interest in working within the food processing center were asked to come together to develop a general plan for the cooperative. Their first joint decision was to decide on the specialization of their prospective food processing center or farm – a choice which often stemmed from the combination of training, the women's skills and/or regional reputation for a particular delicacy, and the raw materials available in the region. The cooperatives represented the joint efforts of all parties to bring the women together to form a sound, profitable business plan and model.



*Ain Ebel Center*

On the official level, government-authorized cooperatives can borrow money, sell, import, export, produce and function in the market much like any other established business. Cooperatives have the derive added benefit of tax exemptions in areas like their Property Rental Tax, thus reducing their

overall running costs. The formation of a legal entity allowed the individual cooperatives to create their own official brand name that could be used in the marketing and the sales of their quality goods.

The establishment of a village-wide committee with local buy-in, a core body of women shareholders, and the creation of a physical space increases the likelihood of success overall; and with formal legal entities come internal checks and balances. Furthermore, the women cooperatives were able to join the National Coop Union where they are able to practice democracy on a broader level through the Union's elections. The cooperatives serve as a means to change the perceptions women had about themselves and the perceptions the men, and community, hold about the women and their potential.

One challenge the SMART program faced came from other local cooperatives that existed in the same area. Lebanese laws have prevented two similar cooperatives from being established in the same village. The SMART program, jointly with the Ministry of Housing and Cooperatives, successfully advocated to modify the law to allow for the establishment of more than one cooperative in villages where one already existed. The success came not from making the law more flexible, but rather from challenging the idea that cooperatives were exclusively a man's domain.

#### ***4) Center and Farm Rehabilitation:***

The initiation of centers involved either rehabilitating old buildings or constructing new ones altogether. The goal was to create structures that enabled women to produce their traditional foods in a safe, contemporary and hygienic environment.



*Construction of the  
Mayrouba Center*

The centers were designed to meet Hazard Analysis and Critical Control Points (HACCP)<sup>2</sup> guidelines and standards. Creating a structure where hygiene was a primary concern meant that all the facilities included in their design a basic layout that segregated potential contaminant areas from the production rooms. Offices and latrines, as one example, were created in separate sections entirely from the production rooms. Even the sewage network was segregated from that of the production facility. Large hallway windows were put in to serve as viewing portals for visitors in order to keep them out of the production rooms and potentially contaminating the area. For facilities that produce both dairy derivative products along with produce, the centers are designed so that the two never come in contact avoiding cross-contamination.

As part of the program's long-term planning, the centers are equipped to be able to provide a wide range of products from jams and pickles to distilled products, even though they each specialize in the creation of one or two types of products.

The procedures differed somewhat with the rehabilitation of the farms, although they were also designed to meet modern standards and agricultural practices. The YMCA's in-house experts worked closely with outsourced specialists from reputable educational institutions and universities in the set-up and development of the farms.



*General Center Design*

High value vegetables were also introduced, replacing the lower priced varieties and using, in most cases, the same production conditions and techniques as those implemented in the older varieties. For example, jalapeño peppers were introduced to replace the traditional green peppers. New production techniques and products were introduced like the Plurotus mushroom variety. Medicinal, aromatic herbs were also added that could be sold fresh, dried, distilled, and in some cases, essential oils could be extracted to increase sales and their profit margins. The aim was to introduce products that can be used for different purposes or that can undergo further processing to increase their value and reduce spoilage. Examples of such products include damask roses: damask roses are not very expensive to cultivate, however the essential oil has a high production cost value. One (1) ml of damask rose essential oil retails at US\$5.00. Another example is the aloe vera plant. It is also not expensive to cultivate but the gel it produces can be used in soap and shampoo and it is known for its healing properties. Another example of a versatile plant and herb is oregano. It can be sold fresh or dry and it can also be distilled to produce essential oils.

Crop (1kg)	Fresh	Dried
Oyster Mushroom (Plurotus)	<b>\$10.00</b>	<b>\$33.00</b>
White Button Mushroom (Portabella)	<b>\$3.50</b>	<b>\$33.00</b>
Oregano	<b>\$3.50</b>	<b>\$8.00</b>
Basil	<b>\$8.00</b>	<b>\$10.00</b>
Jalapeño	<b>\$2.00</b>	
Green Pepper	<b>\$1.00</b>	
Yellow and Red Peppers	<b>\$4.00-\$7.00 (depending on quality)</b>	

*International Prices (USD)*

### 5) *Equipment:*

The equipment and machinery purchased for the centers had three basic, interrelated, requirements. First and foremost, the equipment had to be up-to-date and modern in order to help expedite the women's work. But, the equipment could not replace the women. Second, the equipment and machinery had to be simple enough for safe use and it had to be standardized for the sake of consistency of the final product. Lastly, the equipment had to be tailored to meet local needs and specifications for production.



Tasks that were more demanding and could be replaced by machinery were. For example, small electrical juicers were introduced to replace the manual, labor intensive and time consuming process of extracting juice from tomatoes for sauce

preparation. However, the actual chopping of the tomatoes into small enough sizes to fit into the juicers remained a manual task. Lastly, equipment could only be purchased if it met safety standards. Most of the working women had elementary level educations and very limited – if any at all – exposure to advanced machinery. Modern equipment replaced the old traditional ones – stainless steel pots and culinary tools replaced the old copper, metallic or clay ones. Steam boilers replaced the old gas heating units for a more even distribution of heat and in order to maintain consistency of both color and taste in addition to lower electricity bills.



Procurement of machinery has been a challenging aspect throughout the whole program for two main reasons: the procurement requirements as originally set by the grant limited the origin, source, and nationality of the equipment. This was a major impediment until a waiver was granted. The second reason is that most of the equipment is custom-made to the needs of the women and the requirements of production. As such, these equipment units were not readily available on the market.

### 6) *Marketing and Sales:*

The final aspect of the program included the marketing and sales component. Full-scale production could not have commenced unless the products were either on market shelves for purchase or in the process of securing a market outlet in a supermarket or sales point somewhere in the near future.

Atayeb Al Rif, the sales and marketing cooperative, was established to manage the sales of the Atayeb Al Rif brand name and products manufactured by the 36 women-owned cooperatives. It is the central hub for sales and forecasting of the Atayeb Al Rif product-line. It also serves as the quality control base and scientific bureau for all the cooperatives. It monitors the consistency of the products – taste and physical appearance alike – and it ensures compliance with international standards for export. In addition, the Atayeb Al Rif cooperative represents the various coops from the 36 other different production centers. Atayeb Al Rif has succeeded in exporting the products to the Gulf States, UK, and USA (where Atayeb Al Rif products come with the FDA's stamp of quality). Toward the end of the program, a comprehensive upgrading of the Atayeb Al Rif brand



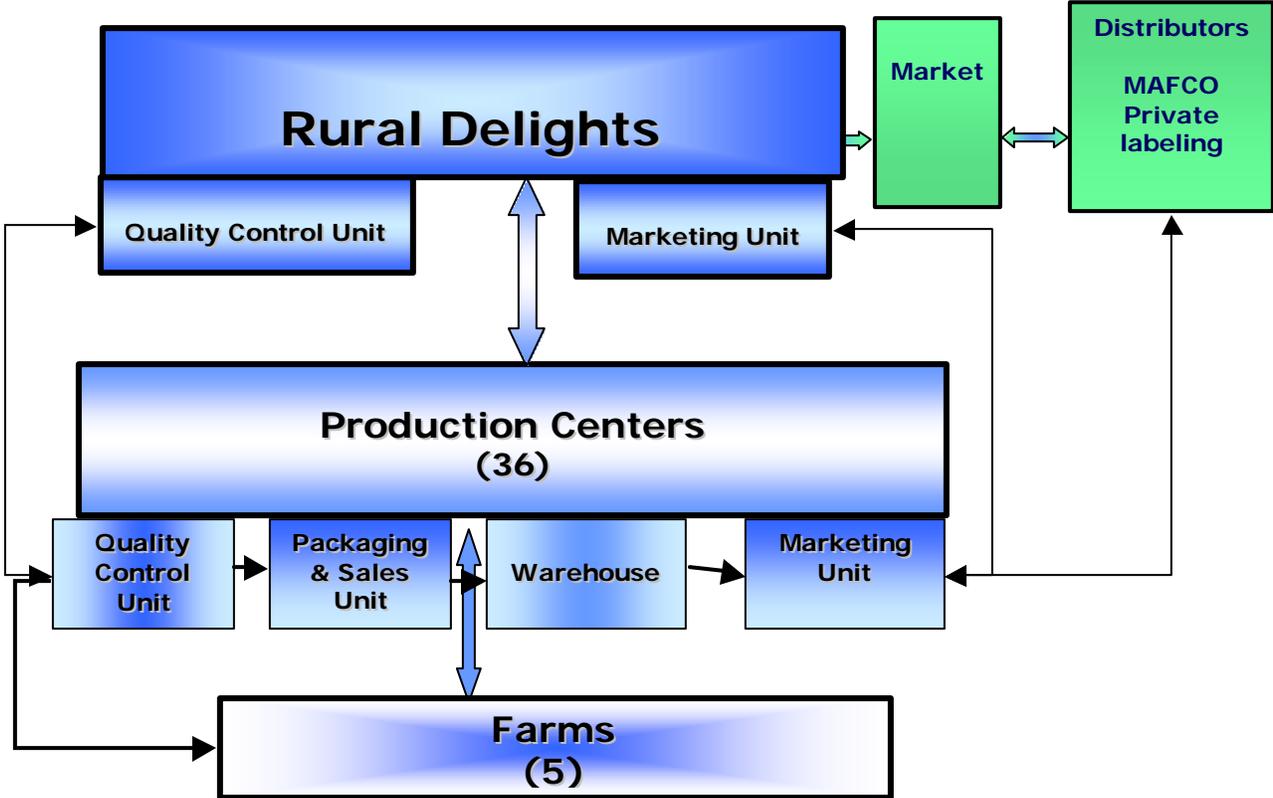
*Fancy Food Show, Jacob Javitz Center, NYC July, 2005*

name and image was implemented including new label designs, improved product packages and enhanced label information. The new product look aims to improve the positioning of Atayeb Al Rif products in both the local and international markets.



In addition, the women of the individual production cooperatives have the option to produce their own private-label products and sell them in their respective villages, at fairs and any village. Private labeling offers a win-win situation for the individual cooperatives; in addition to earning income, they do not have to carry excess inventory in their limited-space warehouses.

Diagram of Sales Chart

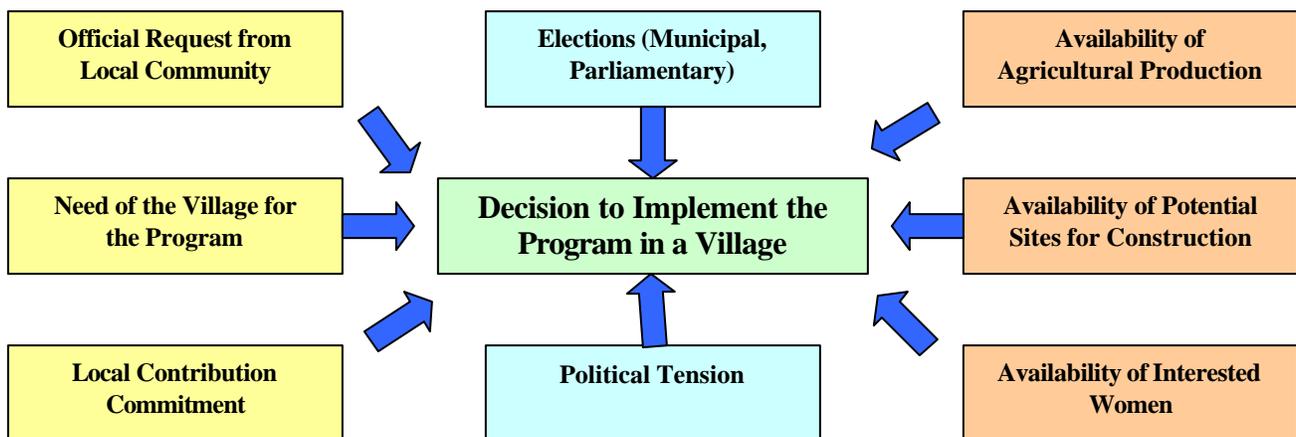


NEGOTIATION CHALLENGES

As with any program, the implementation of the SMART program faced several challenges during the LOP. The YMCA could not approach the local communities with the one-size-fits-all method or a model for all cooperatives. With each village and region, the YMCA team took into consideration the delicate socio-political issues surrounding them. Nevertheless, despite these efforts by the team to represent all sides, there were times when the YMCA team could not overcome the external factors, out of their control, that ultimately affected the final negotiations and implementation in some communities. Local communities, that may have initially expressed an interest in cooperating with the program team, sometimes reneged on commitments and negotiations broke down. When there were problems in negotiations, more often than not they were due to the politics in the region.

The local community approach relies on information sharing with as many people on the village level as possible. The program results, and most importantly the conditions – especially those relating to the program’s resources, the commitments and local contribution – were carefully outlined. In the community meetings – including members of the various factions and political parties – the program planners clearly mapped out the direction and results of the program. The SMART program was always presented as a inclusive program responsive to all factions and not as a one-party-only plan. In some cases, the inclusive approach became a problem for those villages where the religious and/or political divisions had become an intrinsic part of the particular village or region’s culture. Because the program policy was not to take its first concrete implementation steps until consent by *all* interested groups was publicly and clearly expressed, the socio-political challenges were most of the time identified and resolved early on in the process. Local committees representing the various village groups were established to bring together all negotiating parties in order to undertake the first steps toward program implementation. The first tangible act of cooperation was demonstrated by the local community’s commitment, either in cash or in kind, toward the set-up and start-up of the program’s activities.

**Major Factors Affecting Program Implementation in a Village**



There were times, however, after the initial steps had been taken and the community had agreed to support the efforts where additional factors, out of the program planners’ control, began to affect the development plan. In many cases, the causes behind the disruptions were due to the local politics in the area. On a few occasions following elections, new political groups seeking to establish a new trend or record, rejected as a policy, any prior decisions or projects that were made by the outgoing party that may not have been completed. On three occasions, the SMART program was well on its way

when the decision was ultimately made to stop all training and building. It was only when the internal divisions and tensions were ultimately determined to be insurmountable that a decision had to be made to move on. One such example took place in the village of Nabha (see description below). For these reasons, the incremental approach to implementation, rather than all at once, proved to be safer in dealing with the local community since the community can renege on its initial decision to work on the project at any time.

### ***Nabha Village – Lesson Learned:***

Nabha is a remote village in the district of Baalbeck, northeast of Deir el Ahmar. Its population is poor and marginalized; their primary source of income comes from agriculture.

