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**Document of the
International Fund for Agricultural Development**

**The Republic of Lebanon
Smallholder Livestock Rehabilitation Project
Completion Evaluation**

**October 2004
Report No. 1560-LB**

Photo on cover page:

The Republic of Lebanon
Employees wash sheep at the Breeding Station in Turbol. The IFAD-funded station is studying which
breeds of goats and sheep are most suitable for the Bekaa Valley.

IFAD Photo by Jon Spaul

The Republic of Lebanon
Smallholder Livestock Rehabilitation Project, Loan no. 305-LB
Completion Evaluation

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*All Annexes are available from IFAD's Office of Evaluation – Tel: +39 06 5459 2048 or email: evaluation@ifad.org

Exchange Rate

(September 2004)

Local Currency	=	Lebanese Pound (LBP)
USD 1,00	=	1 517 LBP
1,00 LBP	=	0,00065 USD

Abbreviations and Acronyms

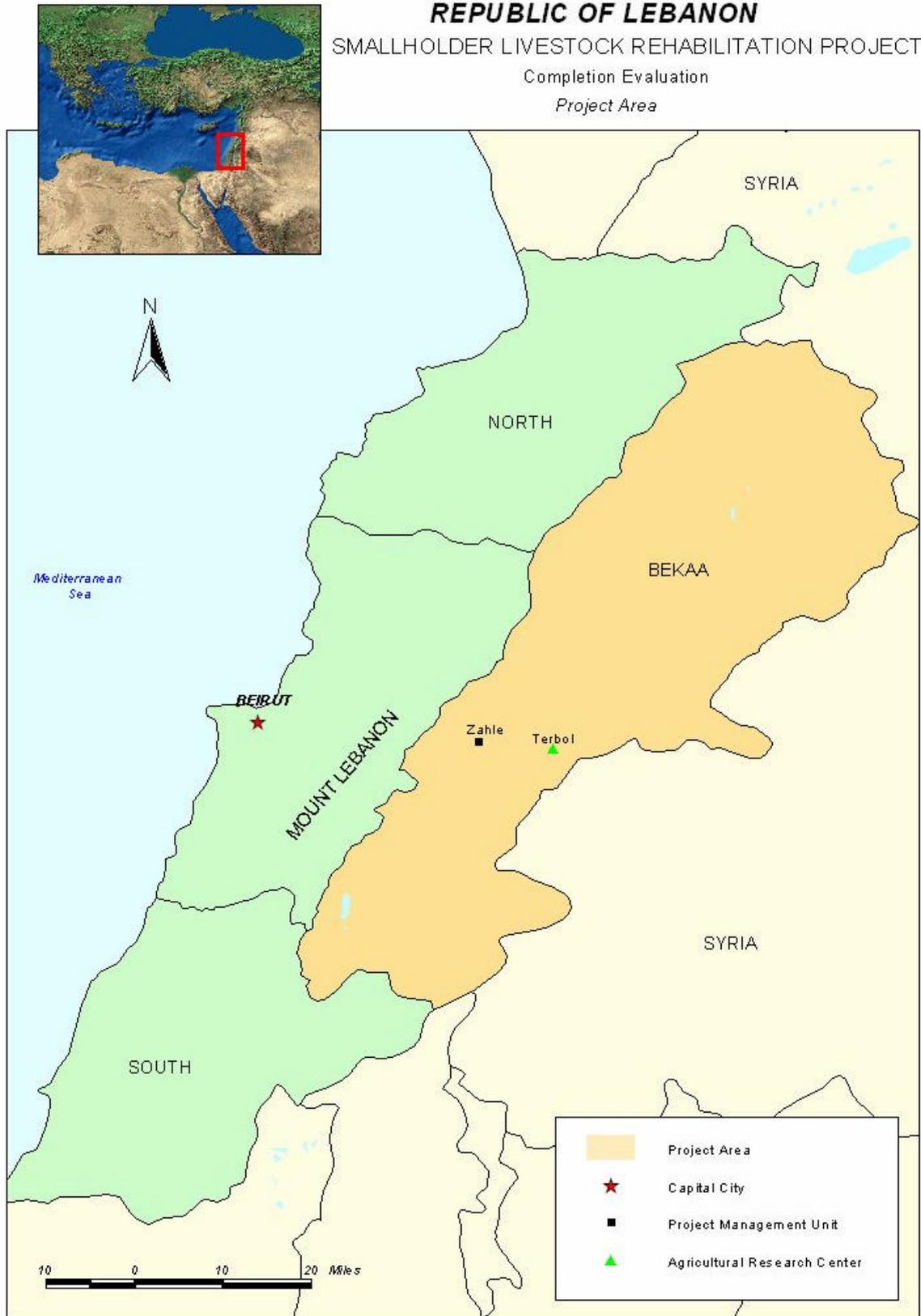
ACSAD	Arab Centre for Studies of Arid Zones and Dry Lands
AFESD	Arab Fund for Economic and Social Development
AI	Artificial Insemination
AUB	American University of Beirut
AWPB	Annual Work Programme and Budget
BSE	Bovine Spongiform Encephalomalacia
CDR	Council for Reconstruction and Development
COSOP	Country Strategic Opportunities Paper
CRFP	Cooperative Rural Finance Programme
CRTD	Centre for Research, Training and Development
CTA	Chief Technical Adviser
EO	Extension Officer
ERR	Economic Rate of Return
GNP	Gross National Product
GRL	Government of the Republic of Lebanon
GTZ	German Agency for Technical Cooperation
HRD	Human Resources Development
ICARDA	International Centre for Agricultural Research in Dry Areas
IGA	Income Generating Activities
LARI	Lebanese Agricultural Research Institute
MCC	Milk Collection Centre
M&E	Monitoring and Evaluation
MOA	Ministry of Agriculture
MTR	Mid-term Review
NGO	Non-Governmental Organisation
NUCC	National Union for Cooperative Credit
OPA	Office of Animal Production
PCC	Project Coordinating Committee
PCR	Project Completion Report
PMU	Project Management Unit
RW	Rural Women
RWP	Rural Women Programme
RWU	Rural Women Unit
TA	Technical Assistance

REPUBLIC OF LEBANON

SMALLHOLDER LIVESTOCK REHABILITATION PROJECT

Completion Evaluation

Project Area



Source: IFAD

The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

The Republic of Lebanon
Smallholder Livestock Rehabilitation Project
Completion Evaluation

Agreement at Completion Point¹

1. The Core Learning Partnership

1. IFAD's Evaluation Policy² defines the objectives of the Agreement at Completion Point (ACP) as... "(i) to clarify and deepen the understanding of evaluation recommendations, document those that are found acceptable and feasible and those that are not; and (ii) flag evaluation insights and learning hypotheses for further future discussion." The role of the Office of Evaluation is to facilitate this process, within the Core Learning Partnership (CLP), leading to the conclusion of such an agreement. Because the Smallholder Livestock Rehabilitation Project (SLRP) has closed, the ACP is concerned to identify lessons from the implementation experience which are either applicable to other ongoing projects in Lebanon or elsewhere in the region and to country strategies and programmes. Members of the CLP include representatives from the Ministry of Agriculture, project and IFAD staff, representatives from AFESD and OPEC.

2. The Main Evaluation Findings³

➤ **Performance of the Project**

2. Relevance. Overall, the evaluation found that project objectives were relevant to the Government's development policy and smallholders needs at design, and many remain still relevant at the time of evaluation. However, the relevance of some objectives has declined over time. The project objective of restoring livestock support services was found to be very valid at design and remains valid at the time of evaluation. The objective of establishing an institutionalised credit mechanism for small and poor rural households remains relevant. A number of factors contributed to the decrease in relevance of the objective of replenishing the livestock resources of the Bekaa with respect to the intended target group. These include the slow start to the project, the late arrival and distribution of animals, and the cancellation of the small ruminants programme. Institutional strengthening for the Ministry of Agriculture (MOA) was identified in the design as a vital objective for implementation, on the basis that services had been greatly disrupted by the civil war. This has now been achieved and continued support for this objective is no longer necessary.

3. Effectiveness. Effectiveness is assessed as the extent to which the objectives of the project have been achieved. Despite the limited percentage of women oriented activities in project cost the evaluation found that the project had been particularly effective in enhancing the livelihoods of women beneficiaries, directly by improving incomes and upgrading skills and indirectly in terms of gender equity and empowerment. The project has also been effective in improving access to

¹ This agreement reflects an understanding among the key partners to adopt and implement recommendations stemming from the evaluation. The agreement was formulated among the following: Mr L. Lahoud, Director General, Ministry of Agriculture (MOA); Dr Mohamad Farran, Advisor to the Minister, MOA; Dr Joseph Tarabieh, Director of Cooperatives Department, MOA; Mr Ali Raad Abdullah, Project Director SLRP; Ms Neila Choueri, Women Programme; Mr Darwish Nouredine, Head of M&E, SLRP; Dr Mona Bishay, Deputy Director, IFAD's Office of Evaluation, in charge of the evaluation; Mr A. Abdouli, Country Programme Manager for Lebanon. OE facilitated the process.

² As approved by the Executive Board, April 2003. Quote from paragraph 46.

