

## **Recovery and Rehabilitation of Dairy Sector in Bekâa Valley and Hermel-Akkar Uplands**

### **Rationale/Objectives:**

The 2006 hostilities which took place in south Lebanon, coupled with the soaring price of animal feed and inexistence of milk collection facilities and dairy producer organizations has seriously weakened the productive capacity of dairy smallholders in the Bekâa Valley. This region of Lebanon is considered to be the dairy basin, providing the main local dairy supply for the country. The number of dairy cows in the Bekâa Valley has decreased dramatically following the high death toll of livestock during the 2006 war and its aftermath and the continuously increasing number of dairy farms shutting down. According to the Ministry of Agriculture (MOA) regional services, the total number of dairy cows has dropped from 25,000 heads to 15,000 to 18,000 heads in the Bekâa Valley region. This drastic decrease will have a serious negative impact on the country's national production of dairy products and will consequently increase their reliance on dairy imports, worsening the balance of payment of the country, which is already heavily indebted. The dairy industry sector in Bekâa Valley requires special consideration if the industry is to develop and be sustainable.

In the Hermel-Akkar Uplands, villagers from the lower valley bring their animals for grazing to the uplands, rising over 1,800 metres, during the spring-summer transhumance season. These farmers are from the most remote, desolate and resource-poor areas of Lebanon and have a higher level of socio-economic deprivation and despair in the country. The last conflict, together with the meager resources and low-level skills, experience and unhygienic practices has led to a decrease or loss of income from goat and sheep milk and an increase in rural exodus. To secure their survival in an increasingly difficult and harsh environment, the local population is now returning to illicit income-generating activities after several years of eradication. The Hermel Uplands is a major area with a thriving cultivation of illicit crops, causing growing concern to the Government of Lebanon.

Therefore, interventions that could create alternative income opportunities and reduce the dependence on illicit crops are urgently required to provide assistance to vulnerable smallholders in Hermel-Akkar Uplands. Improvement of small ruminants, mainly goats which graze in the agro-ecological zones of those highlands, is the most appropriate opportunity for sustainable productive income-generating activity both in terms of the marketplace and of natural resources.

### **Project Approach:**

The aim of this project is to enable the recovery/rehabilitation and assistance to the lives and livelihoods of 600 vulnerable livestock keepers (of which one-third are female-headed households) in the Bekâa Valley and Hermel-Akkar Highlands, who suffered direct or indirect physical damage and losses related to war-conflict and currently are threatened by the recent soaring food prices and high cost of production.

The project interventions are focused particularly on strengthening the capacity of milk production while securing the dairy sub-sector and creating for resource poor farmers productive income-generating activities as an alternation to the production of illicit crops. Activities include the distribution of dairy cattle, shamee goats, beehives, rehabilitation of the dairy industry and veterinary service, related animal production inputs and training to strengthen capacity in improved animal production, hygienic dairy production while sustaining the dairy sector through the introduction of forage crops to secure animal feeding.

### **Activities/Components:**

- 500 resource-poor families, from war-affected Bekâa Valley, including 100 women-headed households, will receive partial restocking with cows (1 imported pregnant dairy heifer / household);

- 100 families, including 50 resource-poor women-headed households, will receive 3 shame bucks / household to upgrade their local female flock; among them 50 leading households will receive small stock (economically viable unit) of 10 Cyprus shamee pregnant goats;
- 50 families, including 25 resource-poor women-headed households, will receive 10 honey beehives with small equipment / household;
- Six dairy communities in six sites will be established and organized with introduction of a portfolio of activities covering the whole dairy production chain through complementary interventions;
- Four milk collection centres are rehabilitated to secure dairy smallholders in milk collection and marketing in Bekâa Valley: Rashaya, Bar Elias, Bâalback and Hermel;
- Two small-scale processing plants established in Gazza (West Bekâa) and Hermel-Akkar Highlands, to support poor dairy cattle and goat farmers in collection, processing and marketing of dairy products;
- All project beneficiaries (600 dairy smallholders) will be supported through distribution of dairy equipment to improve standard of milk production, collection and cooling systems: 1200 almasilium milking cans; 50 milking machines, 100 milk tanks, including 100 units of small equipment for milk handling, hygiene and basic milk processing for 100 leading women-headed households;
- The milk collection centres and dairy small-scale processing plants will be supported by: five milk transportation vehicles (capacity five tonnes), six milk scan machines for milk analysis and control at the milk collection centre, one single cabin 4WD, 1 tonne pickup for milk collection, one frigorific van for transport and marketing of dairy products (cap. 1t);
- The project will distribute 1100 tonnes of feeds and roughage to all project beneficiaries (600 restocked with dairy heifers and shame goat);
- All project beneficiaries will be supported to secure animal feeding with introduction of forage crops. The project is supporting 600 farmers with the following forage seeds: 105 tonnes of oat seeds; 104 tonnes of vetch seeds, 100 tonnes of barley seeds; 12 tonnes of sorghum seeds; 5 tonnes of alfalfa seeds, 5 tonnes of Berseem seeds and 31 tonnes of corn and 1 ton of various species of perennial grasses and legumes;
- Animal health in Bekâa Valley will benefit from rehabilitation of MOA veterinary service in Bâalback through setting up a functioning laboratory with equipment and supplies to cope with animal diseases and vaccination in project areas;
- At least 1000 farmers (600 direct beneficiaries and 400 farmers indirectly), will profit from the AI services and veterinary interventions through the receipt of drugs and vaccinations.

All project beneficiaries will be strengthened through comprehensive training programme covering the whole interventions related to dairy production-processing-marketing, also at least 400 farmers will benefit indirectly from the project through training sessions and production of extension materials (manuals, leaflets & posters).

#### **Outputs and Results:**

By the end of the project, participating farmers will return to some form of normalcy in their lives and even be in a better position to independently improve their income and employment opportunities. The immediate and subsequent outputs of the project are as follows:

- Improved dairy production, covering the whole dairy production chain through complementary interventions: restocking, inputs and training, with good opportunities for gainful employment and decrease in the need for internal/external migration, mainly for the youth;
- increased milk production in the Country with decreased reliance on imports as well as improved standards of food safety through the availability of better milk quality using appropriate cooling system and milk handling;
- Establishment of six active dairy communities will be in a position to independently follow up a core group of 600 trained smallholder dairy farmers, able to provide dairy industry leadership and share their expertise with other farmers;

- Benefits to the dairy sub-sector through improved farm management skills acquired through a comprehensive training programme for 1000 farmers (600 beneficiaries & 400 indirect) with increased Government and NGO's capacity to support small farmers;
- Improve of food security by increasing the efficiency of the dairy component and improved nutritional status of low income rural households (particularly women of childbearing age and children) as a result of increased incomes and consumption of animal products;
- Improved dairy breeding stock as a result of an extensive artificial breeding programme and introduction of 800 shabee goats;
- A core group of 125 active women headed-families empowered in Bekâa Valley and hermel-Akkar Highlands, to efficiently manage dairy cattle and goats for income generation with increasingly more active role to ensure family survival;
- Improved of livestock health and veterinary services through provision of vaccines, drugs and rehabilitation of MOA veterinary laboratory in Bâalback.