A reputable international organization had included Nabha in their plan for development. After hearing of the success of the USAID/YMCA work under the SMART program, both the local community and the international organization approached the YMCA to collaborate. The community expressed its explicit willingness to abide by the implementation terms and established goals for the SMART program and the cooperatives throughout Lebanon. Unlike the basic rule applied to all the cooperatives, in this particular case, the international organization offered to cover the local expenses. Normally the YMCA team requests that the local villages cover the expenses in order to establish ownership and buy-in by the community.

Following several in-depth meetings with the YMCA team and the local population, and building on the local community's responsiveness and enthusiasm, the YMCA set out to implement the establishment of a cooperative – just as it had done with others. The YMCA team began by checking on the availability of physical space that could potentially be converted into a food processing center. Three locations were recommended and offered by the villagers as prospective sites. Following a detailed assessment and analysis of the three sites, one of the spaces was eventually selected as the most suitable, meeting all the basic criteria needed to begin work. The second step involved the training of the women on basic food processing and preservation. Approximately 33 women attended the training.

Following the completion of the training sessions, and the rehabilitation of the center, an official request was filed by the women trainees to establish a cooperative with the Directorate of Cooperatives at the Ministry of Housing. Thirty women submitted their supportive documents expressing their desire to either join the cooperative as shareholders and members or run for elections and form the Board of Directors. Everything appeared to be proceeding according to the planned schedule.

Problems began to arise over issues of leadership of the cooperative. The two dominant political factions in the area squabbled over which faction's women might head the Board of Directors. The rift between the two political factions started to interfere in the process of identifying the best suited women leaders for the cooperative. The debate devolved from a competency-based decision into a political one. The situation reached an impasse necessitating intervention by both the YMCA and the international organization. Several meetings were held and numerous options were proposed. Finally, a 'neutral' woman was identified, agreed upon by both political parties, and selected to head up the prospective cooperative. The woman was not affiliated with either one of the political parties. The decision appeared to work for a short while but even that decision was eventually abandoned following the last parliamentary elections. The village, once again, became divided down political lines affecting all decisions – including the decision of leadership and the cooperative.

The YMCA and the international organization once more, set out in an attempt to negotiate with the opposing sides in an effort to bring the parties together enough to reach an agreement for the benefit of the village and the women. But the conflict continued to escalate. Slandorous public accusations, on both sides of the political fence, were hurled at one another and ultimately the organizations supporting the cooperative were drawn into the fray and all previously held promises and decisions were reneged and all prospects to establish the cooperative vanished.

The rehabilitated structure remains under the SMART program's name and disposal for the next seven years. But in light of the present situation, no cooperative per se can be established. The local community's political wrangling got in the way of the community's development needs and its greater good. Both the YMCA and the international organization were unable to pursue this matter further.

## TRAINING

A core area of the SMART program which has demonstrated strong results is the training component. Evaluation findings demonstrate that the program surpassed its goals and that the women consistently found a high level of utility in the skills, even in cases where they still had the main focus on production for home use.



**The following is a brief summary overview of the SMART program's training methodology and content:**

### Basic:

Introductory, general training of the women beneficiaries on the various concepts related to the food industry and to build the women's capacity through use of scientific, clean and safe food processing and preservation methods.

### Theoretical:

- **Communication:** Introduction to the various forms of communication - especially those related to group dynamics and work. Issues pertaining to conflict resolution and management.
- **Hazard Analysis Critical Control Points (HACCP):** Intensive sessions on how to implement and maintain good manufacturing practices as they relate to personal hygiene, processing center cleanliness overall and operational hazards during production, and monitoring of these points, setting up a system to follow-up and follow-through.
- **Food:** Issues pertaining to nutrition, causes of food spoilage, laboratory tests and measures for quality control (chemical, bacteriological and physical).
- **General Safety:** General introduction to safe operating procedures, energy and water utilization and saving measures, and training on basic processing equipment and tool usage.
- **Cooperative Management:** Introduction to laws as they pertain to cooperatives and the relationship of the state with the cooperatives combined with basic bookkeeping and accounting procedures.
- **Small to Medium Enterprise (SME) Operations:** Basic principles of SME management, basic marketing tools and sales strategies.
- **Human Development:** Self development and confidence building.

### Practical:



*Women learning how to process and handle dairy derivative*

The actual hands-on training of food processing and preservation on a wide range of agricultural products including jams, compotes, pickles, distillates, syrups, dried fruits and vegetables the preservation of foods naturally using oil, brine, tomato sauce, how to handle dairy products, etc.

### **Skills Refresher Course:**

The refresher training sessions were created for the women already working within the cooperatives that needed to go back to basics and they were also created for those women who had trained under the YMCA's rural development training programs.

- **Cooperative Management:** Refresher on the laws as they pertain to cooperatives and the relationship of the state with the cooperatives; review of basic bookkeeping and accounting procedures.
- **Hazard Analysis Critical Control Points (HACCP):** Intensive follow-up sessions on how to maintain good manufacturing practices as they relate to personal hygiene, processing center cleanliness overall and operational hazards during production, and monitoring of these points, setting plans of follow up.
- **Marketing:** Basic marketing concepts.



*Training - women of the village of Jdeydet el Qayteh*

### **Training on Equipment:**

Both theoretical and practical, this portion aimed at building the beneficiaries' skills and awareness in matters relating to safe handling of the processing machinery and quality control tools, basic operations and maintenance schemes.

- **General Safety:** Proper management of water and electrical sources, detailed operating and maintenance procedures of processing equipment and machinery (steam networks, peeling, cutting, pressing and juicing machines, etc.), cleaning and sanitizing procedures for equipment and basic first-aid.
- **Quality Control Instruments:** Training on how to use basic quality control tools such as the Refractometer, PH meter, and the digital scales.

### **Special Training on Managing Production Operations:**

Training on ways to register and track the different phases of production and processing. Women were taught how to use templates to track production, batch numbers, output, etc.

### **Training on New Recipes:**

Practical training delivered on the specific recipes used by Atayeb Al Rif to standardize the food processing procedures in all the centers and to produce quality food. Issues on cooking temperatures, ingredients – their combinations, etc. are all addressed under this phase.



*Training - women of the Village of Hariss*

### **Advanced Training on Cooperative Management:**

Training the trainers and introducing the cooperative members to the various legal issues and by-laws of cooperative ownership – member rights and duties, administrative board, treasurer and secretary functions and internal conflict resolution.

### Training on Management and Development of Human Resources:

Interactive sessions where the aim is self-development through confidence building activities – defining personal interests, improving coaching skills, nurturing sense of responsibility and working on concept of team building and team work.

### Advanced Marketing Training:

In-depth study in marketing - practical solutions related to basic market study techniques, competitors analysis, promotional tools, business negotiations, understanding supply and demand.

### Training on Accounting - Financial Management:

Building the capacity of women in two accounting fields: business accounting related to production cost, inventory control, purchase costs, budgeting and fiscal year; and cooperative accounting - bookkeeping and control



*Computer training – at the PC Center of Kfeir*

### Computer Training:

Increase the women's computer literacy in basic hardware and software and the fundamentals of Microsoft Office applications.

### Integrated Accounting on ICT:

Enabling the women to calculate their production costs (direct and indirect) using electronic templates to help them in their everyday sales, forecasting and sales overall.

### Training Table and Participant Numbers

		Basic	Equip	Advanced	Marketing	Costing on ICT	IT	H.R	Coop Mgmt	Accounting	Production Operations	Total
				Skills refresher								
1	Ain Atta	54	18		3	4	2	3	3	3	4	94
2	Aayha	76	17		2	3	2	3	3	2	4	112
3	Deir el Ahmar	30	10	14	2	3	2	3	2	2	6	74
4	El Ain	9	5	9	1	2	2	2	1	2	4	37
5	Fakiha		9	21	2	4	2	3	3	3	0	47
6	Fourzol	10	9	9	2	4	2	3	3	2	2	46
7	Ham	21	8		2	2		2	3	1	0	39
8	Jdita	26	30									56
9	Khirbet Kanafar	28	11		2	5		3	2	2	2	55
10	Nabha	33										33
11	Wadi el Arayesh	12	9	25	2	2	2	2	3	3		60
12	Yanta	13									3	16
Bekaa Total		312	126	78	18	29	14	24	23	20	25	669
13	Bater	52	13		2	4	2	3	3	2	4	85
14	Kartaba	31	14		2	3		2	3	2	4	61
15	Kfardebian	19	12	14	2	4	2	3	3	1	4	64
16	Lehfed	30	9		2	4	2	1	2	2	3	55

17	Mayrouba	32	13		2	3		3	3	2	4	62
Mount Lebanon Total		164	61	14	10	18	6	12	14	9	19	327
18	Beit el Fakess		22	74	2	2		3	1	2	2	108
19	Beit Shelala		9	24	2	4		2	3	2	3	49
20	Fneydek	39	16		3	4	2	3	3	2	5	77
21	Jdeydet el Qayteh	36	10		2	4		4	4	2	2	64
22	Karam Saddeh	29										29
23	Rahbeh	29	21			3	2				4	59
24	Tekrit	15	6	15	2	2	2	2	2	2	2	50
25	Zghorta		5	33	2	6	2	4	2	2	4	60
North Total		148	89	146	13	25	8	18	15	12	22	496
26	Chehabiyeh	59	24			3					5	91
27	Deir Qanoun el Naher	9	12	6	2	1	2	3	2	2	4	43
28	Deir Qanoun Ras el Ain	48	24	15	5	3	2	3	1	2	3	106
29	Dhaira	15	8	16	1	6		2	2	2	2	54
South Total		131	68	37	8	13	4	8	5	6	14	294
30	Ain Ebel	6		9			2	1	2	2	4	26
31	Arabsalim	45	16		2	4	2	3	3	2	5	82
32	Arnoun	31	7		1	2		1	1		3	46
33	Chakra	42	15		2	2	2	1	3	2	4	73
34	Debel	38	10		2	4	2	3	3	2	4	68
35	Ebel el Saki	35	9		2	3	2	3	2	2	4	62
36	Hariss	54	28		3	2	2	3	3	2	4	101
37	Kfarsyr	63	8		3	3	2	2	3	2	4	90
38	Khelwat	17	14	15	2	3	2	3	3	2	5	66
39	Ksaybeh	17	9	41	2	4	2	4	3	2	3	87
40	Zraryeh	39										39
Nabatiyeh Total		387	116	65	19	27	18	24	26	18	40	740
41	Rural Delight				7		7	7	7	7	7	42
Total		1142	460	340	75	112	57	93	90	72	127	2568
Women trained on processing		1482										

	Basic	Equip	Advanced	Marketing	Costing on ICT	IT	H.R	Coop Mgmt	Accounting	Production Operations	Total
			Skills refresher								
Number of Training Sessions	36	35	16	4	34	7	7	6	6	1	152

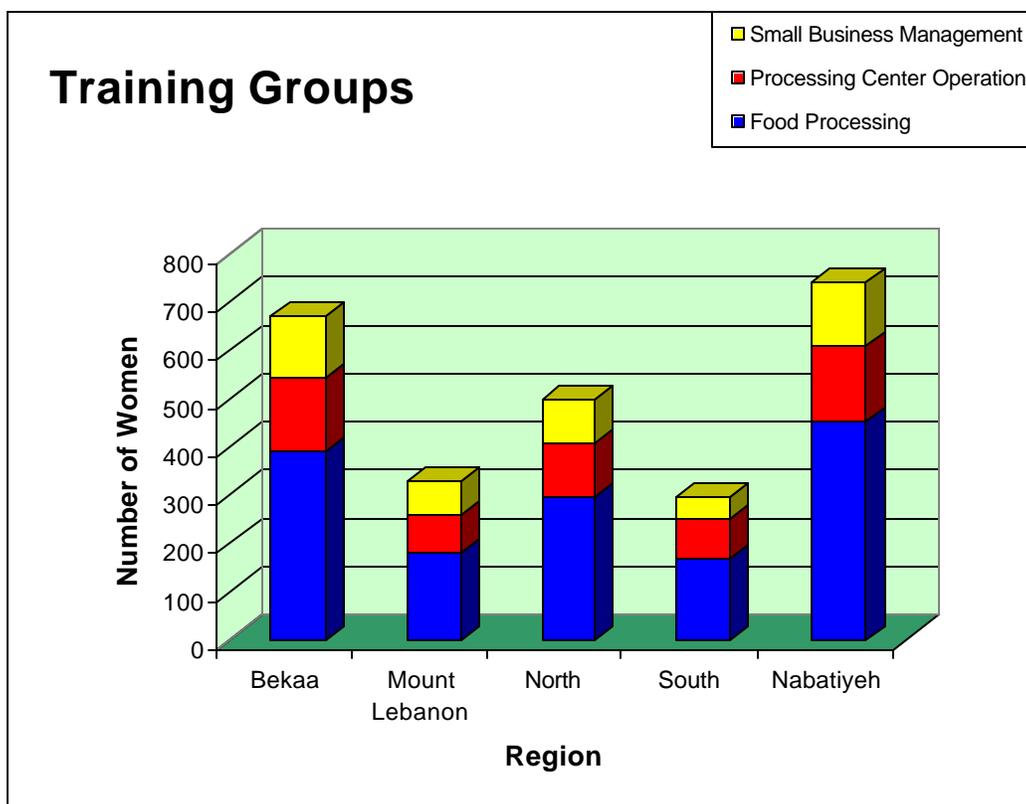
## Training Modules for 4 of the 5 Production Farms

TOPIC/ FARM		KARTABA	RAS EL AIN	BATER	YANTA	
	Title	Content				
	<b>Group Formation &amp; Communication Skills Development</b>	<ul style="list-style-type: none"> <li>Establishment of communication laws and regulations</li> <li>Ice breaker exercises</li> <li>Identification of groups</li> <li>Dynamics of group formation</li> </ul>	X	X	X	X
	<b>Nutrition &amp; Health Hazards</b>	<ul style="list-style-type: none"> <li>Classification of food items</li> <li>Different food categories</li> <li>Food pyramid</li> <li>Diet elaboration</li> </ul>	X	X	X	X
<b>Module I</b>	<b>General Introduction to Agriculture</b>	<ul style="list-style-type: none"> <li>Classification of plants and their specifications.</li> <li>Plant production cycle and the different propagation techniques</li> <li>Plant development stages</li> <li>Photosynthesis</li> <li>Respiration and Transpiration</li> </ul>	X	X	X	X
	<b>Production and Use of Organic Compost in Plant Production</b>	<ul style="list-style-type: none"> <li>Organic compost and its uses</li> <li>Main factors affecting the composting process</li> <li>How best to make compost</li> </ul>	X	X	X	X
	<b>Rational Use of Pesticides</b>	<ul style="list-style-type: none"> <li>Different types of pesticides; scales of pesticides</li> <li>Pesticide classifications: degrees of toxicity</li> <li>How to read a pesticide label</li> <li>What to look for when purchasing pesticides</li> <li>Pesticide contamination: period of depletion</li> <li>Guidelines on how to handle, mix and spray pesticides</li> <li>General recommendations for transport, mix, use, spray and storage of pesticides</li> </ul>	X	X	X	X
	<b>Soil Sampling</b>	<ul style="list-style-type: none"> <li>How to take soil samples</li> <li>Labeling samples</li> <li>Preparation of composite samples</li> </ul>	X	X	X	X
<b>Module II</b>	<b>Fertilizer Management</b>	<ul style="list-style-type: none"> <li>Classification of different fertilizers</li> <li>Differences between classes of fertilizers</li> <li>NPK: function of each element, their mode of action, their absorption model and the form in which the plant absorbs NPK</li> <li>Guidelines on how to read fertilizer labels</li> </ul>	X	X	X	X