³ The evaluation methodology followed uses three composite evaluation criteria: project performance (composed of relevance, effectiveness and efficiency) rural poverty impact (composed of six impact domains, sustainability, innovations and gender equality) and performance of partners (including IFAD, implementing agencies, and the cooperating institution). The ratings used to assess performance using these criteria are high (4), substantial (3), modest (2) and negligible (1). For the sustainability criterion the rating used is highly likely (4), likely (3), unlikely (2) and highly unlikely (1).

information and knowledge for all project beneficiaries, and has partially fostered the development of institutions for the rural poor through the formation of cooperatives for rural women, which are accessible to men as well. However, the cancellation of the small ruminant activities, as well as uncertainty about the extent to which some project benefits have reached the target group has meant that the restocking objectives, as foreseen at design, have not been achieved to a significant extent, despite being a major project focus.

4. Efficiency. Overall, it was concluded that the incremental benefits for the dairy industry in the Bekaa from the introduction of the dairy herd under SLRP were likely to be commensurate to the costs incurred by the project in providing these benefits. However, evidence suggests that the introduced technology had not been appropriate for many of the small-scale farmers who were the initial target group of the project, rather it had been appropriate to large scale, high productivity farmers.

➤ **Impact of the Project on Rural Poverty**

5. The evaluation concluded that the project had resulted in substantial impacts on the Physical and Financial Assets for successful medium-scale dairy farmers, and for most of the rural women who had taken loans. However, for the smaller and/or poorer farmers, who generally considered that dairying was high risk, the evaluation could not establish any impact or reduction in vulnerability. The evaluation found that the project had provided a significant amount of training for all beneficiaries, and that this had had a useful effect in terms of increasing levels of knowledge and skills, leading to the possibility of improving living standards in the longer term. It was further concluded that the project had somewhat improved household food security in the project area, either through milk produced being kept for home consumption, or by generating additional income. The Institutional Strengthening provided for the MOA had also significantly enhanced the capabilities of Ministry staff.

6. The evaluation found two contrary experiences in Social Capital development in SLRP. Through the Rural Women's Programme over a thousand women have become members of women's cooperatives and have described improvements in their social standing and empowerment: this is considered a major impact of SLRP. The successful experience of the formation of the first women's cooperatives in the Bekaa has also demonstrated the usefulness of cooperatives as self-help organisations. In contrast, small dairy farmers did not experience any substantial strengthening in their local level institutions and empowerment, rather they realised their weakness in the face of milk collection cooperatives which they were unable to influence. In assessing impacts on social capital, it must be remembered that these were not specific objectives of the project design, rather unintended results.

7. Sustainability. The circumstances of small dairy producers have changed since appraisal and these enterprises may now be marginal or unprofitable at the current cost of concentrates and milk prices. The evaluation considered that the present arrangements for the Milk Collection Centres (MCCs) are unsustainable. Some of the livestock support services which can be offered through the private sector are likely to prove sustainable providing they are not undercut by competition with government. Although the evaluation concluded that many of the Income Generating Activities (IGAs) financed are likely to be sustainable, there is a need to enhance the overall sustainability of benefits through the establishment of an autonomous self-reliant mechanism that can perpetuate the provision of rural financial services to the poor in the Bekaa. The substantial entrepreneurial and social development benefits received by rural women through Rural Women Programme (RWP) are likely to be sustainable.

8. Gender. Women's social status has effectively been enhanced as a result of the success of the Rural Women (RW) cooperatives. More women are now able to work outside their homes, they became active members of cooperatives, have demonstrated their self-reliance, and as income earners, their decision-making role in the household has been strengthened.

9. Innovation. The model of women's self help cooperatives developed by the Rural Women Unit (RWU) was very innovative, and is probably replicable in other parts of Lebanon. There is some evidence that the YMCA may have already replicated this model elsewhere. The project introduced AI to the Bekaaa, which can also be regarded as a contextual innovation to improve genetic potential. Potential for replication and scaling up exists particularly if it is provided by competent and adequately motivated operators. This service can be sustained through the private sector. The evaluation found, however, that Artificial Insemination (AI) could not substitute for bulls in the more remote rural areas, as intended.

➤ **Performance of the Partners**

10. IFAD, the Cooperating Institution (CI) and the Co-financier. Overall, the evaluation concluded that IFAD and the CI have performed reasonably well in facilitating a design that was appropriate to the circumstances at the time, but had performed modestly in providing guidance to the project in making strategic decisions during implementation. Project staff reported favourably on support received from the CI, whose reports have mostly indicated a very satisfactory implementation situation. However, the evaluation concluded that this was overly optimistic with respect to assessments of development impacts, expected benefits and beneficiary participation. The OPEC fund co-financed the livestock credit activities; project sources reported that OPEC had been an active partner in the project. The OPEC Fund as well IFAD and the CIs had been flexible in allowing re-allocation of project funds among various activities.

11. Government and its Agencies (including project management). MOA facilitated the granting of autonomy to the Project Management Unit (PMU) and has supported the project with seconded staff and counterpart funds. However, delays in procuring the animals have reduced the relevance of the intervention for the small holders in the critical post conflict situation, as well as impact on rural poverty. Although research programmes were started at the Lebanese Agricultural Research Institute (LARI), and considerable investment in reconstruction took place, the programmes were only continued as long as SLRP provided the funding. As soon as they became the responsibility of LARI, they were stopped. For most of the project life the project management has effectively pursued implementation in a dynamic and technically competent fashion, and has successfully implemented the training activities for staff and beneficiaries and the programme for rural women. However, the evaluation was concerned at some of the decisions reached during implementation, particularly those concerning aspects of project design. These have affected the direction and sustainability of the project, the extent of outreach to the target groups and the impacts achieved for poorer beneficiaries.

3. Evaluation Insights

➤ **Creating Social Cohesion**

12. The women's cooperatives, formed as a means of bringing women together for their mutual financial advantage, have led to the identification of common concerns and interests, thus diffusing socio-economic barriers and building social capital. Given the difficulties created by 17 years of civil war, the promotion of social cohesion is considered very relevant, and is a major, positive effect of project activities. The social benefits have been derived through the development of the collective work, equal partnership and joint risk taking; these have drawn the group members together, facilitating the exchange of old allegiances with new. The formation of these women cooperatives has demonstrated a mechanism for realising social and economic development in poor rural villages. This was not the case for milk collection cooperatives.

➤ **Cooperatives as Development Partners**

13. There have been two opposite experiences in SLRP with cooperatives. On the one hand the success of the women's cooperatives has illustrated just how useful and beneficial properly constituted and run cooperatives can be in the development effort, whilst the experience with the cooperatives for

milk collection, which had mostly withdrawn their services at the time of the evaluation, has illustrated some of the difficulties. The difference relates to the ways the cooperatives were selected and constituted, and illustrates the importance not to assume that all cooperatives will be effective development partners. In the case of the women's cooperatives the groundwork for the formation of women's groups was carefully laid and was based on the success of the individual credit loans. The formation of cooperatives was then just a further but logical step to protect and enhance the gains made. The members knew they were coming together for a common purpose. By comparison, for milk cooperatives the evaluation found that there were often very general aims for cooperation, little cohesion in the membership, little clarity on potential for achieving mutual benefits and little training to this effect. Hence, the careful selection and contribution of cooperatives is a vital issue for development interventions.

➤ **Planning a Role for the Private Sector**

14. The project successfully contributed to the development of livestock support services, which have led to the rapid development of the dairy industry throughout the Valley. The evaluation concluded that the combination of the improved veterinary, vaccination, AI and fodder services and demonstrations had played an important role overall and touched on the activities of many farmers. Limited outreach has been partly caused by the lack of a communications component in the project. However, with limited funding available to the MOA, an important element in the continuing support of the livestock sector is the encouragement of private operators to take an increasing role. Whilst the project may have stimulated private sector services for livestock support, at the moment these services have to compete with subsidised government services. Although the government may wish to protect small scale operators from potential over charging of services, the evaluation concluded that there are at present mixed messages in the industry which are leading to uncertainty and hindering development of private sector services. The lesson to be taken from this experience for future projects is the need to plan an exit strategy for government agencies after services have been developed, to encourage a larger role for the private sector and enhance sustainability.

4. Recommendations Agreed Upon by Partners

I. Cooperatives. In assessing the experience with cooperatives, the evaluation concluded that there were specific lessons which could be generally applicable to future interventions. Hence the agreed recommendations given below should be used as a basis in future project design and implementation in similar situations in the Neat East and North Africa (NENA) region:

- Where cooperatives are to be utilised in future IFAD-supported projects, great care needs to be exercised in their selection, effective management, and equity in the distribution of benefits to their members. When cooperatives are required to provide specific services, for example milk collection, they should be established for this purpose only, and their charters should fully reflect the interests of their members, most of whom should be small milk producers. Membership also needs to be based on contributory shares, so that each member has a financial interest in the cooperatives' success. In addition, such cooperatives need to have sufficient working capital so as to pay their producers on time, and they need exclusive collection areas, allocated on the basis of milk production density. The starting point to address the problem of marketing for small-scale milk producers is to promote the establishment of reliable milk collection cooperatives: only then may MCCs have a role.
- Whilst the women's self-help cooperatives have demonstrated their ability to promote development activities and gender equality, they are still in the early stages of their development and require longer term assistance to ensure they can "graduate" to being fully independent. Lessons from this successful experience should be replicated where appropriate in the NENA region, and incorporated in respective IFAD country strategies.

