
### PROGRESS REPORT

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| **Reporting UN Organization** | **:** | **United Nations Development Programme** |
| **Country** | **:** | **Lebanon** |
| **Project No.** | : |  |
| **Project Title** | : | Strengthening the dairy channel in North Lebanon |
| **LRF Signature date** | : | 17/03/2008 |
| **Project Start date**  | : | 17/04/2008 |
| **Project Timeframe** | : | 18 months |
| **Reporting Period** | **:** | April - June 2009 |

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| I. PURPOSE |

**Project Summary:**

The July war has resulted not only in major destruction of infrastructure and common services in the country but also led to huge losses particularly for the agricultural sector. Farmers were not able to harvest their produces due to the impossibility of harvesting as the war took place during the agricultural peak season, and the difficulty of marketing and selling fresh products. This has resulted in a decline in living conditions and loss of income and revenues for a significant group of the population in North Lebanon. It should be also noted that most of the population in North Lebanon relies on income from tourism related activities which were halted during the war and negatively affected afterwards. Consequently, without this income and also due to the regional disparities highly observable in North Lebanon, numerous families live under poverty line and have poor access to education and health services.

The project consists of 3 main components.

* Implementation of a set of training sessions on norms of housing in dairy farming, cows feeding, cows management and manipulation, cows reproduction, milk quality, etc
* Implementation of a set of training sessions on hygiene principles, production management, line of production per item, packaging, quality control, marketing
* Rehabilitation, upgrade and construction of 4 dairy units

The project targets breeders; small-scale SMEs, coops of breeders and municipalities which will directly benefit from the activities carried out under the project.

Indirect beneficiaries include families of the direct beneficiaries. Spillover effects will benefit the entire local communities since additional income will be spent locally.

The public at large will benefit from higher hygiene standards of both raw material and by-products.

**Project Objectives:**

By strengthening the integrated channel (breeding / dairy products) including downstream and upstream activities and targeting not only breeders but also small-scale industrialists involved in the processing phase who are participating in a capacity building program, the project is improving competitiveness and quality of local productions.

The Immediate Objectives achieved are:

* Strengthen the recovery process through the creation of a technical committee consisting of various partners (UNDP, LARI, coops, milk collect centers directors, etc) in charge of the technical monitoring
* Restore rural households’ income through a recovery program aiming at overcoming agriculture losses
* Revitalize the breeding sector by enhancing linkages between stakeholders
* Enhance small scale dairy units by increasing their capacity of production and improving the quality of their production in a safe and healthy environment

**Project Outcomes:**

Outputs can be summarized as follows:

Specific training program addressing breeders, and small-scale industrialists’ needs

Technical assistance , field survey

Dissemination of information

Construction, rehabilitation and upgrading of processing units

Local development capacity building program involving municipalities, coops and local associations

**Project Linkages to National Priorities and Reconstruction Goals:**

This program meets the priorities set by the government in a region where agriculture and agro food processing are major sectors, which could develop comparative advantages for some specific high quality produce and thus lead to economic development through job creation in SMEs. Agricultural regions such as the Akkar of North Lebanon are among the poorest region of Lebanon with high rates of illiteracy, especially among women, high rate of unemployment among youth under 25 and high percentage of households living under the poverty line.

This project is also linked to the Milk collect centers which were established by the Ministry of Agriculture and the IFAD. The three centers located in North Lebanon once they are working again will also contribute to the reinforcement of this channel.

Several development programs focus on forage production in the Akkar region. Indirectly, those programs will help improve the quality of the milk and reduce the costs of production of milk.

**Project Implementation Partners:**

International Partners : UNDP

National Partners : René Moawad Foundation (RMF)