	<b>Irrigation and Fertilization</b>	<ul style="list-style-type: none"> <li>• What is irrigation and fertilization?</li> <li>• Factors affecting irrigation</li> <li>• How to determine the quantity of irrigation water</li> <li>• Detailed view of the irrigation scheme</li> <li>• How to operate the irrigation scheme</li> </ul>	X	X	X	X
	<b>Good Agricultural Practices (GAP)</b>	<ul style="list-style-type: none"> <li>• Principles of GAP</li> <li>• Factors affecting agricultural production</li> <li>• Best practices for agricultural production: sustainable process</li> <li>• Introduction of “Integrated Agriculture Management” practices</li> </ul>	X	X	X	
	<b>Hazard Analysis and Critical Control Points (HACCP)</b>	<ul style="list-style-type: none"> <li>• Definition of HACCP and its correlation to agriculture</li> <li>• Identify critical points in the farm production process</li> <li>• Practical exercises</li> </ul>	X	X	X	
	<b>Integrated Pest Management*</b>	<ul style="list-style-type: none"> <li>• Characteristics of chemical pesticides</li> <li>• Basis of integrated pest management</li> <li>• Classification of chemical pesticides</li> <li>• Control of soil born diseases; soil sterilization</li> <li>• Examples of some pest control schedules</li> </ul>	X (applied for fruit trees)	X (applied for herbs and vegetables)	X (applied for Damask roses)	X (applied for reed and bamboo)
	<b>Diseases Management</b>	<ul style="list-style-type: none"> <li>• Practical session for the on-farm disease identification</li> <li>• Implementation of an integrated management strategy for disease prevention and control</li> </ul>	X	X	X	X
	<b>Pest Management</b>	<ul style="list-style-type: none"> <li>• Identification of insects and symptoms of infections</li> <li>• Implementation of a Strategy for the prevention and control of pests on the respective farm</li> </ul>	X	X	X	X
	<b>Weed Management</b>	<ul style="list-style-type: none"> <li>• Identification of different weed types available on the respective farms</li> <li>• Weed management basics</li> <li>• Identification of a strategy or plan to control weeds on site</li> </ul>	X	X	X	X
<b>Module III</b>	<b>Rootstocks of Fruit Trees</b>	<ul style="list-style-type: none"> <li>• Definition of fruit trees and composition of a tree</li> <li>• The role of rootstocks in fruit trees</li> <li>• Types and characteristics of the planted rootstocks</li> </ul>	X			
	<b>Field Visit to Kartaba Farm</b>	<ul style="list-style-type: none"> <li>• Preparation of soil mix for rootstock planting</li> <li>• Preparation of bags for planting activity</li> <li>• Preparation of rootstocks before planting: pruning- embedding</li> <li>• Farm planting design</li> </ul>	X			

<b>Field Visit to Khatrieh Farm in West Bekaa</b>	<ul style="list-style-type: none"> <li>Identifying fruit varieties to be planted</li> <li>Varieties of apples and pears with high market value</li> <li>Identification of rootstocks planted at Kartaba farm</li> </ul>	<b>x</b>			
<b>Grafting Fruit Trees</b>	<ul style="list-style-type: none"> <li>Identification of different grafting techniques</li> <li>Demonstration of the different grafting techniques</li> <li>The budding technique: explanation and practice</li> <li>Exercise on grafting with the budding technique</li> <li>Follow up on the grafting process w/ women</li> </ul>	<b>x</b>			
<b>Oreganum Syriacum (Oregano): Planting and Propagation</b>	<ul style="list-style-type: none"> <li>Description and importance of Oregano</li> <li>Characteristics of the plant: soil, climate requirements</li> <li>Multiplication, harvesting and productivity of oregano plants</li> </ul>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
<b>Pruning Fruit Trees</b>	<ul style="list-style-type: none"> <li>Identification of different pruning techniques</li> <li>Demonstration on the different pruning techniques</li> <li>The modified central leader technique: explanation and practice</li> <li>Practices and pruning using the adapted technique: the modified central leader technique</li> </ul>	<b>x</b>			
<b>Role Distribution in Cooperatives</b>	<ul style="list-style-type: none"> <li>Summary of the roles of coop members</li> <li>Task allocation among different members</li> <li>Duties and responsibilities of different members</li> <li>Internal laws</li> <li>Role distribution among coop members</li> </ul>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
<b>Cost Determination of Produce</b>	<ul style="list-style-type: none"> <li>Definition and formulas of cost determination</li> <li>Factors involved in the determination of the cost of the produce</li> <li>How to determine your profit share</li> <li>Practical exercises</li> </ul>	<b>x</b>	<b>x</b>	<b>x</b>	
<b>Planting of Medicinal Herbs and Spices</b>	<ul style="list-style-type: none"> <li>Definition of Aromatic medicinal plants</li> <li>Selected varieties of plants</li> <li>Production cycle of the different Plants</li> <li>Different planting requirements</li> </ul>		<b>x</b>		

<b>Propagation of Salvia (Sage)</b>	<ul style="list-style-type: none"> <li>• Identification of wild sage varieties</li> <li>• Description of the plant and its characteristics</li> <li>• Technique for identification and conservation of wild cuttings</li> <li>• Demonstration on propagation techniques: Preparation of soil media</li> </ul>		<b>x</b>		
<b>Production of Damask Roses</b>	<ul style="list-style-type: none"> <li>• What is damask rose?</li> <li>• Characteristics of the plant</li> <li>• Planting techniques</li> <li>• Demonstration and exercise on the planting techniques of different aromatic plants</li> </ul>		<b>x</b>	<b>x</b>	
<b>Essential oil Extraction</b>	<ul style="list-style-type: none"> <li>• Field visit to essential oil extraction center to observe the process</li> <li>• How to extract essential oils</li> <li>• Salvia distillation</li> <li>• Quantifying the oils - quality and quantity</li> </ul>		<b>x</b>	<b>x</b>	<b>x</b>
<b>Propagation of Oregano Syriacum by Cuttings</b>	<ul style="list-style-type: none"> <li>• Identification of the different methods of propagation</li> <li>• Demonstration of the propagation with cuttings</li> <li>• Training on the propagation technique</li> </ul>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
<b>Essential Oils: Qualifications and Grades</b>	<ul style="list-style-type: none"> <li>• Definition of Essential oils</li> <li>• Main uses for essential oils</li> <li>• Techniques of extraction Productivity of essential oils</li> <li>• How to identify the quality of essential oils</li> <li>• How to store essential oils</li> </ul>			<b>x</b>	
<b>Field Visit to Bater Farm</b>	<ul style="list-style-type: none"> <li>• Farm planting design</li> <li>• Planting techniques of Damask Roses</li> <li>• General information on production and maintenance requirements</li> </ul>			<b>x</b>	
<b>Training Day in Kesrwan</b>	<ul style="list-style-type: none"> <li>• Training on the production of vegetables using newly established greenhouses</li> <li>• Visit of two pilot farms</li> <li>• Visit of one food processing center</li> </ul>			<b>x</b>	
<b>Establishment of an Orchard</b>	<ul style="list-style-type: none"> <li>• How to establish an orchard</li> <li>• Cultivation techniques</li> <li>• New trends in orchard establishment</li> </ul>				<b>x</b>
<b>Pawlonia Tree plantation</b>	<ul style="list-style-type: none"> <li>• Definition and characteristics of pawlonia trees</li> <li>• Plantation of pawlonia trees at the site of reed and bamboo farms</li> </ul>				<b>x</b>



#### Sample of Women Trainees who Became Trainers in the Program

No.	Woman	Coop	Number of Training Days	Income
1	Izabelle Akiki	Kfardebian	167	\$16,700
2	Azed Abboud	Tekrit	46	\$4,600
3	Afaf Abou Ibrahim	Khelwat	19	\$1,900
4	Noha Harika	Wadi el Arayesh	44	\$4,400
5	Mona Sukkariyeh	Fakiha	77	\$7,700
6	Angele Ishaak	Deir el Ahmar	127	\$12,700

#### STRATEGIC ALLIANCES AND PARTNERS

Partners and prospective alliances were selected based on two basic criterion, competitive advantage and value-added. YMCA partners came to the table as authorities within their particular fields of expertise; they stood apart from most others in the same industry or line of work, including within their specializations and sub-specializations, human capital, access to information and contacts within their respective fields. Most importantly, the partners were willing to offer their services primarily for the sake of working toward the improvement of the economic situation in Lebanon and contributing toward the establishment of both sustainable and equitable development within the rural areas in particular. The following synopsis of each partner reflects their role and the invaluable experience that they provided to the program.

**American University of Beirut (AUB) – School of Agriculture:** Technical cooperation between the American University of Beirut and the YMCA has been ongoing since 1998 when they first assisted the program developers in a predecessor USAID/YMCA program. Under the SMART program, their technical expertise was utilized to establish the scientific bureau that was created within the Atayeb Al Rif Cooperative to oversee quality control issues as they pertain to the 37 production centers/cooperatives. Services provided by AUB included:

- Laboratory services for the analysis of nutrients and chemicals in the food products
- Technical consulting services on how best to preserve and process the products for optimal taste and consistency of product - advice on how to convert traditional cooking practices into scientifically based products
- Management of food processing, training and supervision
- Quality control of processed food products



*Quality control tools*

**Lebanese University – Faculty of Engineering:** The Lebanese University’s Faculty of Engineering contributed to the program by supplying the program with their best and brightest graduate students to help in the design of agriculture tools and machines needed for the processing and packaging of goods.

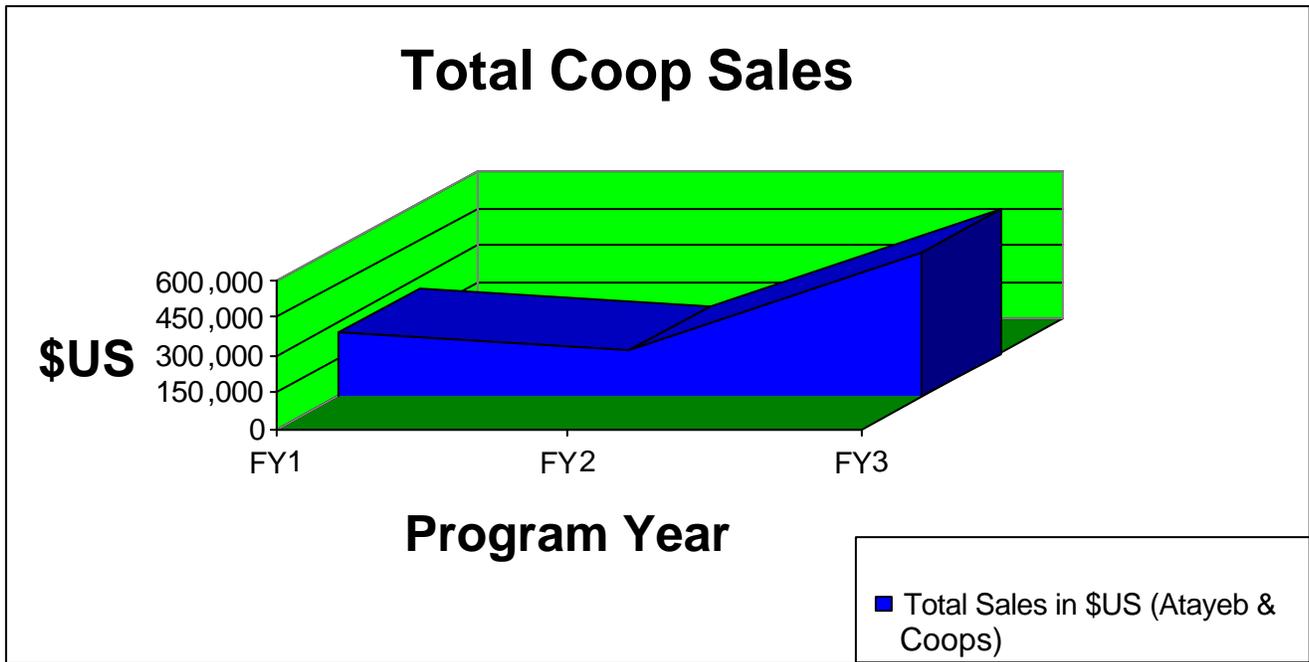
**National General Union of Cooperatives (NGULC):** NGULC is the national umbrella association for all cooperatives in Lebanon. NGULC aims to promote and preserve the creation and establishment of cooperatives throughout the country and in all sectors. They provide technical and training assistance to cooperatives both new and old and they serve as the lobbying arm – the voice for cooperatives – with the General Directorate of Cooperatives of the Ministry of Housing and Cooperatives and the National Union of Credit Cooperatives. NGULC has countrywide outreach and an expansive network of cooperatives and their specialty-area links. The NGULC assisted the SMART program by assisting the program designers in cooperative registration and understanding of cooperative regulations and bylaws.



*Management training of the women at the IMTI headquarters in Jeita*

**International Management and Training Institute (IMTI):** IMTI was established in 1988 to serve the organizational development and management needs of both the public and private sectors in Lebanon and the Middle East. The developers of the SMART program relied on IMTI for all of the management training.

**Mediterranean Authentic Food Company (MAFCO):** MAFCO was established as a distributor company in 2005 through a small network of investors interested in launching the Atayeb Al Rif brand name onto the global market. MAFCO will handle the commercial aspect of Atayeb Al Rif brand to include the market research, marketing, brand management, handling and positioning and most importantly, MAFCO will handle customer relations. MAFCO signed a supplier contract with Atayeb Al Rif with the first set of orders projected to exceed US\$1 million by June 2006. MAFCO has already secured a deal with a Lebanese distributor to manage the national market and is currently engaged in negotiations in the entire Gulf region from the UAE, to Kuwait, the Kingdom of Saudi Arabia and Bahrain, Europe and North America for international distribution of the products. Production and sales under MAFCO have exponentially increased throughout the third year of implementation following the signature of the supplier contract.