II. Private Sector Initiatives. With limited funding available to the MOA, an important element in the development of the livestock sector is the encouragement of private operators to take an increasing role. This is an important plank of the Government of the Republic of Lebanon (GRL) policy and in other countries in the region. Following project closure, the delivery of AI services has been adopted and is being continued by veterinarians and technicians working in the private sector. Vaccination and animal health services are similarly available, but in both cases have to compete with subsidised government services. The agreed lessons learnt from this experience are:

- If the government wishes to encourage private sector activities in the provision of AI, then it needs to limit its role to regulating the service and ensuring that technicians are properly trained and work to industry standards. Equally, for vaccinations, Government should regulate and control vaccine quality and type, and identify and restrict itself to supplying only public-good vaccinations.
- More generally, where project designs establish or expand Government services, exit strategies need to be considered to ensure that these services will not result in ongoing financial burdens for Government, and to ascertain sustainability.

III. Credit Mechanisms. The design of the credit interventions in SLRP was in accord with the credit approaches of the early 1990s, i.e. was concerned with 'opportunities provided', rather than as an 'approach to self-development' and sustainable rural financial services. This needed to be gradually introduced and nurtured. The shortcomings of the earlier approach in terms of development impacts and, particularly, sustainability have emerged from the implementation experience. It is therefore agreed that:

- in future projects credit needs of smallholders should be considered in the wider view of rural financial services, following IFAD's policy guidelines (which had not been developed at the time of the original design). Rather than place the emphasis on how quickly loans are provided and, ultimately, on how many loans are disbursed, emphasis should be placed on creating a system which - regardless of how gradual or how modest in terms of absolute loan numbers - has the potential to grow incrementally and to be self-perpetuating on the basis of its generated resources. The mechanism also needs to be managed by the beneficiaries, so that they have the major responsibility for loan usage and repayments.

IV. Size and Purpose of Loans. The credit experience also highlighted the importance of flexibility when it comes to how loans are to be utilised. Loans provided to women were not linked to a specific type of economic activity and three years after exposure to USD 500 loans, women were ready for larger credit opportunities, provided through the medium of cooperatives. By comparison, larger livestock loans were provided for very specific purposes and were quite inflexible. For livestock, it was assumed that members of the target group, who may never have taken loans before, could successfully manage relatively larger credit linked to specific economic activities, whilst women, it was assumed, would be better served by smaller loans that could be used to finance various types of IGAs. The latter approach has proved more effective as well as being more consistent with reaching the intended target groups. It is therefore agreed that:

- In future, design and implementation of credit systems need to avoid enforcing a particular economic activity. Project beneficiaries should have the freedom (within limits) to embark on economic activities that are consistent with market demand.

V. Monitoring and Evaluation. During implementation of SLRP the project management has modified the original project proposals, with IFAD and CI's approval, in major ways that have influenced project ability to achieve design goals and objectives. This was partly allowed for in the design arrangements, as data were to be collected during the first years of implementation to refine targets, and studies were to be undertaken to determine some of the implementation aspects. Whilst this flexibility is now sought in IFAD projects, and could have made the project objectives and

activities more relevant to the intended beneficiaries, in practice this did not occur. The main reasons have been an absence of an assessment of the coherence of these changes with, and its consequences on project objectives, and limited beneficiary participation and assessment during implementation. No mechanisms were developed to ensure feedback from beneficiaries on project services and assessment of project impacts. An effective feedback and impact assessment system should have been the means through which important strategic decisions are made both by the project management and the Project Coordinating Committee (PCC) to ensure reaching the intended target group. The lesson from this experience stresses the crucial role that a participatory M&E system should play to build flexibility into project design and ensure at the same time achievement of the intended objectives and target group reach. It is therefore agreed that:

- The more flexibility is to be built into the design, the more emphasis needs to be given to ensuring the establishment of an effective participatory M&E system, including adequate beneficiary assessment and feedback, as well as impact monitoring and assessment.
- Changes in design during implementation need to be associated with careful assessment of their coherence with project objectives and poverty targeting.

VI. Interventions in Post-Conflict Situations. The basic rationale for re-stocking was to restore lost production and provide the means for poor farmers to earn a living. In the case of SLRP, although the project was designed in 1991, the first consignment of heifers did not arrive until late in 1996; three years after effectiveness and more than five years after project design. Five years was too long to wait. Inevitably, many livestock farmers would by then either have moved on, or found other means of replacing their lost stock. By 1996 restocking was possibly not what was required anyway, as it interfered with the commercial development then taking place in the dairy industry of the Bekaa. In addition, the heifers were only available as part of a credit package which, for the intended beneficiaries at project design, was far too large in comparison to their incomes, hence discouraging them to acquire it. Whilst these arrangements may be appropriate in some development circumstances, they were hardly conducive to the prevailing post conflict situation in Lebanon. The requirement was for very speedy action to restore production, followed at a later date by considerations of re-couping some of the costs involved.

- Future IFAD and partners interventions in post-conflict situations should be speedily implemented to restore production and should be followed by consideration for enhancing continuous developmental impact and sustainability.

The Republic of Lebanon
Smallholder Livestock Rehabilitation Project
Completion Evaluation

Executive Summary¹

1. **Project Design.** The Smallholder Livestock Rehabilitation Project (SLRP) was the first assistance provided by IFAD to Lebanon. The project, designed as a post-conflict intervention, started at a time when the country was emerging from 17 years of civil war and closed at the end of June 2002. The Completion Evaluation of the project had as objectives assessing project achievements and impact and draw lessons from its experience for future similar IFAD interventions in the Near East Region. In undertaking the evaluation the field mission fully implemented the Methodological Framework for Project Evaluation developed by the IFAD Office of Evaluation (OE) in 2002 and followed its rating system.²

2. At the time of project design, basic services and infrastructure in the project area needed rehabilitation, and the Ministry of Agriculture (MOA), which was gradually being re-organized, had limited experience in the implementation of internationally funded projects. The project was designed with the ultimate aim of addressing the needs of the poor and disadvantaged in the post-conflict reconstruction of the project area. The following main objectives were conceived: (i) provide the stimulus to re-establish smallholders livestock production in the Bekaa Valley; (ii) replenish some of smallholders lost stock in the project area; (iii) provide the basis for sustainable development in the livestock sector and increase the income of the poor farm families and women who derive most of their income from livestock; and (iv) develop agricultural support services. The last objective was to be achieved initially by providing institutional strengthening for the MOA, both to enable the Ministry to implement SLRP, and also to enhance its overall capacity as an agent for agricultural rehabilitation and development. At the time, IFAD thinking on post-conflict support had not been articulated, hence there were no clear policies or guidelines for the designers to follow to achieve these goals.

3. These objectives were translated into four components in the design: (i) Strengthening Support Services (26% of base costs); (ii) Agricultural Credit (49%); (iii) Off-farm Income Generating Activities (IGAs) and studies – including a programme for Rural Women (RW) (12%); and (iv) support for the Project Management Unit (PMU) (13%). The target groups proposed were those with small landholdings, less than 4 ha, and with household earnings of no more than about 40% of the average per capita income (about 8500 households). The total project cost, including contingencies, was estimated at USD 21.9 million, of which IFAD provided a loan of about USD 10 million on intermediate terms, and OPEC cofinanced with a loan of nearly USD 5 million. The Cooperating Institution for the project was the Arab Fund for Economic and Social Development (AFESD).

4. During the period of project implementation the economy made great strides, so that by 1998 the national average GNP per capita had returned to USD 3 500, and inflation, which had been 100% in 1992, had dropped to just 5% by 1999. However, the proportion of the government budget allocated to agriculture had consistently fallen, so that by 2002 the MOA's budget accounted for just 0.6% of all government spending. GRL policies for agriculture over this period have generally emphasised the role of the private sector for investment, and sought to reduce the production costs of smallholder agriculture; the high cost structure was considered to be the result of the very large number of small "traditional" holdings. The open nature of the economy has meant that local producers have consistently had to compete with cheaper imports and small-scale producers of milk and meat have

¹ The Completion Evaluation Mission was composed of Mr Frank Butcher, Mission Leader and Institutions Specialist; Dr Mouna Hashem, Sociologist and Gender Specialist; Mr Roderick Kennard, Livestock Expert; Mr Omar Imady, Credit Specialist; Ms Lea Joensen, Economist, IFAD Associate Professional Officer. Dr Mona Bishay, Deputy Director, IFAD's Office of Evaluation, supervised the evaluation process throughout.

² Methodological Framework for Project Evaluation (IFAD's document EC 2003/34//W.P.3, see also www.ifad.org and Appendix 3).

faced difficult times, characterised by falling prices. Presently, about 75% of red meat is imported, whilst Lebanon produces about half of its consumption of dairy products.

5. **Design Changes.** Whilst the implementing agency for the project has been the MOA, a PMU was established in the Bekaa: this required an act of Parliament and gave the PMU considerable autonomy. A number of changes were introduced to project design by the PMU, with approval from IFAD and the CI, based on studies undertaken during implementation.