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| II. RESOURCES |

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|  | ***As of December 31st, 2008*** | ***As of March 31st, 2009*** | ***As of June 30th, 2009*** |
| **Total budget approved** | $1,000,000.00 | $1,000,000.00 | $1,000,000.00 |
| **Disbursements**  | $0.00 | $286,015.58 | $286,015.58 |
| **Available Balance**  | $1,000,000.00 | $713,984.42 | $713,984.42 |
| **Commitments for next quarter** | ***USD 325,250.67*** |
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| **CATEGORY** | **TOTAL BUDGET (USD)** | **TOTAL EXP. TO DATE (USD)** | **TOTAL EXP. TO DATE (USD)** | **TOTAL EXP. TO DATE (USD)** |
| Personnel | 108,801.00 | 0.00 | 55,793.12 | 55,793.12 |
| Training  | 34,600.00 | 0.00 | 0.00 | 0.00 |
| Transport | 9,579.00 | 0.00 | 795.46 | 795.46 |
| Equipment | 776,800.00 | 0.00 | 208,954.20 | 208,954.20 |
| Miscellaneous | 4,800.00 | 0.00 | 1,761.50 | 1,761.50 |
| Agency Management Support (7%) | 65,420.00 | 0.00 | 18,711.30 | 18,711.30 |
| **Total** | **1,000,000.00** | **0.00** | **286,015.58** | **286,015.58** |

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| III. RESULTS |

**Project Outputs and Indicators:**

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| **Intended Outputs** | **Indicators** | **Timeframe**  |
| **2008** | **09** |
|  |  | Q1 | Q2 | Q3 | Q4 | Q1 |
| * 1. Identification and training of stakeholders
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| 2.1 Formation of a technical committee with enhanced capacities in local development | 1 Municipality7 cooperatives2 private companies (Fresco and Douroub)  |  |  |  |  |  |
| 3.1 Increase in milk quality and in quantity produced (higher yields) | 36 breeders from 6 different locations have been visited and trained on animal production in order to maintain high milk production. |  |  |  |  |  |
| 4.1 Development of linkages with regional activities and projects especially milk collect centers located in the North, dairy units upgraded | - Artificial insemination was done to 70 cow’s belonging to 12 farmers from 4 villages. This activity has many advantages in genetics, economics and sanitary level.The bull semen’s are selected according to production and functional characteristics. (program conducted by RMF to improve genetic characteristics of herds)- 110 farmers, 2 cooperatives and 2 companies benefited from milk collection and sales estimated about 418.017 tones for the three months (Dairy unit and collect truck provided by RMF to assist in increasing growers’ income by marketing their produces) in joint collaboration between Douroub and Fresco private company collecting and buying milk.- RMF created a network linking the productive cooperatives of forage in Akkar region with many farmers and cooperatives specialized in animal production. 16farmers from 11 villages benefited from forage sales (254.15 tones of green corn and 206.54 tones of packed corn) Noting that RMF created a forage facility in Tal Abbass for processing and packing of forage produces in sterile conditions  |  |  |  |  |  |
| 5.1 Upgrade and *mise-à-niveau* of dairy units and Increase in processing capacity | -Assessment needs for 8 dairy units in order to implement adequate training program for helping stakeholders in upgrading their processing units- During this period, civil construction work in the selected site in Mejdlaya-Zghorta is still ongoing in order to implement a new dairy pilot plant according to international safety and technological standards. |  |  |  |  |  |
| 5.2 Diversification of dairy products and reintroduction of traditional cheeses | Trials were done for the production of:- Akkawi Check- Braided Mozzarella. |  |  |  |  |  |
| 6.1 Increase in sales (milk or dairy products) | 110 breeders , 2 cooperatives and 2 companies who benefit from an increase in their income  |  |  |  |  |  |