**United Nations Industrial Development Organization (UNIDO):** UNIDO is the agency within the UN dedicated to assisting countries through their transition phase to market economies. UNIDO aims to work with the countries in transition to become more effective players on the global market. UNIDO agreed to assist the program developers of SMART in their training procedures concerned with food safety and hygiene and in setting the rules for dependable quality control practices. UNIDO provided the following:

- Technical expertise and training on consumer safety standards in hygiene such as the implementation of Hazard Analysis Critical Control Points (HACCP).
- Provided specialized equipment used to monitor the quality of the products to ensure compliance with the international safety and hygiene standards.
- Assisted in the training on product analysis and assessment.

**General Manufacturing and Maintenance (GMM), SARL:** GMM is one of the leading companies in Lebanon specialized in the manufacturing of industrial food processing machinery. GMM assisted the program developers in the manufacturing of various machinery and equipment used in the centers:



*Distillery units*

**Ministry of Public Health (MoH) – Central Laboratory:** Atayeb Al Rif products receive a health certificate from the MoH demonstrating that their products have undergone close inspection for potential contaminants. The MoH certificate is the official seal of approval from the MoH’s Central Laboratory. In order to maintain the health certificate stamp and remain in good standing, Atayeb Al Rif routinely submits three samples of each of its 80 products. In order for Atayeb Al Rif to export its products into the UAE, they are required to follow certain guidelines and meet certain standards that can only be approved by the MoH in Lebanon.

***National Institute for Measurements and Specifications (NIMS):*** NIMS is responsible for setting standard measurements and specifications for agro-industry products in Lebanon which includes composition ingredients, ratios of solid materials, acidity levels, fat content, moisture, sugar quantities, percent of fruit, etc. Product quality protection and preservation and their certification indicating they are safe for human consumption have to undergo a series of tests including examinations for harmful microbes, chemical analysis, content and ingredients together with an analytical description to verify that jar labels and their claims are in compliance with standards. Atayeb Al Rif products are in full compliance with NIMS standard-measurements and specifications for agro-industry products.

***National Institute for Industrial Research (IRI):*** The national IRI conducts tests and research on food, machinery and soil. Atayeb Al Rif periodically sends samples – three of each – of its products for analysis for quality assurance and to make certain that they are safe from potentially harmful microorganisms.

***Ministry of Agriculture (MoA) – Agriculture Scientific Research Institute - Laboratories:*** The MoA performs the same function for the SMART program as the IRI (above). The YMCA partnered with two similar institutions in order to widen the program’s resources and conduct all lab tests in the most efficient manner possible.

## **PROCUREMENT PROCEDURES**

The process of procuring equipment depended on the availability of suppliers and contractors. Bidding for contractors to undertake construction works was relatively easy compared with the bidding process for suppliers of specific machinery.

Construction works were predetermined by YMCA engineers. The process involved the preparation of a bill of quantity with an approximate cost model design for reference purposes. The process involved, first, the mapping-out of the list of specifications; second, the identification of the list of potential contractors in the target beneficiary region; and opening the bidding for submissions. The assessment of the bids took place in the presence of all the contractors, along with YMCA engineers and financial staff, and was based on three factors: the quality of the proposal, the pricing – breakdown and evaluation of project, and the deadline for completion of works. One contractor was awarded the contract.



*Custom designed Keshek machinery*

To attain the best results in the procurement of machinery and equipment, the machines were often custom designed to meet the specific requirements at the production centers. As such, setting the specifications of the required machinery meant identifying the needs and capacities of the producing women in the food processing centers, identifying similar machinery on the market and formulating the specifications around those factors. A minimum of three suppliers was required in order to broaden the spectrum of potential bidders and expand the choices of procurement. As was done on the contractor identification for construction works, assessing the bids took place in the presence of all the suppliers, along with the YMCA technical and financial staff. The contractor with the combination of the most cost-effective bid coupled with good equipment design and delivery-date was eventually awarded the bid.

## DEVELOPING RURAL -URBAN LINKAGES

In addition to Lebanon's natural assets, the Lebanese are known worldwide for their business savvy and acumen. Due to the effects of the war, the floundering economy and the massive debt load on the country, the migration out of rural areas and into the city hubs, or from the country has continued.

A major area of concern has been the gap between the rural and urban areas and the continuing increase of ever widening disparities in communication, physical infrastructure, access to technology, basic services, etc. The USAID-YMCA SMART program sought to mitigate against these effects and contributed to assisting those in the rural areas to revitalize their economies by implementing sustainable programs and fostering the creation of viable linkages. As the rural areas begin to be seen as economic growth poles, migration patterns into the city hubs may begin to slow. The USAID-YMCA experience with Atayeb Al Rif has demonstrated the potential to transform economically neglected and disadvantaged villages or areas into potentially self-sufficient and successful industrial growth poles. By creating the Atayeb Al Rif brand name, the YMCA created consumer awareness of a high quality product produced in the rural areas. Moreover, the program stimulated the active participation of women in an economic role, capable of fostering changes necessary to reduce or eliminate unsustainable patterns of consumption and production. An added by-product was seen in the form of the practices that led to and encouraged environmentally and socially friendly industrial development.

## NURTURING WOMEN'S ROLES/FOSTERING SOCIAL CHANGE

As the demand and expectations of the women and their products increase, their role changes from "passive" to "functional" as noted by J. Pretty in his book, The Sustainable Intensification of Agriculture: Making the Most of the Land.<sup>3</sup> In the beginning, many of the women came into the program as insecure, passive applicants or prospective participants. By the time they were in a position to take control of their individual cooperative, and after their intensive training, they were ready and eager to begin producing and running their cooperatives and managing their business. Most have not looked back.



*From trainee to trainer – Angele Ishaak from Deir el Ahmar Coop*

The YMCA opted not to intervene in the selection, election or formation process of the cooperative bodies. The women were encouraged to express their opinions, put into place democratic procedures on their own and abide by cooperative regulations as established by the Lebanese government. The women met and formed their individual cooperatives, their governing bodies and together determined their respective centers' specialties. Once the cooperatives or farms were up and running, the women mobilized themselves in order to begin selling their products.

While Atayeb Al Rif oversees the sales and marketing overall, the women also know that the more they sell on their cooperative level, the more income they can all collectively earn. That incentive alone keeps the women working to identify other opportunities within their village and region to establish a local customer base. They not only work diligently within their communities to sell their products, they are also always looking for other ways to expand on their cooperatives' potential. Several of the cooperatives have come up with other ways to sell their excess inventory by setting up

small catering services during the “off-peak” seasons. The women may have started out as “passive participants” and observers, but today they are at the heart of Atayeb Al Rif and their individual cooperatives’ success. Several have become trainers of other women and some have even become active participants in training outside Lebanon – as was the case when the YMCA was approached to implement the SMART program in Yemen. Women trainees were brought along to train the Yemeni women in the program.

### ***Women Stakeholders in the Media***

Atayeb Al Rif and the production cooperatives and farms have captivated the media. One reason may be that the SMART program was granted the equivalent of 40% of the total Ministry of Agriculture’s budget, in addition to its high profile and unique stature as a women-only focused development program. To date, over 68 articles in 10 local newspapers have covered the women run cooperatives, 12 TV programs on seven channels and two radio interviews have also covered the women and more are in the pipeline. The media coverage has served to promote and support the women-run cooperatives idea. The coverage has also served to paint a positive picture of USAID and its financial contributions on the local level, both working with the YMCA to implement a project of this scale and in contributing to rural women’s economic independence.

The media coverage has made celebrities of the women in their village. Prior to the SMART program, most of the women had never left their villages. But since the start of their involvement in the program, many have made several public appearances – some in front of cameras, others as class trainers and many of them before the consumers without giving their public appearance a second thought.

Most importantly, the men’s perceptions are also changing. The thought that their wives are working outside the home is no longer a contentious issue. In most cases, the additional income has raised the household’s standard of living, easing some of the stresses of everyday living which in turn eases the men’s response to their spouses’ work. Lastly, the media has also succeeded in promoting natural products and a return to “grandmother’s kitchen”.

### **PROGRAM OUTCOME**

The program’s goal was to stimulate opportunities for women in rural Lebanon to earn money from the sales generated from the cooperatives; where they would also serve in decision-making and leadership roles as shareholders. The creation of jobs, and the economic independence that comes with the jobs, eventually allows the women to play a role in the decision-making within the household. But most importantly, it develops their self-esteem which in turn nurtures a healthy household. In time, as their roles evolve, the women become active participants within their communities – as many women leaders of the older cooperatives already have. As such, empowering women economically allows them to become more active socially within their households first and their respective communities second. Once the woman in the household derives financial resources from her work, the perception of her role and its value begins to change as she begins to have more voice in household affairs. On average, the working housewife in the cooperative earns around \$110 per month. Depending on the region, the women can earn income ranging between \$100 and \$300 per month.

Equally important, the program addresses a chronic problem in the agriculture sector. Where agricultural surplus and fresh products were previously wasted due to the inability of the market to absorb and sell produce on time, the SMART program introduced a value-added approach to make use of surplus agricultural products in the market through an infrastructure and operational supply chain.

The SMART program provided the women farmers and producers alike a “seed to sale” strategy. The SMART program extended the shelf-life of fresh produce from 24 hours to, on average, 24 months. As an example, tons of apples harvested in the North of Lebanon were previously being wasted due to an inability to sell the products. Today, a large part of the surplus is being processed either into apple vinegar or jams and compotes. When properly stored, apple vinegar has a shelf-life of at least three years. The same is applied to several other fresh fruit, vegetables and herbs that can undergo further processing in order to increase their value. One other example is the versatile plant and herb oregano. Oregano can be sold fresh or dry and it can also be distilled and essential oils extracted for medicinal use. One kilogram of fresh oregano retails at approximately US\$3.50. One kilogram of dry oregano retails at approximately US\$8.00 and 1 liter of essential oregano oil retails at approximately \$350.

Another advantage of the products is that they are natural, made to comply with international standards and definitions. The program planners underwent a comprehensive strategy to build in the assurances in order to satisfy critical good hygiene practices and standardize the centers. The YMCA engineers designed the centers to meet Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP) standards. All equipment purchases were standardized for consistency and to meet the specific needs of the individual cooperatives.

## **PROGRAM SUCCESSES**

The program’s performance indicators suggest that the women owned and operated businesses will succeed in the long-term, thus affording the women and their families with access to new benefits and opportunities. On a personal level, the women have developed more confidence as cooperative shareholders and family providers. They earn, on average, a monthly income of US\$110. The income figures, overall, range between US\$100 and US\$300. To illustrate the changing circumstance of the women and their families, the purchasing power of US\$100 in the rural areas of Lebanon can cover, the cost of registration for one semester for one child in the public school system; it can help cover a substantial amount of a monthly heating bill, or contribute to the purchase of necessary food items.

Prior to the women’s work and ownership of the cooperatives and processing centers, most of the women earned no financial rewards for their demanding work within the household. The women’s work has allowed their spouses to realize their wives’ potential. In addition, as active contributing members of their household, the women have started to have a say in household decisions. The status of women within their respective villages is also gradually changing. In some cases, the women’s cooperatives have become models of success within their villages. Another success that cannot be overlooked was the change in “tribal” mindset – a mentality that begins with blind allegiance to the clan that is inherited between families and influences their social or economic (or both) status. The challenge of instilling the idea of ‘cooperation’ with other women--regardless of their status within their community—constantly required an accompanying process of conflict management and training.

On the business front, the Atayeb Al Rif marketing cooperative succeeded in uniting women from the different regions and backgrounds in contexts where they may never have had the opportunity to meet face-to-face, let alone collaborate. The women work together and even assist other women either by starting new cooperatives or refining their skills in advanced training.

Other successes of the program have included the trade-marking of two products registered at the Ministry of Economy and Trade. Through the efforts of the YMCA of Lebanon, the Ministry of Interior granted all cooperatives in Lebanon the right to register tax exempt vehicles in their names. Lastly, the SMART program was deemed so successful that YMCA of Lebanon was asked to set-up an identical pilot project in Yemen.

#### **THE SMART PROGRAM'S SUSTAINABILITY:**

The driving force for the SMART program is a commitment to creating conditions for long-term sustainability to ensure and expand economic opportunities for rural women and their families. Empowering women, the communities and functioning institutions and the environment which they depend on in conjunction with a system that protects them collectively (that is not dominated by vested interests) are all prerequisites for achieving sustainable development.

The SMART program design took into consideration all the factors that play a part in the development of the program. The components the program nurtured were as follows:

***Institutional/local organizational and management capacity:*** The SMART program invested in building local capacities to ensure that the necessary human resource capital was in place and capable of responding to and filling in the roles needed along the production, supply-chain continuum. Through training and technical assistance, and support to the development of fully-functioning and operating cooperatives, the YMCA developed the women's 'know-how' and the local organizations that supported their efforts.

***Investment in local physical infrastructure:*** All the structures were built with a focus on manageability. Layout and design of the structures took into account energy costs, manageability, optimal standards for hygiene, and in the future, if anything requires maintenance and upkeep, it can all be handled on the local level, including the refurbishment of equipment.

***Economic viability and the potential to ensure market outlets:*** The intensive, hands-on training of the women growers, producers, sales and marketing group from the outset increased their competitiveness. By improving production methods and augmenting their traditional know-how with scientific methods for consistency, and training the women on ways to benchmark their products and monitor the market, the women are better able to meet the market's needs. The women farmers, with their value-added produce and environment-friendly high-yielding trees, are better able to turn around a profit and deliver the higher-end goods. This is unlike other local farmers and producers who often lose their sales due to compromised quality or a lack of a system in place to ensure that the products move through the supply chain. The creation of the Atayeb Al Rif marketing cooperative enables the processing cooperatives to bypass the role of the middleman and retain a greater share of the proceeds from the sales. The Atayeb Al Rif cooperative's namesake brand name has come to represent quality as its shelf space increases on supermarket shelves world-wide.

***Training and sustainability:*** All training under the SMART program was designed with long-term goals. Systems were put into place to maintain, manage and operate the facilities on the long-run by tapping into local institutions that can – in the future – supplement or refresh the training on an as-needed basis.

**Partners and Alliances:** Many of the partnerships established will remain and new ones could potentially be developed. These include the partners established in the distribution arm of the program, the research institutions who will continue to assist in the quality control, exporters who continue to identify new markets, government organizations on the local level, credit and financial organizations, etc.