6. A milk marketing study (recommended by the design) was conducted in 1995. Its main conclusion was to propose the establishment of milk collection centres (MCCs), in order to test and consolidate the outputs from small producers and to increase their market leverage. Four MCCs had been constructed in the Bekaa at the time of the evaluation, and a further eight in total have either been constructed or commissioned elsewhere. Capital required for these MCCs was mostly obtained by re-allocations from the small ruminant programme that has been reduced in size. This design change had implications for the direction of the project, and re-oriented it much more towards dairying as its main activity, with an emphasis on **milk marketing**. The lack of development of the small ruminants' programme, significantly affected the achievement of one of the main project objectives regarding the increase in income of poor farm families.

7. As an extension of the fodder development programme, in 2003 the project established a sophisticated feed testing laboratory, also financing this from reallocations from the sheep and goat credit programme. This facility was thought necessary because of farmer uncertainty over the quality of locally produced feed. In addition, cooperatives for rural women were identified as the preferred means of group formation, and project funds were re-directed to provide loans for these cooperatives as well.

8. None of the above activities were included in the original design and both IFAD and the CI demonstrated flexibility in accommodating the requested changes. Although the changes in total were significant, their overall impact on the coherence between project objectives and implemented activities has never been addressed. This was partly because an effective monitoring and information system, a participatory M&E mechanism, and regular beneficiary feedback were not established, and partly because the Mid-term Review (MTR) recommended by the project design was not undertaken.

I. SUMMARY IMPLEMENTATION RESULTS

9. **Restocking.** The project has made available a total of 1430 high quality imported pregnant heifers for distribution. The first consignment of heifers arrived three years after project effectiveness. By the end of the first year under beneficiary ownership, a 26% had died (compared with 3% assumed at appraisal), leaving just 1012 surviving animals (50% of net target³). Livestock insurance was a required feature of the loan arrangements for farmers, and was used to compensate them for these cattle losses. The final importation of 600 animals, to reach the project target of 2000, was cancelled because of disease problems in the supplying country and price escalation.

10. Project data do not indicate the actual number of households that received heifers, and the evaluation found it difficult to confirm the status of the beneficiaries, either from the data or from field visits. The design called for two heifers to be allocated per household, but this was abandoned at an early stage, and heifers were distributed individually. Many heifers were apparently quickly on-passed, so "end-user" households mostly received three or more animals. The livestock activities included also a small ruminant fattening programme: this was operational for two years and achieved 80% of appraisal estimates.

11. **Support Services.** The project introduced a range of support services for livestock. Artificial Insemination (AI) was introduced to the Bekaa and this gave the possibility of much higher

³ The target was to establish 1000 dairy units of two heifers each.

performance for dairy farms throughout the valley compared to local bulls, enhancing milk production capability from about 3 500 litres to 6 000 litres plus. The programme also increased farmer awareness of this greater potential. All (dairy) cattle were vaccinated against Foot and Mouth Disease in most years, and to a lesser extent, against some other diseases: considerable numbers of productive sheep and goats were vaccinated against key diseases. This was most useful, laid the foundation for a better animal health status, and made farmers appreciate the value of vaccinations. The project's Extension Officers (EOs) have introduced more modern animal husbandry and milk production technology to more than 600 producers, resulting in their ability to produce milk of much higher quality than before.

12. The livestock activities included a small fodder promotion programme which introduced crop/legume mixtures, conducted field days and produced and distributed a significant quantity of improved fodder seeds. The feed analysis laboratory was constructed as part of this programme, but its impact has been limited, as has been the effect of interventions to improve rangeland stability and conservation. A Research programme into the upgrading of sheep and goats was begun during the project and led to the progressive build-up of flocks at the Lebanese Agricultural Research Institute (LARI). However, most of the animals were disposed of in 2002 when SLRP stopped funding the activities at LARI and passed over the control and management of project-sponsored activities and resources.

13. **Milk Marketing.** The first Milk Collection Centre (MCC) was constructed at Bar Elias in 1998, and the project contracted an existing milk collection cooperative to arrange supplies. Three more MCCs were commissioned in 2001 and six more cooperatives were contracted to supply them with milk, although none of these cooperatives had ever collected milk before. Technically the MCCs have performed well, producing milk of improved quality. However, it was assumed that the processors would pay a higher price based on quality and that the Government of the Republic of Lebanon (GRL) would introduce and enforce a recommended support price – this has not happened. Analysis from Bar Elias indicates that MCC operations add about 28% to the farm gate milk price. The premium processors' willingness to pay for higher quality supplies has resulted in an increase in the farm gate price of milk compared to the price paid by traditional collectors: this has been of benefit to small producers, but is steadily reducing. During the period April 2002 – May 2003, all but the first milk collection cooperative withdrew their services, so that only one MCC was operational during the evaluation. The evaluation found that the cooperatives had often not paid their producers on time, in spite of borrowing start-up and operating capital. This does not augur well for the future of these activities and their sustainability.

14. **Credit.** Lebanon has long been regarded as one of the region's most important financial centres. Private banks in Lebanon have enjoyed government support and attracted deposits from both national and regional sources. Today Lebanon's financial sector boasts 72 banks with a wide network of over 700 branches, of which 194 are located in the Bekaa. However, by and large, Lebanon's financial institutions are essentially urban.

15. Following a credit study undertaken in early implementation the project opted to take direct responsibility for managing the credit line and two credit units were established in the PMU, one for agricultural credit and the other for rural women, covering the loans for IGAs. The credit units developed the criteria and procedures for the selection of borrowers and the terms of the loans following the base line survey and specified the socio-economic characteristics of the credit target group. A commercial bank has served as the financial intermediary for the project, but did not risk any of its own funds. The bank has also been the depository for the credit funds. The project calculated standard loan amounts for the different (livestock) activities to be financed; generally the beneficiaries were required to provide a 25% deposit and offer collateral and two guarantors. Livestock loan sizes varied from USD 4 600 for a dairy unit, to USD 2 270 for lamb fattening. Importantly, loans provided to women were not linked to a specific type of economic activity.

16. In just under 10 years of operations the project has managed to distribute about 55% of its credit funds: this is estimated following the cancellation of credit for the small ruminant programme and the

introduction of new loan categories for cooperatives. Just over USD 3.5 million has been disbursed and 3 272 loans have been opened (but not all are continuing, the net figure is 2 683): this distribution performance is considered very creditable. However, there has been a marked contrast in the project's experience with loan repayments. In the case of livestock loans, repayments have been exceptionally low, whilst in the case of the women's programme, loan repayments have been exemplary. Summary repayment rates to date are:

- Dairy Cows: (i) Dutch source- 18.3%; (ii) French source – 9.3%
- Fattening lambs/sheep: 12.5%
- Loans to milk collection cooperatives: 14%
- Individual loans for Rural Women's: 84%
- Loans to rural women's cooperatives: 67.7%

17. According to project staff, the most important factor in low repayments for livestock loans has been the common perception among loan recipients that loans are de-facto 'disguised grants'. Further complicating the issue is the fact that some of the farmers considered that the loans were compensation from the Government for destruction of their *hashish* (marijuana) crops. An underlying assumption of the credit design was that the target group, given their meagre resources, could not meet the credit criteria required by commercial banks. That is, most project borrowers had never had loans before. Managing a first time loan that could be, as in the case of dairying, quite large (sometimes higher than annual incomes) was not an easy undertaking for many borrowers.

18. **Women's Programme.** All 500 of the loans for rural women were distributed between 1996 and 1998. Overall, the Rural Women's Unit in the PMU estimated that about 70% of the beneficiaries had been poor rural women: in some instances, it is possible that the loan conditions may have been prohibitive to poorer women and excluded them from participating in the project. The loans were used mostly for food processing. Several factors are thought to explain the high repayment rates: activities were of interest to the beneficiaries; adequate pre-training was provided; a supportive environment was built based on trust between the beneficiaries and the extension agents; and the continuous monitoring of beneficiaries' activities by the extension agents. Training organized by the Rural Women's Unit (RWU) on matters related to loan management has been extensive and, in essence, women who took loans were 'adopted' by the project's RWU. Three years after exposure to USD 500 loans, women were ready for larger credit opportunities, provided through the medium of cooperatives.

19. A further contributory reason was the healthy profits made from most activities. As a result of high repayment rates the Rural Women Unit (RWU) was able to establish a revolving fund, thereby disbursing an additional 459 loans. Overall, therefore, 959 women (180% of target) had benefited from the IGA credit activities at the time of the evaluation. The women's credit programme is considered by the evaluation to be very successful. The main problem reported to the evaluation was recent difficulties with marketing.

20. Project design called for a group formation mechanism to be introduced as part of the women's programme. Between 1999 and 2001, 20 rural women's food production cooperatives were registered: they were the first of their kind in the Bekaa and perhaps also in Lebanon. The cooperatives were also permitted to apply for loans from the project in their own right, this investment is in addition to the loans granted to individual women, which are usually "pooled" in the cooperative and invested jointly.

21. An important impact of the cooperatives has been that they provided employment for their members. Members can earn between USD 150 - 200 dollars per month, for five to eight months a year. In addition to direct employment, members also receive a share of the cooperatives' profits, but often opt to leave these dividends with the cooperative. In 2002, nine cooperatives joined together to form an Association, to improve their marketing possibilities, this is considered a promising development.