**Progress in Project Implementation:**

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| **Project Outputs and Activities** | **Status** |
| 1.1.1 Implementation of a training program addressing specific needs of coops, associations and municipalities | Design of educational material, sessions’ outlines and training activities |
| 2.1.1 Establishment of the technical committee | Technical committee created consisting of: Apave, Dar Al Handassa, RMF, 7 cooperatives and 1 municipality (large number of meetings conducted) |
| 2.1.2 Provision of technical assistance | Field visits and needs assessments for 9 small scale dairy industries (1new) |
| 2.1.3 Monitoring of the program | - Creation of a Project Management Unit (PMU)The PMU is responsible of the management of the project; PMU meet on a bi-weekly basis or whenever deemed necessary by the PMU to discuss the development of the project preparation and implementation against the work plan.The PMU is responsible for the following tasks: planning all project activities; preparing/approving the tender documents for each activity; opening the offers; selecting/approving the selection of the best offer; monitoring the progress of activity implementation; approving payments; reporting any problems, concerns, pending issues, or anything else that needs continued follow-up; and coordinate between and among the project stakeholders and beneficiaries.- A list of indicators is established as means of verification of the project’s activities: i.e. attendance list shows the number of beneficiaries in training sessions, assessment reports are prepared following field visits, tables are made for sales activities… |
| 2.1.4 Evaluation and recommendations | Field survey report prepared by RMF staff.Dairy assessment report prepared by technical consultancy.Dairy plant (tender, design and specifications) prepared by Dar al-Handassa.Guidance document for the construction of a new dairy production plant prepared by APAVE Liban. |
| 3.1.1 Implementation of 52 intensive one-day session (cows housing, feeding, veterinary care, etc) | 11 intensive one- day sessions :Day 24: April 6, 2009 at Aydamoun - Akkar, entitled “Nutrition of new born calf” benefiting 15 farmersDay 25: April 14, 2009 at Halba, entitled “ General farm Management” benefiting 35 farmersDay 26: April 20, 2009 at Aydamoun village entitled “Quality of milk” benefiting 16 farmersDay 27: April 27, 2009 at Tal Abas village, entitled “Practical session on diet formulation” benefiting 8 farmersDay 28: May 4, 2009 at Tal Abas village, entitled “Inflammation of the udder” benefiting 9 farmersDay 29: May 11, 2009 at Tal Abas village Akkar, entitled “General farm management” benefiting 11 farmersDay 30: May 18, 2009 at Aydamoun village Akkar, entitled “Practical session on diet formulation ” benefiting 11 farmersDay 31: May 25, 2009 at Aydamoun village Akkar, entitled “Inflammation of the udder” benefiting 12 farmersDay 32: June 1, 2009 at Aydamoun village Akkar, entitled “ General farm Management” benefiting 10 farmersDay 33: June 15, 2009 at Denbo village Akkar, entitled “Practical session on diet formulation” benefiting 7 farmersDay 34: June 22, 2009 at Denbo village Akkar, entitled “ General farm Management” benefiting 9 farmers |
| 3.1.2 Technical assistance | * RMF staff conducted several visits benefiting 36 farmers in 6 villages

The hygiene of herds was the main topic discussed with farmers: ( Good animal health is essential for maximum production )The most animal diseases observed is the mastitis affecting the udder of the cattle.A dairy herd program was provided for the growers.* RMF staff supported 4 farmers from three different locations (Bazbina, Aïntourine, Zgharta, kferdlakos) by technical advices and recommendations for the establishment of a new dairy farm building.

Noting that a feasibility study was prepared for each one in order to profit from KAFALATE facilities.Farm construction ( Good construction = Healthy cattle) - Relation between building and hygiene.- Environmental factors and their effects on animal health.- Humidity and its impact on animal hygiene.- Air as a factor transporting diseases.- Ventilation- Availability of water* RMF assisted the cattle’s breeders’ cooperatives in creation of veterinary pharmacy.

The veterinary pharmacy provides the farmers with many technical advices and diagnosis on animal diseases (free of charge) and also proposes them the adequate medicament for the livestock (low price).28 farmers from 6villages have benefited from this facility.The most encountered animal diseases are:* Metabolic disorder.
* Inflammation.
* Lack of vitamins.
* Calcium deficiency.
* Parturition preventive.
* RMF ameliorated the genetic herd characteristics (milk and meat production) by providing artificial insemination (AI) practices.