### 37 COOPERATIVES: THEIR SUCCESSES AND CHALLENGES\*

#### AAYHA COOPERATIVE:

**Date Completed:** July 2005

**Products:** Jam/compote: fig (fresh and dried), grapes, quince, seeds; Molasses: grapes; Pickles: cucumber, wild cucumbers, and cocktail<sup>†</sup>

**Success Story/s:** Prior to becoming shareholders with their cooperative, most of the women had never earned any income or worked outside their own homes. The cooperative consists of both younger and older women. They work as a unified group.

**Advantage/s:** Their local community was very supportive of the women and their cooperative.

**Challenge/s:** Minimal challenges. Getting the women out of their home might be considered the only small challenge along the way.



#### AIN ATTA COOPERATIVE:

**Date Completed:** July 2005

**Products:** Jams/composites: fig, grapes, pumpkin; Molasses: grape; Pickles: cucumber, wild cucumbers, cocktail, and olives

**Success Story/s:** The SMART program succeeded in bringing two political rivals to work together in one cooperative for the benefit of the village. The society, otherwise, does not mix outside of the cooperative.

**Challenges:** The rivalry in the village presented the organizers with several obstacles in the beginning. Once the program was put forward to the community, however, the women took the lead and decided to come together for their own good initially and for the good of the community later.

#### AIN EBEL COOPERATIVE:

**Date Completed:** October 2005

**Products:** Molasses: carob - primary use for molasses. Secondary use - as the women process the carob for the molasses, they extract the seeds and sell them for medicinal purposes. Tertiary use - the by-products from the carob (what they do not use for the molasses) they sell as filler for large animal feed and it can also be sent to composting facilities as organic waste. Also make Jams/composites: strawberry, fig, pumpkin, etc. Own a solar drier where they make sun-dried tomatoes



*Ain Ebel – Private label*

\* All the cooperatives are able to produce the entire range of products on a need-be basis although they all develop a specialty. The list includes most of the items the individual cooperatives produce but does not include what they can do if need be.

<sup>†</sup> Cocktail includes cauliflowers, carrots and cucumber and wild cucumbers

either plain or in an olive oil base and flavored with basil and oregano. They also have the equipment to smoke fish, meats, and poultry.

**Success Story/s:** This particular village was under occupation until relatively recently. The people of the village had been earning higher incomes with the occupiers' support. Once the source of funding ended, the women were left without an income or hope for a future. The cooperative idea gave the women that sense of hope they needed – even if the income they were going to make was smaller. Once the idea was presented to them they supported it and were far more interested in the security and the ownership that came with being a shareholder in a cooperative.

**Challenges:** In the beginning, convincing the women that the cooperative idea was an alternative for them to consider.

#### **EL AIN COOPERATIVE:**

**Date Completed:** June 2004

**Products:** Small Eggplants: preserved in oil; Prune paste (roll-up); keshek<sup>^</sup>; tomato paste (with or without salt)

**Success Story/s:** Fatmeh Dabbous has taken to wearing a neck tie – a symbol that she donned to indicate that she is taking charge of her future. She has taken the lead in her community in implementing the project. She even ran for public office where she ultimately lost but she ran on her own ticket and without the direct backing of the community. The fact that she had the courage to run for office is an accomplishment. Ms. Dabbous is much respected in the community today – a status she did not enjoy prior to her involvement in the cooperative. Prior to her work in the cooperative she served as an assistant at a gas station. Today, she is active on all fronts and with all other organizations and cooperatives in her area. She now even attends seminars outside Lebanon to address issues relating to women and their rights.

**Challenges:** The community was not supportive of the women in the beginning – they were not taken seriously. All that is changing as the women step up to the plate and their products now sell and they all earn income that has improved their respective household's standard of living and as they run and manage their own cooperative and business.



*Fatmeh Dabbous*

#### **ARABSALIM COOPERATIVE:**

**Date Completed:** August 2005

**Products:** Bitter orange peel rolls in syrup; Distilled products: orange blossom, rose, thyme, sage, rosemary, etc.; Syrup: citrus

**Success Story/s:** The women of Arabsalim at first glance are reserved.

The head of the coop was the only woman that was active socially prior to the creation of the cooperative. If anyone needed to get in touch with the women of the village, it used to be that they went through her. Today, the women of the cooperative have also become active and it no longer is about the one leading woman anymore; she alone does not represent the women of the village – all of them do.

**Challenges:** The women were voiceless in the community when the community was initially approached. Today, they are extremely active. They are even in touch directly with the Municipality and are active on the community level.



*Arabsalim Cooperative*

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<sup>^</sup> Keshek consists of goat's milk with cracked wheat. It comes in both powdered form for a soup base and the other form of Keshek comes in the form of a soft cheese consistency that is preserved in oil.

**ARNOUN COOPERATIVE:**

**Date Completed:** June 2004

**Products:** Jams/compotes: strawberry, pumpkin, bitter orange marmalade; Bitter orange peel rolls in syrup; Distilled products: Oregano, sage, rose, orange blossom. The women even add sugar to some of the distilled products to turn them into syrup – e.g.: rosemary, rose, geranium, citrus; Wheat products like roasted wheat; Zaatar\*

**Success Story/s:** The women succeeded in convincing many of the other local women in the village to actually buy their goods instead of producing their own at home.

**Challenges:** Convincing the entire community to support and buy from their local woman-owned and -run cooperative.



*Women of Arnoun*

**ATAYEB AL RIF COOPERATIVE:**

**Date Completed:** November 2003

**Products:** The only official marketing and sales, packaging and quality control center for the entire chain of women owned and run cooperatives. The women at Atayeb Al Rif update the recipes and ensure that all standards are maintained.



*New Atayeb Al Rif logo and sample product*



*Grounds*



*Laboratory*



*Warehouse*

**Success Story/s:** Worked out a deal with the distributor company, MAFCO, to expand the sales outreach both on the local and international levels. MAFCO also worked with Atayeb Al Rif to improve on and expand on the Atayeb Al Rif brand name.

**Challenges:** Getting the Atayeb Al Rif products on shelves worldwide and maintaining an awareness locally and regionally of the women and their efforts.

**BATER COOPERATIVE:<sup>††</sup>**

**Date Completed:** June 2005

**Products:** Jams/compotes: strawberry, pumpkin, quince, apple, apricot; Pickles: cucumber, wild cucumber, turnip and cocktail; Dried leafy vegetables: Nalta Jute (Melokhia – Corchorus Olitorius), mint; Distilled Products: rose water

\* Zaatar consists of ground dried thyme with sesame seeds and sumac. It is used as a spread on bread with added olive oil and is often eaten in the morning as part of one's breakfast.

†† The Bater cooperative has a farm cooperative affiliated with it as part of the SMART program from which it obtains much of its produce – information on the Bater farm is listed toward the end of the list of cooperatives.

**Success Story/s:** This particular group of women is very team-oriented and supportive of one another. They are very organized and famously disciplined. They benefited from a loan they obtained from a loan center in the village. They used the money as capital for the products they ultimately sold during the inauguration ceremony of the center. They opened their operations with an exhibition in November 2004 at a fair in the southern city of Sidon.

**Challenges:** There were no real challenges. This cooperative was supported by the community.

#### **BET EL FAKESS COOPERATIVE:**

**Date Completed:** June 2004

**Products:** Cherries – dried; Prune paste (roll-up); Jams/compotes: apples, peaches, pears; Mulberry (whole); Syrup: mulberry

**Success Story/s:** Training and implementation of the project in an extremely conservative, patriarchal society. The women today are active in their cooperative. Their activity working in the cooperative and producing products for sale is giving them a voice in their households for the first time.

**Challenges:** Dealing with an extremely conservative society and convincing them of the fact that the women and their program can be successful and non threatening. Men insisted on being involved and several decided to attend the training to make certain ‘their’ women were not being taught anything of which they did not approve.

#### **BET SHELALA – KFARHELDA COOPERATIVE:**

**Date Completed:** March 2004

**Products:** Located in a valley – this cooperative benefits both from the vegetation that grows in the valley and from the surrounding mountainous. It is an all-season cooperative: Jams/compotes: apples, quince, fig; Bitter orange peel rolls in syrup; Grape leaves; Dairy products: Keshek; Syrups: rose, orange blossom, etc.; Lemon peel that is grated and sweetened and can be added to cakes or eaten as is.



*Private label for Kfarhelda Cooperative*

**Success Story/s:** The women of Kfarhelda have many success stories. The highlights include - their invention of natural pectin\* that they use in their products. They also created a natural red colorant for rose syrup and jams using beetroot. On the business side, they sell their produce using both their own private label for local sales and the Atayeb Al Rif label for nation-wide and international sales. They generate, on average, US\$250 per woman, per month. Due to their success and their willingness to put a percentage of their money back into the cooperative, they were able to purchase a shankleesh\* machine and an industrial blender for the manufacture and sales of shankleesh among other things. The women that run the cooperative consist of both part-timers and full-timers. Another successful achievement of the cooperative was the donation of a van to the cooperative by a private donor. The van became the first registered vehicle in Lebanon for use by a cooperative.

**Challenges:** No real challenges from the community.

#### **CHAKRA COOPERATIVE:**

**Date Completed:** June 2005

**Products:** Jams/compotes: strawberry, pumpkin, dates, Pickles: cucumbers, wild cucumbers, olives; Zaatar

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\* Pectin is a purified carbohydrate product obtained by aqueous extraction of appropriate edible plant material –usually citrus fruits or apples. It is a valuable and harmless food additive.

\* Shankleesh is a traditional cheese that is balled up and preserved in dried thyme.

**Success Story/s:** These women are extremely team-oriented and nurturing toward one another. They were eager to get their cooperative off the ground and started. Their local community was supportive of them and worked with them to help get them started.

**Challenges:** No real challenges from the community.

**CHEHABIYEH COOPERATIVE:**

**Date Completed:** July 2005

**Products:** Jams/compotes: bitter orange, dates; Syrups: citrus, rose, mulberry; Distilled Products: orange blossom; sage; oregano

**Success Story/s:** Extremely well organized and the community was also supportive of the project.

**Challenges:** No real challenges from the community.

**DEBEL COOPERATIVE:**

**Date Completed:** June 2005

**Products:** Distilled products: rose water, orange blossom; Syrup: rose, orange blossom; Zaatar; Keshek; Tomato paste

**Success Story/s:** This cooperative developed a new approach to make use of their equipment and center – the cooperative rents out their workers' time to assist people in the village needing them to process certain products for home use.

**Challenges:** No real challenges from the community.

**DEIR AL AHMAR COOPERATIVE:**

**Date Completed:** June 2004

**Products:** Jam/compote and syrup: Apricot

**Success Story/s:** The woman in charge of this cooperative used to be a teacher and was active with local organizations. After going through the training, she became one of the key trainers coaching the women of the other newer centers on ways to best preserve food in a healthy and hygienic environment. In 2004, she attended the Slow Food conference in Torino, Italy. Prior to her involvement in the program, she had never traveled outside of Lebanon.

**Challenges:** The key challenge they faced was the men-run and -owned coop that already existed in the village. The women-owned and -run cooperative was viewed as a threat to the business and they were, as a result, unable to secure local contributions. The municipality did not support them with the land or coop space. One of the women of the coop donated the space and a structure – free of charge for 7 years. The lack of local community support and assistance towards the women created in a desire to defy the odds. Today the cooperative is extremely successful and the women are all very active.

**DEIR QANOUN EL NAHER COOPERATIVE:**

**Date Completed:** June 2004

**Products:** Pickles: Green Persian wild thyme; olives; Grape leaves; Laurel soap (bay leaf) and olive oil based soap

**Success Story/s:** The head of the municipality, in a show of support to the women and the prospective cooperative, offered them a structure that was an extension of his own home and mansion.

**Challenges:** No challenges from the community whatsoever.

**DEIR QANOUN RAS EL AIN COOPERATIVE:<sup>†</sup>**

**Date Completed:** November 2004

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<sup>†</sup> The Deir Qanoun Ras El Ain cooperative has a farm cooperative affiliated with it as part of the SMART program from which it obtains much of its produce – information on the farm is listed toward the end of the list of cooperatives.

**Products:** Jalapeños stuffed with labneh\* or cheese with oregano; Zaatar; Jams/composites: bitter orange; Syrup: bitter orange; Solar Drier: oregano; mint; basil, etc.

**Success Story/s:** The women of this cooperative had participated in a previous USAID supported YMCA pilot program through the training component. However, at that time there was no funding to set up a cooperative. This time around, the women invited the idea of additional training supplemented with an actual cooperative in which their training could be put to immediate use. They are very independent and they attend as many local fairs as they can. Their village culture - although on the surface appears



*Solar dryer*

conservative - is not so deeply rooted in a history of conservatism as are some other cooperatives. The establishment of the cooperative has re-created a sense of identity in the women. Several have admitted to the program directors that prior to the war their life in the village was more moderate. The cooperative is allowing the women in the village, and their spouses, to feel as though they are producing again and giving back to the community. As a result, they are feeling as though they have been given another chance to prove themselves and perhaps even return to the point that they were at before the war.

**Challenges:** Few. The spouses of the women are supportive of their wives.

#### **DHAIRA COOPERATIVE:**

**Date Completed:** July 2005

**Products:** Jams/composites: strawberry, pumpkin, fig; Pickles: cucumber, wild cucumber, olives; Olive oil based soap; Cracked wheat

**Success Story/s:** Another village that existed under occupation until recently. It is a small, isolated village. These women are driven to make their cooperative a success to prove to their spouses and the males in the village that they can produce excellent product and they will do well.

**Challenges:** Women under pressure by the male-dominated society. The entire process was an uphill battle. The women needed encouragement in the beginning but they are now taking the lead and are happy to have their own space and center to get them out from under the watchful and domineering eyes of their husbands.

#### **EBEL EL SAKI COOPERATIVE:**

**Date Completed:** June 2005

**Products:** Specialty: Organic tomato paste; Jams: strawberry, apricot, fig, apple; Rent out their time to process tomato - cutting and/or cooking.

**Success Story/s:** Two religious groups working together in the cooperative for the good of the village and the women. They also figured out another way to make use of their equipment and center - they rent out their time and equipment to assist people in the village to process certain products for home use. The women are very active and they attend fairs as much as they can.

**Challenges:** No challenges from the community.



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\* Labneh can be defined as yogurt cheese. In some circles it is known as "Kefir cheese". It is usually eaten with pita bread at breakfast with olive oil drizzled over it. It can also be made into balls and preserved in olive oil and eaten in much the same way.

### **FAKIHA COOPERATIVE:**

**Date Completed:** February 2004

**Products:** Eggplants preserved in olive oil; Jams/compotes: Eggplant stuffed with roasted almonds; Pickles: cucumber; wild cucumber, and cocktail; Equipment to smoke meats, poultry and fish (trout\*).