22. **Project Management.** The decree granting the PMU autonomy allowed the PMU to employ its own staff, prepare independent budgets, set procurement conditions and devise lending arrangements. Staff numbers have changed over time: in the earlier years (to 1998) a lot of staff were seconded from MOA and LARI; subsequently these numbers have fallen (with the end of animal distribution activities and the hand over of the breeding programme etc to LARI), to be more than replaced by direct employment of staff for the MCCs. The present staff strength is 114, of which only nine are now seconded (c.f. 44 in 1999). The evaluation was impressed with the standards of staffing throughout the project; although it is difficult to relate present standards to the early 1990s, there appears to be now no lack of technical competence. Project budgets have been prepared annually and include counterpart funds, which have always been provided by MOA, although with some delays. The project now requires approximately LBP 4 billion for annual expenditures (USD 2.7 million), which is nearly three times the annual operational cost estimated by the Appraisal; this accounts for 11% of the MOA budget (in 2003).

23. **Institutional Strengthening.** Interviews with staff confirmed that the Technical Assistance (TA) and training provided had been both meaningful for their project tasks and matched their needs. The evaluation found that the recipients of this training were either still working for the project or the Ministry, or were in a closely aligned occupation. It was concluded that the training and TA provided were both necessary for the start of the project and are having an ongoing impact in increasing the capacity of the Ministry, as many of the seconded staff have now returned to their original roles.

24. **Monitoring and Evaluation (M&E).** Despite the emphasis in the design on institutional strengthening, the TA for M&E was never recruited – this is the only example of TA not being used as designed in the project. The baseline survey was undertaken in 1994 and provided useful benchmark data for the selection of project beneficiaries, however, no key indicators were ever derived from the survey. Possibly as a result, whilst the monitoring has been adequate the project has had no impact indicators to guide management decisions. For example, it is not possible to trace the location of animals supplied through SLRP or to collect performance data which might provide proxy indicators of impact.

II. PROJECT PERFORMANCE⁴

25. **Relevance.** In terms of replenishing the livestock resources of the Bekaa the evaluation found the original project objectives to have been soundly based at design. However, the slow start to the project and the late arrival and distribution of animals reduced the relevance of the dairy intervention for the intended target group (see also paragraph 46). The project objective of restoring or establishing livestock support services was very valid at design and remains as valid at the time of evaluation, either through government services or through the development of private sector operators. The objective of establishing an institutionalised credit mechanism for small and poor rural households remains relevant. Institutional strengthening for the MOA was identified in the design as a vital requirement for implementation, on the basis that services had been badly disrupted and the civil war had stopped almost all programmes of Human Resource Development (HRD). Judged from staff assessments and performance the objective was relevant as designed, but is now no longer necessary.

26. The evaluation concluded that, while project objectives were relevant within the Government's development ambitions at the time of design, and many remained substantially relevant at the time of evaluation, the relevance of some of these objectives for rural poverty reduction in the Bekaa has now

⁴ The evaluation methodology followed uses three composite evaluation criteria: project performance (composed of relevance, effectiveness and efficiency) rural poverty impact (composed of six impact domains, sustainability, innovations and gender equality) and performance of partners (including IFAD, implementing agencies, and the cooperating institution). The ratings used to assess performance using these criteria are high (4), substantial (3), modest (2) and negligible (1). For the sustainability criterion the rating used is highly likely (4), likely (3), unlikely (2) and highly unlikely (1).

been reduced. This is due, in part, to the nature of interventions for institutional reconstruction in post conflict situations and in part due to delays in implementing some activities.

27. **Effectiveness.** Effectiveness is defined as the extent to which the objectives have been achieved, and the extent to which achievements have impacted on the lives of the rural poor as intended at design. The evaluation concluded that for rural women beneficiaries the project had been particularly effective in enhancing their livelihoods, directly by increasing access to credit, improving incomes and upgrading skill and indirectly in terms of gender equity and empowerment. It has fostered the development of institutions for the rural poor through the formation of cooperatives for rural women, which were accessible to men as well. The project has also been very effective in improving access to information and knowledge for all project beneficiaries through its training programme, and the objective of institutional strengthening for the MOA has largely been achieved.

28. Although the project will have an increasing impact on the dairy industry in the Bekaa, through organic growth in the dairy herd and its followers, uncertainty remains as to actual project reach, the socio-economic status of the beneficiaries, and the extent to which project benefits have and will reach the IFAD target groups. This, and the cancellation of the small ruminant activities, originally targeted to smallholders, have meant that the restocking objectives, as formulated at design, have not been achieved to a significant extent. On balance, therefore, effectiveness of the project has been substantial but could have been higher with respect to poverty reduction objectives.

29. **Efficiency.** The evaluation was unable to prepare an overall ex-post Economic Rate of Return (ERR) for the project, because of the lack of recording of benefits and beneficiary numbers. Given these constraints, the evaluation prepared farm models for the dairy enterprises, which absorbed the bulk of the project resources. Overall, it was concluded that the incremental benefits for the dairy industry as a whole in the Bekaa from the introduction of the dairy herd were likely to be high, compared to the costs incurred by the project in providing these benefits. Despite this overall conclusion, the farm models suggest that the introduced technology was not appropriate for many of the small scale farmers who were the intended target group of the project, rather it was appropriate only for those farmers able to sell their milk at high local prices in niche markets, or to large scale, high productivity farmers. Project efficiency, was therefore not high compared to original design expectations. Overall, project performance has been substantial.

III. IMPACT ON POVERTY

30. **Impact on Physical and Financial Assets.** For successful dairy farmers physical and financial assets have increased, sometimes quite substantially. However, this does not apply to the smaller or poorer farmers, who generally considered that dairying was high risk and did not reduce vulnerability. The evaluation found that lamb fattening was no longer considered profitable and had not contributed to increasing household physical or financial assets. For most of the rural women who had taken loans, financial assets had increased. This conclusion arises from the high levels of profit achieved in many IGAs, but is also influenced by the possibility of employment in the cooperatives.

31. **Impact on Human Assets.** The project has provided a significant amount of training for all beneficiaries. The evaluation concluded that this training had a useful effect in terms of increasing levels of knowledge and skills and that these were being applied in improving living standards. However, the project has also resulted in increased workloads for many households. Women's workloads have increased through their employment in the cooperatives, although only in the processing season. Evidence also suggests that men's workloads, and probably children's workloads as well, have increased with caring for more livestock.

32. **Impact on Social Capital and Empowerment.** There have been two diverse experiences in social capital in SLRP. Dairy farmers did not experience any empowerment, rather they realised their weakness in the face of milk collection cooperatives which they were unable to influence. In contrast, through the Rural Women Programme (RWP), over a thousand women have become members of

women's cooperatives; cooperative working has allowed members to put aside their traditional affiliations, uniting them in facing common goals and challenges. The social cohesion established is considered sustainable and could have profound local impacts. The women component, however, absorbed only a small fraction of total project expenditure.

33. **Impact on Food Security.** The evaluation concluded that the project had moderately increased household food security in the project area. For dairy farmers some of the extra milk produced has been kept for home consumption, whilst women activities increased income (hence food security) directly through IGAs and indirectly through women's employment in cooperatives and access to products at wholesale prices. The reduced size of the small ruminants activities has probably resulted in forgone income and food security for poorer farm households. An unintended benefit for poor households, which are not dairy farmers, is that the drop in the price of milk may have made dairy products more affordable.

34. **Impact on the Environment and the Communal Resource Base.** The livestock activities have probably had a small positive impact on the environment, as most livestock are not grazed, but remain housed on the farms. The fodder produced to support them, if grown on-farm, is fertilised with farmyard manure, hence soil fertility and soil structure on these farms has probably improved as a result. The project introduced rangeland management and reseeding practices in the sheep grazing areas, with some positive effects.

35. **Impact on Institutions, Policies and the Regulatory Framework.** Whilst the project has improved access to credit for poor rural women, this was not associated with any changes to the existing institutional arrangements for the provision of financial services to the poor. The successful experience of the formation of the first women's cooperatives in the Bekaa has demonstrated the usefulness of cooperatives as self help organisations though it still remains of limited scale. The Institutional Strengthening provided for the MOA has enhanced the capabilities of some of the Ministry staff. The evaluation could find no impacts on the policy or regulatory frameworks.

36. **Gender.** Women's social status has effectively been enhanced as a result of the success of the RW cooperatives. More women are now able to work outside their homes, they became active members of cooperatives, have demonstrated their self-reliance, and as income earners, their decision-making role in the household has been strengthened.

37. **Innovation.** The project had some contextual innovative aspects. The model of women's self help cooperatives developed by the RWU was a very innovative approach for the Bekaa, and is probably replicable in other parts of Lebanon. There is some evidence that the YMCA may have already replicated this model elsewhere. The project introduced AI to the Bekaaa, which can also be regarded as a contextual innovation to improve genetic potential. Potential for replication and scaling up exists particularly if it is provided by competent and adequately motivated operators. This service can also be sustained through the private sector. The evaluation found, however, that AI could not substitute for bulls in the more remote rural areas, as intended.