70 cattle’s belonging to 12 farmers from 4 villages (Zgharta, Danieh , Chouaylit, Kousba) were inseminated with semen from three different bulls (Pride Ruger, Bosside Ronald and Kildare Menhat). Noting that the production ( milk, fat and protein) and functional characteristic ( persistency, calving ease and daughter fertility) of the three bull semen are taken in considerationThe advantages of artificial insemination are:- Rapid Amelioration of the herds genetic characteristics - Birth date control- Reduction of fertility problems- Certitude about the semen inseminated* RMF assured good quality of forage (603.48 tones) at low prices for 24 farmers from 16villages.
* 254.15 tones of Green corn at 43,427,100 L.L.
* 206.54 tones of packed corn at 47,392,575 L.L.
 |
| 3.1.3 Provision of storage facilities | * RMF installed 4 small tanks (1,000 liter / tank) in 4 villages to collect the milk produced in order to be transported to RMF Dairy unit for processing by the mean of the refrigerated tanker truck (capacity 4,000 liter) managed by Douroub Company.
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| 4.1.1 Organization of meetings with the various stakeholders | - Under the framework of Farmer-to Farmer program (FtF) implemented by ACDI VOCA a workday meeting was held in René Moawad Foundation between American expert Dr. David C. Slusser and 7 breeders (4 villages)Field surveys to 2 animal farms are done, noting that Dr. Slusser (Dairy herd management and nutrition Specialist) provided the growers involved with many recommendations relating to the nutrition of dairy herd.- Meetings have been conducted continuously with the concerned animal production cooperatives, small scale dairy units, RMF and the private sector (Douroub company), Tal Abass cooperative for forage production and Aidamoun cooperative for cattle’s raising.  |
| 4.1.2 Visits on sites for breeders (milk collect centers, coops specialized in forage production, lab and dairy units) |  |
| 5.1.1 Rehabilitation, construction, update and equipment of dairy units | Technical assistance and maintenance support were provided for the 7 small-scale dairy units and 2 cooperatives of animal production. This includes:Maintenance and reparation of equipments and materials: steam boilers, electricity installation and problems, pumps, vacuum machines…Production improvement: establishing a list of the numerous difficulties that the 8 dairy units ran into and trouble-shooting. Based on the “Guidance Document for the construction of a new Dairy production Plant” prepared by Apave and submitted to RMF for the implementation of the new Dairy production Unit in Mejdlaya within RMF campus, Civil construction works had started at the selected site under the supervision and recommendation of Dar al-Handassa and Apave consultancy.The steps accomplished till now:* Site preparation.
* Blinding concrete.
* Excavation.
* Backfill.
* Foundation
* Column Neck
* Tile-Bean
* Slab on grade
* Column
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| 5.1.2 Implementation of 112 intensive one-day sessions  | 40 intensive one-day sessions for 4 small-scale dairy industries and university students in dairy processing in RMF.Day 1: April 1st, 2009 at RMF-Mejdlaya, Training session entitled “Production of fermented milks: laban and labneh”.Beneficiaries: 2 participants from “Le Bon Lait” Cooperative.Day 2: April 3rd, 2009 at RMF-Mejdlaya,Training session entitled “Production of fermented milks: laban and labneh”.Beneficiaries: 2 participants from “Le Bon Lait” Cooperative.Day 3: April 6th, 2009 at RMF-Mejdlaya, Training session entitled “Production of fermented milk: Chanklich”.Beneficiaries: 2 participants from “Le Bon Lait” Cooperative.Day 4: April 8th, 2009 at RMF-Mejdlaya, Training session entitled “Production of fermented milk: Chanklich”.Beneficiaries: 2 participants from “Le Bon Lait” Cooperative.Day 5: April 9th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Baladi cheese and whey cheese”.Beneficiaries: 2 participants from “Le Bon Lait” Cooperative.Day 6: April 14th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Baladi cheese and whey cheese”.Beneficiaries: 2 participants from “Le Bon Lait” Cooperative.Day 7: April 15th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Akkawi and Halloum cheeses”.Beneficiaries: 2 participants from “Le Bon Lait” Cooperative.Day 8: April 16th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Akkawi and Halloum cheeses”.Beneficiaries: 2 participants from “Le Bon Lait” Cooperative.Day 9: April 21st, 2009 at RMF-Mejdlaya, Training session entitled “Quality control of dairy products”.Beneficiaries: 2 participants (university students).Day 10: April 24th, 2009 at RMF-Mejdlaya, Training session entitled “Quality control of dairy products”.Beneficiaries: 2 participants (university students).Day 11: April 27th, 2009 at RMF-Mejdlaya, Training session entitled “Quality control of dairy products”.Beneficiaries: 2 participants (university students).Day 12: April 29th, 2009 at RMF-Mejdlaya, Training session entitled “Quality control of dairy products”.Beneficiaries: 2 participants (university students).Day 13: May 1st, 2009 at RMF-Mejdlaya, Training session entitled “Production of Baladi cheese and whey cheese”.Beneficiaries: 2 participants from Marj Dairy Unit.Day 14: May 4th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Baladi cheese and whey cheese”.Beneficiaries: 2 participants from Marj Dairy Unit.Day 15: May 6th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Baladi cheese and whey cheese”.Beneficiaries: 2 participants from Marj Dairy Unit.Day 16: May 8th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Baladi cheese and whey cheese”.Beneficiaries: 2 participants from Marj Dairy Unit.Day 17: May 11th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Baladi cheese and whey cheese”.Beneficiaries: 2 participants