**Success Story/s:** Mona Sukkarieh was a math teacher with four children who resigned from her teaching post to take on the challenge of the cooperative. She proved to be a leader and self-starter and was even asked to train other women in the SMART pilot program in Yemen. Ms. Sukkarieh has since appeared on television and is extremely committed to the success of the program. She is the both the head of the cooperative and the Vice President of the Atayeb Al Rif cooperative.

**Challenges:** The community was not supportive of the women (although Ms. Sukkarieh's husband was). Ms. Sukkarieh invested her own money in the place of the community's contribution. She put her foot down and stepped out of the community's traditional thinking and forged a new direction for herself, giving the cooperative the break it needed.



*Women outside their Cooperative - Fakiha*

### **FNEYDEK COOPERATIVE:**

**Date Completed:** July 2005

**Products:** Molasses: pomegranate; Jams/compotes: apple, strawberry; Vegetables in brine: green beans; carrots, fava beans

**Success Story/s:** The woman who initiated the group - and who is now the head of the cooperative - is determined to see that the cooperative succeed. She even gained the confidence to run for mayor and lost by only 200 votes. She not only had the courage to run but she had the courage to run unsupported by a community who does not recognize a woman's basic rights and was able to prove herself and make a name for women and the cooperative she leads.

**Challenges:** Training and implementation of the project in an extremely conservative, patriarchal society. This was one cooperative where the head had to be a man. The program organizers had to compromise and allow a man to oversee operations. In the upcoming cooperative elections, however, it appears as though he may be voted out to be replaced by a woman.

### **FOURZOUL COOPERATIVE:**

**Date Completed:** February 2004

**Products:** Pickles: cucumber, wild cucumber, and cocktail; Grape leaves; Sour grape dressing\*; Green beans in oil; Keshek

**Success Story/s:** This group of women is very organized and determined to succeed. They single-handedly, and without the support of the community, formed their group of cooperative owners and participants. They even pooled their own money and rented a house. Most of the women of this cooperative have served as trainers to other groups and women. The cooperative gave one



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\* The women smoke mostly trout adding value to the fish. Fresh trout retails at: US\$2.00 per kilo versus smoked trout that retails at: US\$20.00 per kilo.

\* Sour grape dressing is used as a dressing mostly for salads – or as a substitute for lemons. It is highly nutritious.

woman, Ms. Samira Mehanna, mother of two girls, the financial independence to purchase items for her two daughters – items she used to have to ask her husband for. She dreams of the day that her two daughters will be educated and self-sufficient.

**Challenges:** Their local municipality did not support them in their efforts.

*Samira Mehanna*

#### **HAM COOPERATIVE:**

**Date Completed:** July 2005

**Products:** Jam/compote: Apple, cherries, apricots; Vinegar: Apple; Kawarmah<sup>^</sup>; Dairy: Goat labneh and Keshek

**Success Story/s:** Very eager group of women and their spouses are also very supportive. There is no municipality that presides over the village but there is a local Mayor who is willing to help in any way that he can. The YMCA worked with an international organization that assisted the local community with payment toward the structure that would become their cooperative.

**Challenges:** The village of Ham is remote and sits right on the border with Syria. Communication with them is difficult due to the distance of the village. There are only a few telephone lines.

#### **HARISS COOPERATIVE:**

**Date Completed:** July 2005

**Products:** Jams: strawberry, pumpkin, bitter orange; Pickles: cucumber, wild cucumber and cocktail

**Success Story/s:** The cooperative has allowed the women to step out from under the shadows of their spouses and the male figures within their families. The cooperative has given them a sense of ownership of their future – without the men running their lives.

**Challenges:** It is an extremely patriarchal society. Nevertheless, through the creation of the SMART program, the Municipality and the community have come around and support the initiative.

#### **JDEYDET EL QAYTEH COOPERATIVE:**

**Date Completed:** July 2005

**Products:** Molasses: pomegranate; Jams: strawberry, quince, apple, pear, Syrups: mulberry; rose

**Success Story/s:** The woman head of the cooperative is determined to make her life a success in order to educate and be a positive role model for her daughter. The cooperative has given the woman leader and her husband the hope that their daughter will one day be afforded the chance to learn to speak both French and English and become educated so that she is not faced with some of the same challenges her mother has been confronted within her lifetime. The women of this cooperative are very committed and determined to succeed.

**Challenges:** Although the Municipality supported the initiative, it did not come without internal conflict and resistance. Those who opposed the initiative within the Municipality are making the lives of the women difficult.

#### **JDITA COOPERATIVE:**

**Date Completed:** September 2005

**Products:** Jams/compotes: strawberry, mulberry, dates (stuffed with almonds), pumpkin, fig (dried and fresh); Sour grape dressing; Pickles: cucumber, wild cucumber; Malban<sup>^</sup>

**Success Story/s:** This group of women is very active. They have set up their own local exhibitions for their community to witness and support their efforts. The Municipality and community, in turn, are very supportive.

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<sup>^</sup> Kawarmah is dried, seasoned, lamb meat preserved in natural sheep fat.

<sup>^</sup> Malban is made from grape molasses that is cooked with flour and is, most commonly, stuffed with walnuts.

**Challenges:** No challenges from the community.

**KARTABA COOPERATIVE:**

**Date Completed:** June 2005

**Products:** Mostly from fruit trees: e.g. apples; Jams/compotes: strawberry, quince; Vinegar: apple; Keshek and labneh

**Success Story/s:** Independent women. They are not waiting on Atayeb Al Rif to help sell their products. As a cooperative, the women decided to buy raw products and prepare processed foods that they went on sell at a local exhibition that they set up in August 2005.

**Challenges:** No challenges from the community.

**KFARDEBIAN COOPERATIVE:**

**Date Completed:** February 2005

**Products:** Jams/Compotes: peach, apple and whole apples stuffed with roasted almonds

**Success Story/s:** The women of this cooperative see the big picture. They are committed to one another and to making the cooperative succeed. They are very dependable and they are often the women the organizers of the SMART program use to represent the face of Atayeb Al Rif at exhibits when there is limited space.

**Challenges:** No challenges from the community.

**KFARSYR COOPERATIVE:**

**Date Completed:** July 2005

**Products:** Jams/compotes: date, pumpkin, apple; Syrups: citrus, mulberry, apricot; Pickles: cucumber, wild cucumber, cocktail, olives

**Success Story/s:** For the women in the village who felt as though they were not as much in need of money because either their spouse worked or they were comfortable financially, they still wanted to support the cooperative effort for three primary reasons: 1) they wanted to gain their own economic independence; 2) they wanted to support the women of the village who were less fortunate; 3) they wanted to feel a sense of accomplishment and ownership. They work together as equals in an effort to make the cooperative idea succeed.

**Challenges:** No real challenges from the community.



*Kfarsyr Cooperative*

**KHELWAT ASSOCIATION (AFFILIATED WITH THE LOCAL ORGANIZATION, NOUR):**

**Date Completed:** June 2005

**Products:** Soap: olive oil based; Molasses: grape (regular and whipped); they also rent out their time to process soap and molasses usually for local, home use.

**Success Story/s:** The head of the group, Afaf Bou Brahim, is a middle-aged, unmarried woman whose parents passed away. Prior to her work with the Association, she had never really worked for a living. The women within the Association are extremely supportive of her and they are all determined to make the project work.

**Challenges:** No real challenges from the community.



*Women bottling grape molasses*

**KHIRBET KANAFAR COOPERATIVE:**

**Date Completed:** May 2005

**Products:** Jams/compotes: strawberry, fig, pumpkin, quince; Sour grape dressing; Grape leaves in brine or vacuum packed; Syrups: citrus, mulberry, apricot; Dairy: keshek and labneh

**Success Story/s:** Previously this cooperative was a handicrafts-only outfit – today they have supplemented their product-base to include food products. They are very independent and their private label is doing well. They supply a well-known brand name company with stuffed grape leaves for export and they set up their own exhibitions to sell their products.

**Challenges:** No real challenges from the community.

#### **KSAYBEH COOPERATIVE:**

**Date Completed:** June 2004

**Products:** Distilled: orange blossom and rose water; Jams/compotes: rose, date, orange blossom, and citrus marmalade; Bitter Orange Jam peel rolled in syrup;

**Success Story/s:** One of the first groups to set up a cooperative. Many of the women started out as submissive housewives but since the start of their work with the cooperative, and their economic independence which allows them to contribute to the household, the women have started to carve out a role for themselves within their household and community. One woman – Amal Mehdi – takes particular pride in responding to the question, “What do you do?”. She can now say that she is both a part-owner and member of staff to a cooperative. The money she has brought in to the family has helped cover school tuition fees for their four children.

**Challenges:** One of the first cooperatives. There were no real examples before them that the organizers could use to sell the idea.



*Amal Medhi*

#### **LEHFED COOPERATIVE:**

**Date Completed:** June 2005

**Products:** Leafy greens: Jews mallow preserved with lemon juice and put into jars; Akoub\*; Jams/compotes: strawberry, mulberry; Vinegar: apple and grape; Pickles: cucumber, wild cucumber and olives; Syrups: apricot, mulberry, bitter orange, citrus

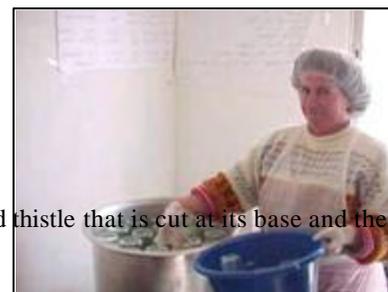
**Success Story/s:** The women of this cooperative fully understand the idea of a cooperative. This is another group of independent women who are always thinking ahead. They have come up with ideas to sell their jams during the off-peak seasons to the local communities. They are in the process of trying to set-up a catering business where they make pastries for special occasions.

**Challenges:** No real challenges from the community.

#### **MAYROUBA COOPERATIVE:**

**Date Completed:** June 2005

**Products:** Jams/compotes: apple; cherry; quince, strawberry, mulberry; Vinegar: apple; Syrups: cherry; apricot, mulberry, bitter orange, citrus; Keshek; Pickles: cucumber, wild cucumber, cocktail



*Sterilizing bottles –  
Mayrouba Village*

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\* Akoub is a delicacy known in its scientific name as *Gundelia tournefortii*. It is a wild thistle that is cut at its base and the prickles removed and it is cooked as a stew.

**Success Story/s:** The head of the cooperative, Monique Saadeh, is an Agriculture Engineer with five children. She found something to do within the village where she could put her skills to work and she could support the village in addition to earning an income and be a shareholder in a small business.

**Challenges:** No real challenges from the community.

#### **RAHBEH COOPERATIVE:**

**Date Completed:** August 2005

**Products:** Molasses: pomegranate; Jams: strawberry, quince, apple; Pickles: cucumber, wild cucumber and olives

**Success Story/s:** Mixed religion cooperative. The women want the cooperative to succeed because of the support they received from the community and municipality. The head woman of the cooperative is a published author on her village and the natural environment around it. She is eager to see the cooperative succeed and to share their products with consumers. The women set up a local exhibition to kick off sales.

**Challenges:** No real challenges from the community.

#### **TEKRIT COOPERATIVE:**

**Date Completed:** June 2004

**Products:** Olives stuffed with labneh or almonds or thyme; Molasses: pomegranate; hot pepper sauce; Prune paste (roll-up); dried cherries

**Success Story/s:** Women starting to prove they have leverage in the male dominated, traditional village. Although the agreement with the village required the head of the cooperative to be a male; he is now concerned about his position in the election and his reelection is not guaranteed. He has repeatedly, in attempt to secure his reelection, told the women that if they vote for him, he will strive to work for their rights even more. Working in the cooperative has empowered the women in a way they never could have imagined coming into the program.

**Challenges:** This is a mixed male and female cooperative. The men attended many of the training sessions fearing what the women might learn.



*Women making prune roll-ups*

#### **WADI ARAYESH COOPERATIVE:**

**Date Completed:** June 2005

**Products:** Jam/compote: cherries, fig, pumpkin; Dairy: keshek; Molasses: grape

**Success Story/s:** These women had dreamt of starting their own business – especially following previous training that they had received under an earlier USAID-YMCA program. They tried to run their businesses out of their own homes but they quickly learned that running a food processing business out of one's kitchen was not optimal. When the SMART program and the cooperative idea were presented to them, they jumped at the opportunity to finally realize their dream. They are very active today.

**Challenges:** No real challenges from the community.



*Private label – Wadi Arayesh*

#### **ZGHORTA COOPERATIVE:**

**Date Completed:** June 2004

**Products:** Pickles: cucumber, wild cucumber, cocktail, olives; Bitter orange peel rolls in syrup. Specialty: Beetroot sweetened in syrup; Hot sauce; Tomato paste; Green beans in vegetable oil;

**Success Story/s:** These women are very independent and do not plan to wait for Atayeb Al Rif to come up with an order. They have developed their own private label - Sit El Sittat - and they have exported products under their label to the UAE. Two of the women from the cooperative actually flew to the UAE to promote their products.

**Challenges:** No real changes from the community.

#### **BATER FARM COOPERATIVE:**

**Date completed:** February 2004

**Products:** Damask roses for extraction of essential oil and rose water

**Success Story/s:** The women of this cooperative farm are extremely committed to making their project succeed. They are known to work nights to water their crops. They spend lots of time at their farm even during their off-shift hours and help out whenever they can. They have a real sense of ownership and pride in their farm.

**Challenges:** No real challenges from the community.



*Women of Bater Farm*

#### **DEIR QANOUN RAS EL AIN FARM COOPERATIVE:**

**Date Completed:** February 2003

**Products:** All types of leafy vegetables, fresh and dry oregano, marjoram, onion, fava beans, all kinds of peppers – green, red, yellow, jalapeño, etc.

**Success Story/s:** One of the beneficiaries faced resistance from both her parents and her spouse when the idea of her working in a farm – as a partial owner – was presented. After much negotiating she was able to convince them to allow her to try her hand in the project. One year after the fact, she is earning enough money to pay for her own healthcare. She underwent major dental work and was able, for the first time in her life, to pay for the dental work from the money she earned at the farm as a stakeholder. One other single woman, who had been working on the farm, had to leave her work due to the fact that her parents were both infirm and they needed assistance. What she decided to do, instead, was to invest her money into the cooperative buying US\$450 worth of shares. The women got a chance to show off their produce at the Beirut Garden Show Exhibition in May 2005.



*Jalapeños*

#### **DHAIRA FARM COOPERATIVE:**

**Date Completed:** February 2003

**Products:** White (button) mushroom in addition to the production of special compost for the planting of white mushroom.