IV. SUSTAINABILITY

38. **Livestock.** The circumstances of small farm dairy production have changed since appraisal and small-scale dairy enterprises may now be marginal or unprofitable at the current cost of concentrates and the level of milk prices. The livestock support services which can be offered through the private sector are likely to prove sustainable providing they are not undercut by competition with government and prices are affordable to small farmers. However, the sustainability of the services which are normally funded by government - extension and research - appear much less certain. In the case of animal health and livestock extension, useful capacity has been created in the MOA, but the extent to which it will be used will depend on the policies adopted for support for the livestock industry in general and the funding available. The MCCs and the milk collection cooperatives have had some positive impacts on milk prices, but it is questionable as to whether this can be sustained, in view of

the withdrawal of most of the collection cooperatives and the continuing uncertainty over the operation of the MCCs themselves.

39. **Credit.** The project has made no provision for an autonomous self-reliant mechanism that can perpetuate the provision of credit (and other rural financial services) to the poor in the Bekaa. The way in which credit has been provided by SLRP has meant that at the end of project activities, credit would come to an end. In order to assess the sustainability of income generated, evidence is needed of the growth of the initial investment and/or reinvestment of profits. Evidence for this is scanty for livestock loans, but profits made by cooperatives often appear to be reinvested. Overall, women's loans for food processing, which are relatively flexible in that products can be adjusted to market requirements, are likely to be sustainable.

40. **The Rural Women's Programme.** The entrepreneurial and social development benefits which individual rural women have received through participating in the RWP have been considerable, and these are presently sustainable, without further inputs from the project. However, because the cooperatives are all relatively new, they are not in a position to "graduate" as fully independent entities, as yet. To ensure sustainability will require further support for the near future, especially with marketing. To date, the cooperative spirit and determination demonstrated has been remarkable, and augurs well for the future, if resources continue to be invested in this area in the near future. For the project as a whole, the likelihood of sustainability of its impact on rural poverty does not appear high.

V. PERFORMANCE OF THE PARTNERS

41. **IFAD and the Cooperating Institution (CI).** Overall, the evaluation concluded that IFAD had performed reasonably well in facilitating a design that was appropriate to the circumstances at the time, but had performed modestly in providing guidance to the project in making strategic decisions during implementation. This is obviously shared with the CI. Project staff reported favourably on support received from the CI, whose reports have mostly indicated a very satisfactory implementation situation. However, the evaluation concluded that this was overly optimistic with respect to assessments of development impacts and sustainability, expected benefits and beneficiary participation. As a result, appropriate incentives were not created for the project to pursue systematically its original poverty reduction objectives. It is unclear how the CI assessed these development indicators, as no data were available. In addition, the evaluation would also question the very positive rating given to the M&E system given the limited beneficiaries and impact assessment during implementation.

42. **Co-financiers.** The OPEC fund co-financed the livestock credit activities; project sources reported that OPEC has been a full and active partner in the project, despite the problems with credit recovery.

43. **Government and its Agencies (including project management).** MOA facilitated the granting of autonomy to the PMU and has supported the project with seconded staff and counterpart funds. However, the slow start of the project and delays in procuring the animals reduced the relevance of the intervention for smallholders in the post-conflict situation. Although research programmes were started at LARI, and considerable investment in reconstruction took place, the programmes were only continued as long as SLRP provided the funding. As soon as they became the responsibility of LARI, they were stopped. For most of the project life the project management has effectively pursued the implementation in a dynamic and technically competent fashion, and has successfully implemented the training activities for staff and beneficiaries and the programme for rural women. However, the evaluation was concerned at some of the decisions reached during implementation, particularly those concerning aspects of project design, which have affected the direction of the project, its intended objectives, the extent of outreach to the target groups and the impacts achieved for poorer beneficiaries. Overall, partners' performance could have been higher in terms of influencing project implementation towards the achievement of its intended target group reach and poverty impact.

VI. MAIN INSIGHTS AND RECOMMENDATIONS

44. **(i) - Creating Social Cohesion.** An unexpected but very significant effect of the project has been the extent of social cohesion which has been fostered as a result of the formation of cooperatives for rural women. In Lebanon there are strong traditional allegiances that have been strengthened during the seventeen years of civil war. However, the cooperatives, formed as a means of bringing women together for their financial advantage, have led to the identification of common concerns and interests, thus diffusing barriers and building social capital to a large extent not aligned to established socio-economic and traditional structures. The impacts of this experience have been felt economically, and socially. Economically, the initial vulnerability and insecurity for rural women have largely been substituted by feelings of empowerment and equality, as incomes have increased and been shown to be sustainable. Socially, the collective work ethic, equal partnership among women and joint risk taking have drawn the group members together, facilitating the exchange of old allegiances with new. In addition, the formation of these cooperatives has given the Government a means of realising its policies for social and economic development in poor rural villages.

45. *The opportunity exists to build on and extend this experience. The evaluation strongly recommends that a wide range of support for the present rural women's cooperatives be continued, as they are still new experiences and require assistance to ensure they can "graduate" to being fully independent. This experience should also be further studied and made use of in other IFAD supported interventions in the region.*

46. **(ii) - Restocking.** The basic rationale for re-stocking is to restore lost production and provide the means for poor farmers to earn a living. In the case of SLRP, although the project was designed in 1991, the first consignment of heifers did not arrive until late in 1996 (three years after effectiveness and more than five years after project design). Five years was too long to wait. Inevitably, many livestock farmers would by then either have moved on, or found other means of replacing their lost stock. By 1996 restocking was possibly not what was required anyway, as it interfered with the commercial development then taking place in the dairy industry of the Bekaa. In addition, the heifers were only available as part of a credit package which, for the intended beneficiaries at project design, was far too large in comparison to their incomes, hence discouraging them to acquire it.

47. Whilst these arrangements may be appropriate in some development circumstances, they were hardly conducive to the prevailing post conflict situation in Lebanon. The requirement was for very speedy action to restore production, followed at a later date by considerations of re-couping some of the costs involved. For example the two-heifer units could have been given to smaller and poorer farmers on the basis that the first two female calves were returned.

48. **(iii) The Targeting of Dairy Interventions.** In SLRP potential recipients of dairy cows were apparently selected on the basis of applications submitted by individuals who met the poverty criteria suggested in the Appraisal, augmented by findings from the baseline survey. Another consideration for the project was the need to ensure a reasonably balanced distribution throughout the project area. With hindsight, this approach created problems both with the support of the animals and also with marketing. These difficulties have reduced the poverty impacts of the intervention, and probably contributed to re-distribution of the animals to non-intended beneficiaries. For high producing dairy cattle to be the means of increasing incomes for poorer households, local markets for dairy products should have been readily available and, most importantly, ready access either to bulls or AI. Small dairy units (of two cows) located over a wide geographical area made meeting these needs exceptionally difficult. A preferred approach may have been first to develop local farmer organisations (such as cooperatives) based on a village or other defined areas, then to supply the animals. This would aim to increase the "density" of production so that, for example, collective milk marketing and the keeping of a bull might be justified as bringing benefits to all the producers.

49. **(iv) Milk Collection Cooperatives.** The project design suggested a possible role for cooperatives in milk collection, and nearly USD 1.5 million was allowed to develop this possibility. At the time of the evaluation most of the milk collection cooperatives had withdrawn their services, with the result that three of the four milk collection centres were shut. However, this should not be interpreted as meaning that cooperatives could never undertake this role. In fact the project experience suggests that milk collection cooperatives can be effective under the right circumstances. In a more general sense, it is important not to assume that all cooperatives are the same. The success of the RW cooperatives illustrates just how useful and beneficial properly constituted and run cooperatives can be in the development effort, whilst the modest experience with many of the milk collection cooperatives demonstrates some of the difficulties. This illustrates that where cooperatives are to be utilised in future IFAD-supported projects, great care needs to be exercised in their selection, effective management, and equity in the distribution of benefits to their members.

50. **(v) Credit Mechanisms .** The design of the credit interventions in SLRP was in accord with the credit approaches of the early 1990s, i.e. was concerned with ‘opportunities provided’, rather than as an ‘approach to self-development’ that needed to be gradually introduced and nurtured. The shortcomings of this approach in terms of development impacts and, particularly, sustainability have emerged from the implementation experience.

51. **(vi) Size and Purpose of Loans .** In addition, the credit experience also highlighted the importance of flexibility when it comes to how loans were to be utilised. Loans provided to women were not linked to a specific type of economic activity and three years after exposure to \$500 loans, women were ready for larger credit opportunities, provided through the medium of cooperatives. By comparison, large livestock loans were provided for very specific purposes and were quite inflexible. For livestock, it was assumed that members of the target group, who may never have taken loans before, could successfully manage relatively larger credit linked to specific economic activities, whilst women, it was assumed, would be better served by smaller loans that could be used to finance various types of IGAs. The latter approach has proved more effective as well as being more consistent with reaching the intended target groups.