from Marj Dairy Unit.Day 18: May 13th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Akkawi and Halloum cheeses”.Beneficiaries: 2 participants from Marj Dairy Unit.Day 19: May 15th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Akkawi and Halloum cheeses”.Beneficiaries: 2 participants from Marj Dairy Unit.Day 20: May 18th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Akkawi and Halloum cheeses”.Beneficiaries: 2 participants from Marj Dairy Unit.Day 21: May 20th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Akkawi and Halloum cheeses”.Beneficiaries: 2 participants from Marj Dairy Unit.Day 22: May 22nd, 2009 at RMF-Mejdlaya, Training session entitled “Production of Akkawi and Halloum cheeses”.Beneficiaries: 2 participants from Marj Dairy Unit.Day 23: May 25th, 2009 at RMF-Mejdlaya, Conferences entitled “Food safety hazards in the dairy industry”, “Maintenance of dairy equipments and materials” and “Principles of sanitation”.Beneficiaries: 6 participants.Day 24: May 27th, 2009 at RMF-Mejdlaya, Conferences entitled “Food safety hazards in the dairy industry”, “Maintenance of dairy equipments and materials” and “Principles of sanitation”.Beneficiaries: 6 participants.Day 25: May 29th, 2009 at RMF-Mejdlaya, Conferences entitled “Food safety hazards in the dairy industry”, “Maintenance of dairy equipments and materials” and “Principles of sanitation”.Beneficiaries: 7 participants.Day 26: June 1st, 2009 at RMF-Mejdlaya, Training session entitled “Production of fermented milks: laban and labneh”.Beneficiaries: 2 participants (university students).Day 27: June 3rd, 2009 at RMF-Mejdlaya, Training session entitled “Production of fermented milk: Chanklich”.Beneficiaries: 2 participants (university students).Day 28: June 5th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Baladi cheese and whey cheese”.Beneficiaries: 2 participants (university students).Day 29: June 9th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Akkawi and Halloum cheeses”.Beneficiaries: 2 participants (university students).Day 30: June 10th, 2009 at RMF-Mejdlaya, Training session entitled “Quality control of dairy products”.Beneficiaries: 2 participants (university students).Day 31: June 11th, 2009 at RMF-Mejdlaya, Training session entitled “Production of fermented milks: laban and labneh”.Beneficiaries: 2 participants from North Dairy Industry.Day 32: June 15th, 2009 at RMF-Mejdlaya, Training session entitled “Production of fermented milk: Chanklich”.Beneficiaries: 2 participants from North Dairy Industry.Day 33: June 17th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Baladi cheese and whey cheese”.Beneficiaries: 2 participants from North Dairy Industry.Day 34: June 19th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Akkawi and Halloum cheeses”.Beneficiaries: 2 participants from North Dairy Industry.Day 35: June 22nd, 2009 at RMF-Mejdlaya, Training session entitled “Quality control of dairy products”.Beneficiaries: 2 participants from North Dairy Industry.Day 36: June 24th, 2009 at RMF-Mejdlaya, Training session entitled “Production of fermented milks: laban and labneh”.Beneficiaries: 2 participants from El-Delbeh Dairy Unit.Day 37: June 25th, 2009 at RMF-Mejdlaya, Training session entitled “Production of fermented milk: Chanklich”.Beneficiaries: 2 participants from El-Delbeh Dairy Unit.Day 38: June 26th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Baladi cheese and whey cheese”.Beneficiaries: 2 participants from El-Delbeh Dairy Unit.Day 39: June 29th, 2009 at RMF-Mejdlaya, Training session entitled “Production of Akkawi and Halloum cheeses”.Beneficiaries: 2 participants from El-Delbeh Dairy Unit.Day 40: June 30th, 2009 at RMF-Mejdlaya, Training session entitled “Quality control of dairy products”.Beneficiaries: 2 participants from El-Delbeh Dairy Unit.*Notice:* Beneficiaries of the training courses were divided in groups of 6-7 persons for the conferences and 2 persons for the technical training.  |
| 5.1.3 Technical assistance  | Assessment of Coops and small-scale dairy industries needs was achieved in 9 villages in Akkar and Zghorta regions: Tikrit, Aabdeh, Kobayet, Tal Abbas, Kweichra, Meryata, Akkar El-Aatika and Mejdlaya, Deir Imar.Assessment reports of the fact-finding investigation were prepared. They include the following information:- General description of the dairy unit which include: location and size of the unit, hygiene of surrounding area, divisions, infrastructure and utilities, offices and vehicles.- Number of operators and their educational and technical qualifications.- List of products and accessed markets. - Technical evaluation of the dairy unit including the list of processing and laboratory equipments. |
| 5.2.2 R & D to develop new products | Trials were done for the production of:- Akkawi Check. - Braided Mozzarella.Analysis of dairy products:- Preliminary analysis on raw milk: alcohol test, clot-on boiling test.- Physicochemical analyses of raw milk and dairy products: titratable acidity, fat, protein, humidity.- Microbiological analyses: determination of coliforms, staphylococci, salmonella, yeasts and moulds. |
| 5.2.3 Collect of old recipes, design of HACCP processes for these old cheeses and processing  | Feasibility and technical study of the implantation of an integrated risk and quality management system (HACCP) on the production line of laban product.Demonstration were done concerning:* How applying simple quality control techniques may minimize the losses that occur during the processing and assure better quality and longer shelf-life.
* How dairy processors might proceed to provide products with traditional sensorial bu uising selected industrial cultures.
* How starter cultures affect yogurt quality in terms of firmness, acidity and flavor
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**Implementation Constraints and Lessons Learned:**