**Success Story/s:** The women of this particular farm are mostly uneducated. They learned how to plant both white (button) and Pleutorus (Portabella) mushrooms with the aid of the SMART team of experts who put together visual aids and images to supplement their training. The women have become so adroit at growing the varieties of mushroom that they have even come up with ways to optimize the growth process and have proven to the experts that their techniques work without compromising the mushrooms in any way.



*Compost for white mushrooms*

Their productivity has increased by 50% since its opening. They set up a booth at the Beirut Garden Show in May 2005.

**Challenges:** No real challenges.

**KARTABA FARM COOPERATIVE:**

**Date Completed:** March 2003

**Products:** High quality varieties of grafted fruit trees

**Success Story/s:** This particular farm is run by a small, but very active, group of women. It was rehabilitated to cultivate different varieties of apples, pears, cherries, peaches and nectarines. The women have learned to graft the rootstocks and are selling the fruit trees. One of the women actually managing the farm had no previous experience with farming or agriculture before the SMART program. She was so determined to learn and excel, she attended all training sessions fully prepared, always having thoroughly read all her materials, and she always came with lots of questions to ask the experts. She soon became a leader in the farm taking charge of daily management tasks. They set up a booth at the Beirut Garden Show in May 2005.

**Challenges:** No real challenges.



*Women of Kartaba grafting fruit trees*



*Women planting - Yanta Farm*

**YANTA FARM COOPERATIVE:**

**Date Completed:** October 2004

**Products:** Bamboo and reed production

**Success Story/s:** Some of the women started out as hesitant participants unsure of the time commitment toward the program that might take them away from their homes. But after one session, one woman who had initially expressed to the trainers that she would not be able to attend all sessions because she had to take care of her children, was so impressed with the ability of the women trainers to manage their time and what the program had to offer on the long-run, she worked out an alternate schedule with her husband and was able to attend each session.

**Challenges:** Getting some of the women out of their homes and onto the farm.

**Table of Farm Production**

Farm	Production	Total Production	
		Quantity in Kg	Total Quantity Sold
Ras el Ain	Jalapeno Pepper	313	280
	Basil Leaves	53	35
	Wild Oregano	651	651
	Italian Oregano	2.5	2.5
	Fenel <sup>1</sup>	25	2

	Lettuce <sup>2</sup>	605	225
	Salvia Officinalis <sup>1</sup>	35	33
	Oreganum Majorana	12	11
	Jews Mallow	152	27.5
	Fava Beans	80	70
	Spinach, Rocca, Onions <sup>2</sup>	60	58
	Red Pepper	34	24
	Cayenne Pepper	15	0
Dhaira	Oyster Mush <sup>3</sup>	387	265
	White Mush	271	60
	Compost (WM) <sup>4</sup>	56,700	19,000
Bater	Damask Roses <sup>1</sup>	197	0
Kartaba	Wild Oregano	7	7
<sup>1</sup> : Products that have been distilled; the # of bottles sold are reflected in the center sales			
<sup>2</sup> : Fresh vegetables subjected to extremely warm conditions deteriorating their quality			
<sup>3</sup> : The grade II oyster which are accounted for in the total quantity produced are not accounted for in the current sales as they have been dried and are not yet on the market.			
<sup>4</sup> : Compost that is not being sold is used for planting white mushroom in the facility			

### Table of Local Partnerships

CENTER	MOUHAFAZA	LOCAL PARTNERSHIP
Ain Atta	Bekaa	Municipality
Aayha		Municipality
Deir el Ahmar		Municipality
El Ain		
Fakiha		
Fourzol		
Ham		Moukhtar (mayor)
Jdita		Municipality
Khirbet Kanafar		Local Cooperative
Nabha		Moukhtar (mayor)
Wadi el Arayesh		
Bater		Mount Lebanon
Kartaba	Municipality	
Kfardebian	Municipality	
Lehfed	Municipality	
Mayrouba	Municipality	

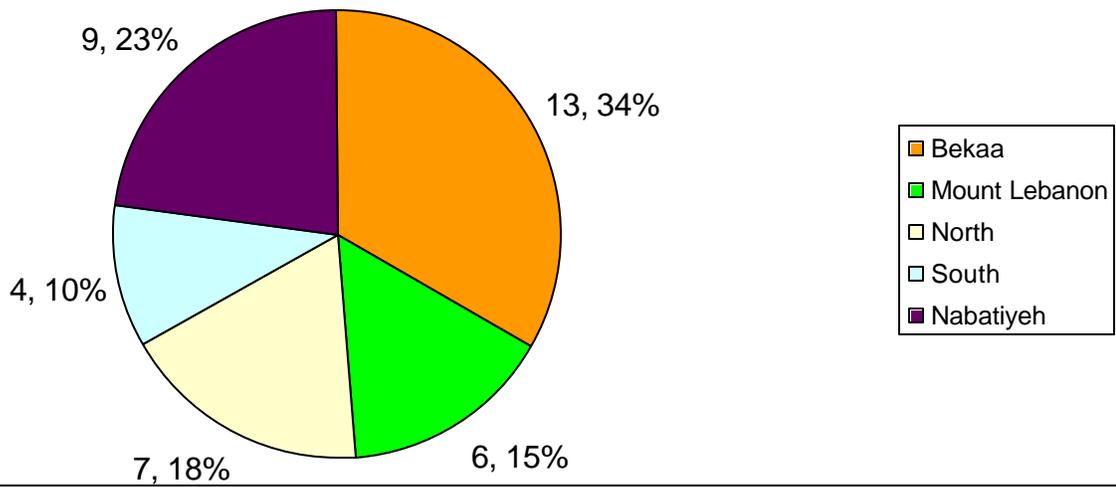
Beit el Fakess	North	Local Cooperative
Beit Shelala		
Fneydek		Municipality
Jdeydet el Qayteh		Municipality
Rahbeh		Municipality
Tekrit		Municipality
Zghorta		Municipality
Chehabiyeh	South	Municipality
Deir Qanoun el Naher		
Deir Qanoun Ras el Ain		Municipality
Dhaira (no municipality)		
Ain Ebel	Nabatiyeh	Municipality
Arabsalim		Municipality
Arnoun		
Chakra		Municipality
Debel		Municipality
Ebel el Saki (+coop)		Municipality
Hariss		Municipality
Kfarsyr		Municipality
Khelwat		Local Association
Ksaybeh		
<b>Total Number of Partner Municipalities</b>		23

### Production Farms Summary

FARM LOCATION	OBJECTIVE	WOMEN ON FARM	NO. TRAINING DAYS	EQUIPMENT PROVIDED
Kartaba	Prod. of grafted fruit trees of high quality varieties	8	21	<ul style="list-style-type: none"> <li>▪ Electricity meter</li> <li>▪ Highly efficient irrigation system,</li> <li>▪ Easy to handle spray pump,</li> <li>▪ Weed trimmers,</li> <li>▪ Grafting tools,</li> <li>▪ Labeling equipment,</li> <li>▪ Essential planting tools,</li> <li>▪ Prefab house,</li> <li>▪ Storage container</li> </ul>
Ras el Ain	Prod. of aromatic and medicinal herbs as well as some vegetables	9	19	<ul style="list-style-type: none"> <li>▪ Generator,</li> <li>▪ Highly efficient irrigation system</li> <li>▪ Easy to handle spray pump,</li> <li>▪ Weed trimmers,</li> <li>▪ Essential planting tools,</li> <li>▪ Prefab house,</li> <li>▪ Storage container,</li> <li>▪ 4 water reservoirs (8000 liters each),</li> </ul>

				<ul style="list-style-type: none"> <li>▪ Electronic scale,</li> <li>▪ Sealing machine</li> </ul>
Bater	Prod. of damask roses for essential oil and rose water extraction	9	16	<ul style="list-style-type: none"> <li>▪ Electricity meter</li> <li>▪ Highly efficient irrigation system</li> <li>▪ Easy to handle spray pump,</li> <li>▪ Weed trimmers,</li> <li>▪ Essential planting tools,</li> <li>▪ Prefab house,</li> <li>▪ Storage room,</li> <li>▪ Decanters for essential oil extraction</li> <li>▪ Four water reservoirs</li> <li>▪ Electronic scale,</li> </ul>
Dhaira	Prod. of compost for white mushroom plantation as well as prod. of white mushroom	10	30	<ul style="list-style-type: none"> <li>▪ Boiler equipped with sensors,</li> <li>▪ Electronic scale,</li> <li>▪ Boxes for packaging,</li> <li>▪ Sealing machine</li> </ul>
Yanta	Prod. of reed and bamboo	14	23	<ul style="list-style-type: none"> <li>▪ Water distribution network</li> <li>▪ Pump to transport water to collection reservoir</li> <li>▪ Planting tools,</li> <li>▪ Manual spraying pump</li> </ul>

## Formed Cooperatives



## Registered Women in Coops Vs Trained Women

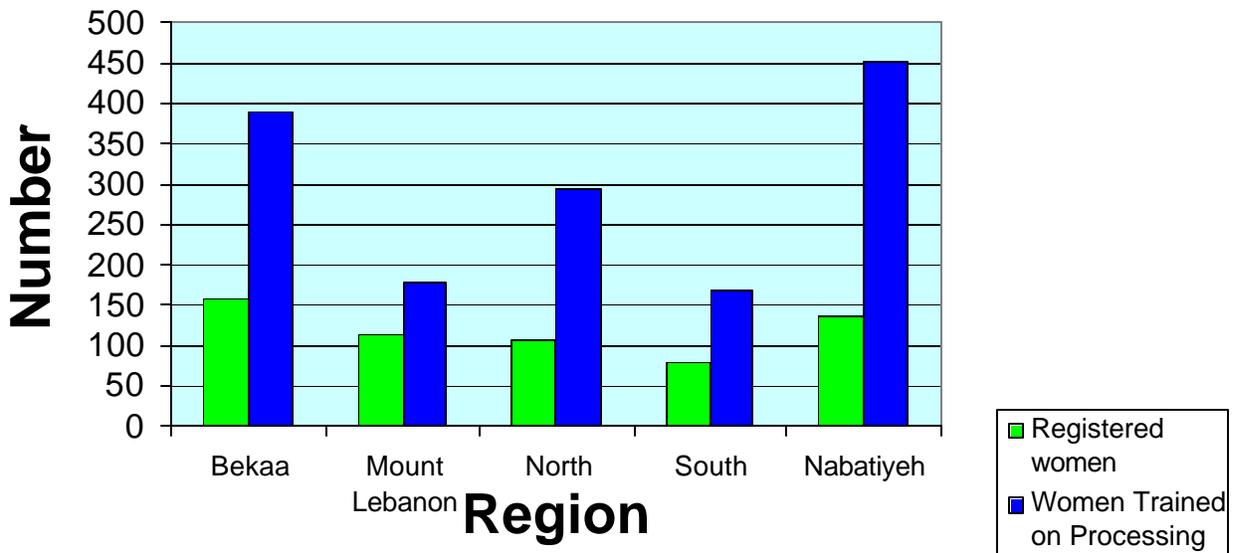


TABLE OF REGISTERED WOMEN BENEFICIARIES IN COOPS

#	Center	Coop	Registered Women	Official Name of Cooperative in Arabic
1	Ain Atta	coop	26	الجمعية التعاونية النسائية - عين العتة
2	Aayha	coop	14	الجمعية التعاونية النسائية - عيها
3	Deir el Ahmar	coop	12	الجمعية التعاونية النسائية - دير الأحمر
4	El Ain	coop	14	الجمعية التعاونية النسائية - العين
5	Fakiha	coop	11	الجمعية التعاونية النسائية - فكيها
6	Fourzol	coop	13	الجمعية التعاونية النسائية - فورزول
7	Ham	coop	12	الجمعية التعاونية النسائية - هام
8	Jdita	coop	14	الجمعية التعاونية النسائية - جدية
9	Khirbet Kanafar	coop	23	الجمعية التعاونية النسائية - خربت كانفار
10	Mansourah	coop		
11	Mhaydseh	coop		
12	Wadi el Arayesh	coop	20	الجمعية التعاونية النسائية - وادي العريش
<b>Bekaa Total</b>		<b>12</b>	<b>159</b>	
13	Bater	coop	17	الجمعية التعاونية النسائية - باتر
14	Kartaba	coop	21	الجمعية التعاونية النسائية - كرتابا
15	Kfardeblian	coop	13	الجمعية التعاونية النسائية - كفر دبلان
16	Lehfed	coop	11	الجمعية التعاونية النسائية - لطف
17	Mayrouba	coop	25	الجمعية التعاونية النسائية - مريوطا
<b>Mount Lebanon Total</b>		<b>5</b>	<b>87</b>	
18	Beit el Fakess	coop	14	الجمعية التعاونية النسائية - بيت الفكس
19	Beit Shelala	coop	14	الجمعية التعاونية النسائية - بيت شلالا
20	Fneydek	coop	8	الجمعية التعاونية النسائية - فنيدك
21	Jdeydet el Qayteh	coop	13	الجمعية التعاونية النسائية - جدية القايته
22	Rahbeh	coop	15	الجمعية التعاونية النسائية - راهبه
23	Tekrit	coop	16	الجمعية التعاونية النسائية - تكريت
24	Zghorta	coop	27	الجمعية التعاونية النسائية - زغورتا
<b>North Total</b>		<b>7</b>	<b>107</b>	
25	Chehabiyeh	on going	25	
26	Deir Qanoun el Naher	coop	12	الجمعية التعاونية النسائية - دير القانون الناهر
27	Deir Qanoun Ras el Ain	coop	30	الجمعية التعاونية النسائية - دير القانون رأس العين
28	Dhaira	coop	11	الجمعية التعاونية النسائية - ديرة
<b>South Total</b>		<b>3</b>	<b>78</b>	
29	Ain Ebel	coop	11	الجمعية التعاونية النسائية - عين عبل
30	Arabsalim	coop	16	الجمعية التعاونية النسائية - عربسليم
31	Arnoun	coop	11	الجمعية التعاونية النسائية - ارنون
32	Chakra	coop	15	الجمعية التعاونية النسائية - شكارا
33	Debel	coop	13	الجمعية التعاونية النسائية - دبل
34	Ebel el Saki	coop	11	الجمعية التعاونية النسائية - عبل السكي