52. **(vii) A Role for the Private Sector.** With limited funding available through the MOA, an important element in the development of the livestock sector was the encouragement of the private operators to take an increasing role. This is an important plank of GRL policy. Although the delivery of AI services stopped when the project ended, it has been adopted since and is being continued by veterinarians and technicians working in the private sector. Vaccination and animal health services are similarly available, but in both cases have to compete with subsidised government services. ***If the government wishes to encourage private sector activities in the provision of AI, then it needs to limit its role to regulating the service and ensuring that technicians are properly trained and work to industry standards. For vaccinations, Government should regulate and control vaccine quality and type, and identify and confine its services to supplying the public-good vaccinations.***

The Republic of Lebanon
Smallholder Livestock Rehabilitation Project
Completion Evaluation

I. INTRODUCTION

A. Background to the Evaluation

1. The Smallholder Livestock Rehabilitation Project (SLRP), which closed at the end of June 2002, started at a time when the country was emerging from 17 years of civil war. Basic services and infrastructure required complete rehabilitation, and the Ministry of Agriculture (MOA), which was gradually being re-organized, had no experience in the implementation of internationally funded projects. The project was the first assistance provided by IFAD to Lebanon and was intended to help with the re-construction and rehabilitation programme of the government (GRL) in the rural areas. The main goal was described as rebuilding the smallholder livestock sector in the Bekaa Valley, thereby raising the standard of living of about 8 500 small and poor rural families.

2. Since SLRP the IFAD portfolio has expanded to a further two projects in the Lebanon, both are ongoing and continue to support rehabilitation and development of the agricultural sector (irrigation, terracing, soil and water conservation, and support for institutional strengthening). In late 1998 a Country Strategic Opportunities Paper (COSOP) was initiated, and was finalised with the completion of a rural poverty assessment and mapping exercise in 2000. This produced a new strategy in which the socio-economic causes of rural poverty are to be simultaneously addressed through agricultural development, improvement of health and social services, education, income generation, marketing, promotion of cooperatives and associations, and most importantly provision of rural financial services. The completion evaluation of SLRP is the first IFAD independent evaluation of a project in Lebanon.

B. Approach and Methodology

3. The evaluation objectives described in the Approach Paper were:

- i. To assess the extent to which project objectives were achieved, and the efficiency of the intervention;
- ii. To assess the impact on rural poverty and the prospect of its sustainability; and
- iii. To assess the implementation experience, the difficulties encountered and the means used to address them, and to draw lessons from this experience, especially those relevant to similar future interventions in the NENA region at large.

4. The evaluation was undertaken following the approach described in OE's "Methodological Framework for Evaluation"¹. This requires a participatory approach to be employed so as to give weight to beneficiaries' assessments of the changes in their livelihoods due to participation in SLRP. To do this, the evaluation made extensive use of focus group discussions and interviews with individual beneficiaries, as well as commissioning a small impact survey, which, with evaluation support, was undertaken by staff from the project. In addition, extensive discussions took place with other concerned organizations and agencies involved in project implementation.

¹ A Methodological Framework for Project Evaluation (EC 2003/34/W.P.3). See also IFAD's Website: www.ifad.org.

II. MAIN DESIGN FEATURES

A. Project Rationale and Strategy

5. After 17 years of civil war Lebanon needed to rebuild its social and physical infrastructure, including revitalizing its stagnant economy and reuniting a divided society. The post-conflict circumstances described in the Appraisal are of a reduced agricultural population in the Bekaa Valley, with significant insecurity, high inflation, land ownership concentration and exploitation of producers by market intermediaries. There were also many women who were heads of households². Government services were reported as either non-existent or in disarray.

6. Given these fraught conditions, the project was conceived with two main goals. The first was to provide the stimulus to re-establish livestock production, replenishing the lost stock. The Bekaa Valley contains 37% of the national territory, and is the most fertile region in the country, hence the need was seen as being for what was essentially a relatively short term “kick starting” process which would generate its own momentum. At the time, IFAD thinking on post-conflict support had not been articulated, hence there were no policies or guidelines for the designers to follow. The strategy chosen for restocking, therefore, was similar to other approaches used in other development circumstances, i.e. to provide loans, directed to the most disadvantaged groups. The second project goal was to develop agricultural support services by providing institutional strengthening for the MOA, both to enable the Ministry to implement SLRP, and also to enhance its overall capacity as an agent for agricultural rehabilitation. To achieve this second goal the strategy agreed with GRL was to include a major programme of Technical Assistance (TA) as part of the loan, complimented by extensive training.

B. Project Area and Target Group

7. The project area was defined as the Governorate of the Bekaa, which comprises five districts: Al-Hermel, Rachia, West Bekaa, Balbeck and Zahle (the governorate capital)³. Even now, the Bekaa has a large number of rural households, with a high percentage of low revenue households and a high incidence of poverty, especially in Hermel⁴. According to the baseline survey conducted for SLRP in 1994, Hermel and Rachia were then the two most deprived districts in terms of social services.⁵ The rate of illiteracy in the Bekaa at that time was estimated at about 33%, and there was poor distribution of schools and hospitals, these institutions mostly being found in the district centres.

8. The overall target groups proposed were those with small landholdings, less than 4 ha, and with household earnings of no more than about 40% of the average per capita income. The project participants selected from this group would then be those who could benefit from the interventions included in the project, especially those who were already small dairy farmers. From calculation made by the design team⁶ this suggested a potential total target group of about 8 500 households, based on some farmers receiving livestock (2 400), others benefiting from extension services in general, and including a programme of income generating activities for (500) women.

C. Goals, Objectives and Components

9. The project goals were further defined through a number of development objectives, viz:

² Twelve years after the civil war ended some repercussions are still evident, for example, in North Lebanon and Bekaa, 15% of young men (15-24 years old) are unemployed and 37% of households are indebted.

³ The population of the Bekaa is about 395 000 of which approximately 25% is engaged in agriculture.

⁴ COSOP, 2000, p. 4.

⁵ The Social and Economic Situation in the Governorate of Bekaa (1994). MAA-DATA Statistical Consulting Centre. Beirut- Lebanon.

⁶ At the time of design much of the statistical data needed were either not available or out of date.

- Assisting the Government in helping farmers to replace their lost stock with improved breeds, and strengthening animal health services;
- Influencing the Government to undertake important institutional changes in order to provide adequate farm support services such as credit for meeting the needs of smallholders, including women;
- Developing livestock research and a responsive extension service for the generation and dissemination of improved technological packages;
- Improving human resources through the provision of training for farmers and concerned technical staff of MOA.

10. These objectives were translated into four components in the design: (i) Strengthening Support Services; (ii) Agricultural Credit; (iii) Off-farm Income Generating Activities (IGAs) and studies; and (iv) Support for the Project Management Unit (PMU). The total project cost, including contingencies, was estimated at USD 21.9 million, of which IFAD provided a loan of about USD 10 million at intermediate terms, and OPEC cofinanced with a loan of nearly USD 5 million. The project was approved by IFAD's Executive Board in April 1992, but implementation did not start until the latter part of 1993. The component breakdown and costs are shown in table 1.

Table 1. Summary Project Base Costs

Component	Total Cost USD mn	% Foreign Exchange	% of Base Cost
Strengthening Support Services	4.09	48.6	26
Agricultural Credit	7.97	80.3	49
Off-farm IGAs	1.88	71.6	12
Project Mgt Unit	2.12	69.8	13
Total baseline Costs	16.06	70	100

Source: Appraisal report

Strengthening Support Services

11. This component was nominally concerned with the support services related to livestock. However, in practice livestock interventions were divided amongst all four of the project components, viz:

- In the component **Strengthening Support Services**, farmers were to be supported with technology, extension and breeding material. The project allowed for: (a) the development of a breeding, demonstration and training station to be established at the Lebanese Agricultural Research Institute's (LARI) research station at Terbol, with 400 Awassi sheep, 300 Shami goats and 15 dairy cows; (b) the construction of a distribution centre for imported breeding stock, also at Terbol; (c) the privatised delivery of Artificial Insemination (AI); and (d) extension, including livestock vaccination.
- Under the **Agricultural Credit Component**, credit was to be provided for restocking by supporting: (a) 1 000 smallholder cattle units supplied with two imported pregnant Holstein/Friesian heifers each; (b) 700 smallholder goat farms, based on improved Shami goats and; (c) 200 smallholder Awassi sheep farms.
- Under the **IGAs and Studies Component** was included a milk marketing study, to be undertaken to identify a preferred milk marketing system, and assistance was to be provided to small farmer cooperatives to allow them to acquire three small dairy processing plants, transportation and milk collection equipment, and fodder production equipment.
- The **Project Management Component** included allowances for an extensive technical assistance programme, which was mostly concerned with the implementation of and support for, livestock activities.

Agricultural Credit

12. The provision of credit was one of the major mechanisms through which SLRP aimed to achieve its objectives. In the project design total resources allocated for credit amounted to USD 9.85 million and accounted for 61% of base costs. These resources comprised USD 8.95 million to be disbursed as credit, with the remainder for institutional support, studies etc. The credit was to be made available as livestock loans, hence facilitating the restocking objectives of the project, and for women's IGAs. Specifically, credit was to be channelled as follows:

- *Dairying* – USD 3.6 million was allocated for the establishment of the small dairy cattle units, the construction of animal sheds and the purchase of feed.
- *Small ruminants* – USD 3.6 million for the purchase and maintenance of small ruminants covering livestock purchases, housing and some feed.
- *IGAs* – the provision of small loans of USD 500 each for 500 women to undertake IGAs.
- *Milk cooperatives* – USD 1.5 million to assist three milk cooperatives to expand milk collection, the establishment of a small dairy processing plant and/or the purchase of machinery for forage production.