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| * **Processors from different small-scale dairy industries declared that they now:**
* **Have better understanding of the production process.**
* **Know the origin of problems causing losses and poor quality of dairy products.**
* **Have the ability to choose by themselves the starter cultures for fermented milks.**
* **Use some basic dairy laboratory instruments.**
* **Some university students were interested to join the training sessions as beneficiaries in order to apply their scientific knowledge and to have a practical experience in the dairy sector.**
* **The forage ratio suggested by RMF team increased the quantity and the quality of the milk production and consequently decreased the cost of production.**
* **The use of three different bulls’ semen in the artificial insemination will allow comparison and identification of the most suitable in term of Production and functional criteria.**
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| IV. FUTURE WORK PLAN |

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|  | **2008 -2009** |
| **ACTIVITIES** | **A** | **J** | **O** | **J** | **A** | **J** |
| Implementation of a training program addressing specific needs of coops, associations and municipalities |   |   |   |   |   |   |
| Establishment of the technical committee |   |   |   |   |   |   |
| Provision of technical assistance |   |   |   |   |   |   |
| Monitoring of the program |   |   |   |   |   |   |
| Evaluation and recommendations |   |   |   |   |   |   |
| Implementation of 52 intensive one-day session (cows housing, feeding, veterinary care, etc) |   |   |   |   |   |   |
| Technical assistance |   |   |   |   |   |   |
| Provision of storage facilities |   |   |   |   |   |   |
| Organization of meetings with the various stakeholders |   |   |   |   |   |   |
| Visits on sites for breeders (milk collect centers, coops specialized in forage production, lab and dairy units) |   |   |   |   |   |   |
| Rehabilitation, construction, update and equipment of dairy units |   |   |   |   |   |   |
| Implementation of 112 intensive one-day sessions |   |   |   |   |   |   |
| Technical assistance |   |   |   |   |   |   |
| R & D to develop new products |   |   |   |   |   |   |
| Collect of old recipes, design of HACCP processes for these old cheeses and processing |   |   |   |   |   |   |

**Adjustments to strategies, outcomes or outputs:**

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| * **The information gleaned during the assessment of dairy industries was applied as a roadmap for project implementation and selection of priority training subjects.**
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