34	Ksaybeh	13	1,870	13,184	13	768	5,212	13	7,020	87,861
<b>Nabatiyeh Total</b>		<b>29</b>	<b>3,576</b>	<b>25,211</b>	<b>51</b>	<b>1,628</b>	<b>14,937</b>	<b>137</b>	<b>26,113</b>	<b>159,788</b>
35	Chehabiyeh							25	850	4,054
36	Deir Qanoun el Naher	12	379	2,672	12	267	1,335	12	375	2,015
37	Deir Qanoun Ras el Ain				30	240	2,870	30	2,310	13,803
38	Dhaira				11	300	2,550	11	260	1,130
<b>South Total</b>		<b>12</b>	<b>379</b>	<b>2,672</b>	<b>53</b>	<b>807</b>	<b>6,755</b>	<b>78</b>	<b>3,795</b>	<b>21,002</b>
<b>Total (atayeb Al Rif=25)</b>		<b>280</b>	<b>38,530</b>	<b>271,644</b>	<b>287</b>	<b>20,898</b>	<b>121,002</b>	<b>568</b>	<b>108,442</b>	<b>747,168</b>
<b>average income per wowed</b>		<b>up to end of FY1</b>		<b>\$972.16</b>	<b>up to end of FY2</b>		<b>\$864.00</b>	<b>during FY3</b>		<b>\$1,315.44</b>
<b>Total Program</b>									<b>167,870</b>	<b>1,139,814</b>

**TABLE OF PROJECTED PRODUCTION FROM SEPTEMBER 2005 UNTIL MAY 2006 (BASED ON MAFCO'S FIRST ORDER)**

<b>Product Name</b>	<b>bottle/ Jar Capacity in gr or ml</b>	<b># of Boxes</b>	<b># of Jars/ bottles</b>	<b>Production Worth in \$US</b>	<b>Production Centers (production already ongoing in these centers based on the season)</b>
Apricot Preserve	400	2500	30000	137700	Deir el Ahmar, Aayha
Apricot Spread	400	4000	48000	220320	Deir el Ahmar, Aayha
Orange Blossom Jam	400	200	2400	23016	
Dried Fig Jam	400	400	4800	28800	Aayha, Ain Atta, Fourzol
Dried Fig Jam with roasted almonds	400	400	4800	21000	Aayha, Ain Atta, Fourzol
Petal rose Jam	400	200	2400	6996	Ksaybeh, Deir Qanoun Ras el Ain
Strawberry Preserve	400	1000	12000	24000	Arnoun, Ebel el Saki, Deir Qanoun el Naher, Deir Qanoun ras el Ain, Beit el Fakess, Beit Shlela, Fneydek, Bater, Lehfed
Strawberry Jam	400	1500	18000	36000	Arnoun, Ebel el Saki, Deir Qanoun el Naher, Deir Qanoun ras el Ain, Beit el Fakess, Beit Shlela, Fneydek, Bater, Lehfed
Cherry Jam	400	200	2400	4800	Mayrouba, Lehfed
Apple Jam (pieces)	400	200	2400	4404	Kfardebian, Beit Shlela, Jdeydet el Qayteh, Zghorta
Quince Jam (pieces)	400	200	2400	6000	Ain Atta, Kfarsyr
Bitter Orange Marmalade	400	400	4800	8808	Zghorta, Beit Shlela, Ksaybeh
Whole Apples stuffed with roasted almonds cooked & preserved in syrup	700	400	4800	22416	Fakiha, Ham, Kfardebian, Fneydek
Dates stuffed with roasted almonds cooked & preserved in syrup	700	400	4800	27984	Arnoun, Chakra, Ksaybeh
Bitter Orange Peels cooked & Preserved in syrup	700	400	4800	17616	Zghorta, Beit Shlela, Ksaybeh
Figs cooked & preserved in syrup	700	400	4800	24000	Deir el Ahmar, Fourzol, Aayha, Khirbet Kanafar, Khelwat
Pumpkin pieces cooked & preserved in syrup	700	200	2400	8808	Arabsalim, Debel, Hariss, Chehabiyeh
Carob molasses	800	800	9600	38400	Ain Ebel
Whipped Grape molasses	700	200	2400	12792	Khelwat
Cucumber Pickles	600	2000	24000	40800	Ain Atta, Aayha, Fourzol, Khirbet Kanafar, Kfardebian, Chehabiyeh, Hariss, Khelwat
Wild Cucumber Pickles	600	2000	24000	40800	Ain Atta, Aayha, Fourzol, Khirbet Kanafar, Kfardebian, Chehabiyeh, Hariss, Khelwat

Mixed Vegetable Pickles	600	1600	19200	32640	Ain Atta, Aayha, Fourzol, Khirbet Kanafar, Kfardebian, Chehabiyeh, Hariss, Khelwat
Grape leaves in Water (non-salted)	700	400	4800	9600	Fourzol, Wadi el Arayesh
Stuffed Eggplants preserved in oil	600	1000	12000	58800	el Ain, Fakiha
Green olives with thym	550	600	7200	69624	Tekrit
Goat Milk Labneh preserved in oil	600	400	4800	36816	Ayta el Foukhar, Khirbet Kanafar, Jdita
Stuffed Grape Leaves Preserved in oil	700	200	2400	5520	Wadi el Arayesh, Fourzol, el Ain
Goat Milk Labneh with thym preserved in oil	600	400	4800	38400	Ayta el Foukhar, Khirbet Kanafar, Jdita
Distilled Orange Blossom water	500	2000	24000	192000	Ksaybeh, Bater, Deir Qanoun ras el Ain
Distilled Rose water	500	1500	18000	95940	Deir Qanoun ras el Ain, Bater, Ksaybeh
Pomegranate molasses	500	800	9600	102432	Wadi el Arayesh, Jdeydet el Qayteh, Rahbeh, Tekrit, Fneydek
Mulberry Syrup	500	300	3600	14400	Kartaba, Mayrouba, Beit Shlela
Rose Syrup	500	200	2400	7200	Beit Shlela, Bater, Kartaba
Apricot Syrup	500	300	3600	13212	Deir el Ahmar, Fourzol
Apple vinegar	500	2000	24000	55920	Mayrouba, Kfardebian
Grape vinegar	500	2000	24000	55920	Fourzol, Khelwat
Extra virgin olive oil	500	3500	42000	273000	
<b>Total</b>		<b>35,200</b>	<b>422,400</b>	<b>1,816,884</b>	

## FUTURE PLANS

Building on the successes of the SMART program, the future plans include the expansion of the production-base by adding new centers within new sectors of the agricultural sector to include olives. The olive industry within rural Lebanon will be tackled from capacity building of the farmers, crop management to table olives processing and oil production.

## IMPLICATIONS

Women, the world over, have a long way to go yet in terms of equality with their male counterparts. And Lebanon is no different. In the rural areas of Lebanon women are still mostly marginalized – their role relegated to that of nurturer whose primary responsibility is to support their spouse and raise their children. The SMART program succeeded in taking women out of the exclusive role of homemaker and into the role of wage earner – supportive of their partners still but with added skills and incentives for the entire family to support. The SMART program succeeded in lessening the gender gap for the benefit of all.



*Training women on grafting*

Providing secure, stable and sufficient incomes for women in rural Lebanon is vital in serving as a step toward broader economic and social justice.

## **LESSONS LEARNED:**

The lessons learned from the implementation of the YMCA SMART program fall within 6 main areas. In general terms, the lessons learned from the SMART program indicate that the program concept was on target and represented a viable means to address critical concerns for expanding economic opportunities in rural areas of Lebanon. The core components of the YMCA's grant application included the essential elements for a strong sustainable program. The areas of weakness of the program were seen in 4 basic areas.

**Time period of the grant:** The program is on a strong trajectory towards achieving substantive impact for the 37 cooperatives located throughout Lebanon. The cooperatives which were operational early on in the program, within the first year of its development, achieved higher impact indicators than the cooperatives which were established within the 2<sup>nd</sup> and 3<sup>rd</sup> years. The latter achieved more limited results by the end of the program due to their later start-time but with promising indicators nonetheless. All indications signal prospectively higher end results for the newer cooperatives, following in the footsteps of their predecessor cooperatives. There were no cases identified where the cooperatives that had begun operation early in the program failed to yield strong results. The length of the program has laid solid groundwork to fulfill the ambitious goals of linking rural women and their products to the global market. To date, their products are being sold in the local market, regionally, in the Gulf States and in both Europe and the USA.

**Maturation of cooperatives leadership and management capacity:** In a similar vein, the cooperatives required additional counsel and bookkeeping/management training and orientation to become fully functional and self-reliant. The YMCA investments in training and orientation of the cooperatives established a firm base for the cooperatives. And as with any start-up, these matters require additional time and experience in order to enable them to reach a new 'maturity' level to where they can overcome start-up and production/market entry barriers to become income generating businesses – achieving their projected targets for their members.

**Constraints to cooperative business growth from lack of access to credit:** The women's cooperatives' lack of opportunities for access to credit in their start-up phase meant that the cooperatives *re-invested a portion of their profits into their individual cooperatives* to sustain or develop the business rather than *disburse all their initial profits* to the members. Thus the actual levels of net income paid out to the women as profit was lower than might have been if they had access to credit from other sources. The issue of access to credit for working capital is a concern for the women's cooperatives since the viability of the business is dependent on that capital to be successful. Based on both the SMART and IRDP experiences, it was found that cooperatives tend to require anywhere from 1-3 years of development and growth through re-investment of returns before they are able to disburse all their profits to the members. Currently, however, women on average, make \$150.00 a month – a comfortable addition to any household in rural Lebanon.

**Strategies and support for marketing and sales of the products:** The program required further and/or targeted financial and technical resources to support and strengthen the marketing and sales cooperative's (Atayeb Al Rif) efforts and the cooperatives' credit activities. The YMCA invested the resources available to the program and leveraged important cooperation agreements to strengthen the marketing and sales component. The products required specialized 'niche' product marketing strategies and more intensive support in order to respond to the specific requirements of the US and European markets. Through application of intensive quality control and hygiene standards, the YMCA secured access to sales points locally, the Gulf States, Europe and the US, with FDA approval of the

products in the latter. As part of SMART's promotion and sales efforts, they set up booths at specialized foods sales fairs such as the Fancy Food Fair – the last of which took place in July, 2005 in the Jacob Javitz Center in NYC. Faced with the initial marketing and sales hurdles that confront any start-up, the SMART program's developers, by the end of the program, had put mechanisms into place to address those challenges. By the conclusion of the program period, the YMCA had successfully negotiated an exclusive distributor agreement with the Mediterranean Authentic Food Company (MAFCO). The agreement with MAFCO indicates that it will serve the commercial needs of the product-line. The production and all the details associated with production, e.g. quality control, order placement, etc., remains under the umbrella of the marketing and sales cooperative, Atayeb Al Rif. By the end of the life of the program, sales contracts in the amount of US\$5.7 million were signed with MAFCO for the three ensuing years while new, MAFCO led, contracts for Atayeb Al Rif products are being negotiated. The risks and constraints associated with business development and progress need to be taken into consideration during the implementation of this program. For instance, several political constraints that affected the economy at large in the region and country (such as war in Iraq which affected the exports to Saudi Arabia, and the tense situation in Lebanon which crippled the economy) need to be accounted for as uncontrollable factors affecting the output and outcome of Atayeb Al Rif.

### **Recommendations:**

**Development of a cooperative model for learning and application of best practices:** It is recommended, based on the experience of the SMART program, that the YMCA develop a sample growth model for cooperatives, based on the experience of a mature cooperative. This would accelerate the start-up phase of new cooperatives and provide benchmarks and realizable growth strategies for new cooperatives to model and measure their progress.

**Results Framework Modification:** The YMCA and USAID should develop more efficient and streamlined mechanisms to revise the results framework in response to changing contextual factors and program monitoring information. As demonstrated in the program report, the SMART implementation was at times adversely impacted by municipal elections and political disputes on the local level. On occasion, this could mean that the timeline would be altered for reasons beyond the control of the implementing organization and therefore, despite the best technical effort by the staff team to move the program forward, the results would be affected.

### **BEST PRACTICES DEMONSTRATED BY THE SMART PROGRAM:**

- Ongoing Monitoring and Evaluations (M&E) and continuous quality improvements lead to more effective program delivery and stronger outcomes, as demonstrated by the SMART training component.
- Practice-based learning and follow-up support strengthened the learning and capacity outcomes, as demonstrated by the technical production training curriculum.
- Mobilization of strategic partners from the business, academic, voluntary, and public sectors brought valuable and diverse technical expertise and support to the program.
- Engagement of municipalities as primary partners and stakeholders in the rural cooperatives strengthened the sustainability of the program. By engaging the community, securing their support and creating a sense of ownership, the SMART program assured community buy-in and access to further resources and support in the future.

- A highly trained, committed, and sizeable workforce along with well-equipped production centers producing premium products coupled with effective quality control mechanisms, all contributed to the program's success in engaging the private sector partner and investor company, MAFCO. The YMCA-brokered Atayeb Al Rif/MAFCO partnership leverages significant private sector resources (both technical and financial) which are expected to drive the growth of the rural cooperatives and Atayeb Al Rif following conclusion of the SMART program.
- Training and engaging high-performance cooperative members as technical production trainers provided role models for trainees, developed linkages and solidarity between cooperatives and women from different regions and communities, and directed additional program resources to beneficiaries (as income).
- Atayeb Al Rif's pre-purchase mechanism for raw materials is an innovative response strategy to an identified barrier. This mechanism is essential for cooperatives without working capital or access to credit.
- The program model and objectives – increasing income and employment opportunities for women in rural areas – was acceptable and attractive to socially conservative communities by addressing priority needs shared by the community as a whole. However, while addressing the economic development priorities of rural communities, the program was also able to affect significant social change in the beneficiaries' lives – such as increased mobility, decision-making and financial autonomy, social networking, ownership of assets, and self-confidence – which, if pursued under the rubric of a gender and development project, may not have been acceptable to many of the targeted communities.
- The program model is designed to be replicated and implemented not only in Lebanon but in many other countries in the Middle East. The first replica program was implemented in Yemen on a smaller scale. Some of the women cooperative owners from Lebanon's SMART program were asked to travel to Yemen to serve as trainers in the program there. In addition, the program has created a flurry of interest, prompting extensive media coverage – written, television and radio. Also, from USAID's extensive pool of funded programs world-wide, only three programs were selected for a USAID sponsored documentary film and the SMART program was one of the programs selected to be featured. Other endorsements of the SMART program include the following: The YMCA was asked to submit the SMART program as a case study for use by the College of Agricultural and Consumer Economics' - Division of Rural Development at the University of Illinois – Champaign. The YMCA was also invited to present to both academics and international development experts in Chicago in June 2005 at the *IAMA Forum* and at the *Regional Consultation on Linking Farmers to Markets* in Cairo at the end of January, 2006.

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<sup>1</sup> Ministry of Finance. (2002). *Details of the 2002 Budget*. (pp70.) Beirut: Lebanese Republic

<sup>2</sup> HACCP: Hazard Analysis and Critical Control Points

<sup>3</sup> Pretty, J. (1997), The Sustainable Intensification of Agriculture: Making the Most of the Land. In *The Land*, 1, 1, (pp 45-64)