13. To implement the credit aspects, the design called for "...devising a mechanism for the delivery and recovery of credit provided to small livestock farmers"⁷ and suggested a credit management and administration unit should be contracted to manage and administer the line of credit.

Off-farm IGAs and Studies

14. Apart from the sub-components dealing with studies⁸ and assistance to milk cooperatives, the IGA component included a Women's Programme which had three objectives:

- to train 500 poor rural women in income generating activities along with business management and accounting;
- to provide 500 poor rural women with credit of USD 500 each to partake in income generating activities;
- to assist in group formation for women.

However, of the component allocation of USD 1.88 million (base costs), just USD 315 000 was allocated to support women's income generating activities, or 2% of total base costs. A small Rural Women's Unit (RWU) was to be established in the project management unit to implement these activities.

The Project Management Unit

15. The design of the project management component specified that a high level Project Coordinating Committee (PCC) would be convened to oversee project direction and that an autonomous PMU would be established in Zahle. Project costs allowed for considerable construction and building rehabilitation, including five offices, one in each of the Districts of the Bekaa, from which the extension and other staff were to operate, and the construction of a livestock distribution centre, plus rehabilitation of facilities for the breeding programme at the LARI station in Terbol. This component contained the TA programme, which was estimated to require 108 man months and to cost USD 1.4 million, or approximately half of the budgeted total allowance for the component. The objective of the training programmes, which were budgeted under the relevant individual components, was to significantly upgrade staff knowledge and skills so that newer and more intensive production

⁷ SLRP, Appraisal, Vol. II, Annex II, p. 87.

⁸ The studies included in the design were to allow the project management to investigate the preferred methods for arranging a credit mechanism and for milk marketing.

methods could be introduced for all livestock producers in the Bekaa Valley. This meant, in effect, that extension services had to be re-established, spread throughout the Valley.

D. Implementation Partners and Arrangements

16. The implementing agency for SLRP was MOA; this arrangement was unusual at the time in that internationally funded projects mostly came under the auspices of the Council for Reconstruction and Development (CDR), which retains an overall planning function for economic development and which became the executing agency for the next two IFAD-funded projects in the portfolio. The development of appropriate technical packages to complement the extension activities required some applied research for pasture/forage production and to improve local breeds of small ruminants: this was arranged through LARI, which is a Department of the MOA with stations in the Bekaa, and was to be implemented with technical backstopping from the International Centre for Agricultural Research in Dry Areas (ICARDA).

17. The project sub-contracted two aspects of the implementation. A commercial bank was contracted as a financial intermediary to distribute the credit funds, and a local Non-Governmental Organization (NGO), the YMCA, was contracted to provide training for women taking credit.

E. Major Change in Policy and Institutions during Implementation

18. During the period of project implementation the economy made great strides, so that by 1998 the national average GNP per capita had returned to USD 3 500, and inflation, which had been 100% in 1992, had dropped to just 5% by 1999. However, the proportion of the government budget allocated to agriculture had consistently fallen, so that by 2002 the MOA's budget accounted for just 0.6% of all government spending. GRL policies for agriculture over this period have generally emphasised the role of the private sector for investment, and sought to reduce the production costs of smallholder agriculture; the high cost structure was considered to be the result of the very large number of small "traditional" holdings. The open nature of the economy has meant that local producers have consistently had to compete with cheaper imports and small-scale producers of milk and meat have faced difficult times, characterised by falling prices. Presently, about 75% of red meat is imported, whilst Lebanon produces about half of its consumption of dairy products.

19. Cooperatives are given a special status in Lebanon and were intended to play an important role in project implementation. In the past there was an active cooperative movement concerned with housing, wholesale and retail marketing, and agriculture; nearly 700 cooperatives were registered with their own Ministry. However, during the civil war many became defunct and existed in name only, partly to receive government support. During the 1990s housing and marketing were divested to other organisations, and the Ministry was downsized to become a Directorate of the MOA. At the time of design, the cooperative movement suffered from a number of problems, for example a breakdown in collective and group working to achieve mutual benefits, a lack of cooperation spirit, passive member participation, lack of supervision, weak training and domination by few for their own purposes⁹. Despite this catalogue of problems, cooperatives have a recognised legal status and are able to borrow collectively. The project design suggested a possible role for cooperatives in milk collection, and nearly USD 1.5 million was allowed to develop this possibility.

F. Design Changes during Implementation

20. The milk marketing study included in the design was conducted in 1995. Its main conclusion was to propose the establishment of milk collection centres (MCCs), in order to test and consolidate the outputs from small producers and to increase their market leverage. Four MCCs had been constructed in the Bekaa at the time of the evaluation, and a further eight in total have either been constructed or commissioned elsewhere. Capital required for these MCCs was mostly obtained by re-

⁹ Ref: Appraisal Report, Cooperative Rural finance programme – Annex 4.

allocations from the small ruminant programme. This design change had implications for the direction of the project, and re-oriented it much more towards dairying as its main activity, with an emphasis on **milk marketing**. The lack of development of the small ruminants' programme significantly affected the achievement of one of the main project goals.

21. As an extension of the fodder development programme, in 2003 the project established a sophisticated feed testing laboratory, also financing this from allocations to the sheep and goat credit programme. This facility was thought necessary because of farmer uncertainty over the quality of locally produced feed. In addition, cooperatives for rural women were identified as the preferred means of group formation, and project funds were re-directed to provide loans for these cooperatives as well.

22. None of the above activities were included in the design. Although the changes in total were significant, their overall impact on the coherence of project objectives with new activities undertaken has never been addressed. This was partly because an effective monitoring and information system, and regular beneficiary feedback were not established, and partly because the Mid-term Review (MTR) included in the project design was not undertaken.

III. SUMMARY IMPLEMENTATION RESULTS

A. Livestock

Dairy Cattle Distribution

23. Between November 1996 and October 2000, the project imported a total of 1615 pregnant heifers from Holland and France: of these 185 died before they could be distributed to farmers, leaving 1430 cattle for distribution.

24. However, by the end of the first year under beneficiary ownership, a further 26% had died (compared with 3% assumed at appraisal), leaving just 1012 surviving animals. Livestock insurance was a required feature of the loan arrangements for farmers, and was used to compensate them for these cattle losses; however the losses are very high and not fully explained¹⁰. The final importation of 600 animals, to reach the project target of 2000, was cancelled because of disease problems in the supplying country and price escalation.

Table 2. Heifer Shipments, Distribution and Losses

Shipment	Date	Contract head	Losses - Pre distribution	Head distributed	Losses post distribution	Net head
Dutch	Late 1996	600	71	529	180	349
French						
First	Dec. 1999	315	46	269	62	207
Second	May.2000	350	38	312	80	232
Third	Oct. 2000	350	30	320	96	224
Total		1615	185	1430	418	1012
Percent of total		100	11	89	26	63

Source: Project records. Notes: 1. Pre distribution losses occurred during shipment or quarantine at Terbol. 2. Post distribution losses occurred during the 12 month insurance period.

25. Project data do not indicate the actual number of households that received heifers, and the evaluation found it difficult to confirm the socio-economic status of the beneficiaries, either from the data or from field visits. The model of two heifers per household was abandoned by the project

¹⁰ In the USAID funded project some 5 500 head were distributed with reported losses of 9%. SLRP had a high level of training and TA in animal health.

management, and heifers were distributed individually. However, many heifers were apparently quickly on-passed, so many households received three or more animals. In discussions with project staff it was suggested that approximately 700 households could be estimated to have directly benefited from the programme of dairy cattle distribution, but this could not be verified and the evaluation felt this was more likely to be a maximum (for example 3.0 heifers per household would account for just 300 households). The evaluation decided to base its analyses on three farm sizes/types to reflect this uncertainty (see section on efficiency).

26. The net 1 012 head of high quality dairy cattle (and some calves surviving from heifers lost), provided a nucleus of high performance stock with the potential to out-produce the local dairy cattle by nearly 2:1. Seven years on, the original breeding females will have increased in number by about half (say 1 500). This figure amounts to approximately 7% of the total number of dairy cows estimated to have been in the Bekaa Valley at the end of 2002. Depending on the exact year, each of these cows will have contributed between USD 700-2 200 of gross income annually, derived from the sale of milk, surplus and culled animals and manure¹¹. Their offspring, about 3 000 assorted-age followers, plus those produced from AI, have also extended their productive influence beyond the original farms. From an industry perspective, these cattle have been useful in developing a more commercially-based system of milk production.

Small Ruminant Programme

27. The small ruminant sub-component relied on obtaining large numbers of higher quality sheep and goats needed from Syria and Cyprus. However, only a few goats were eventually obtained from Cyprus, and these then died. As a result, the 900 sheep and goat breeding enterprises envisaged at appraisal were eventually cancelled entirely. The number of small ruminant fattening operations envisaged was partly realised and a total of 399 operations, or 80% of appraisal estimates, were financed, these over two successive years. They were reportedly highly successful in the first year, but lamb turnoff in the second year is said to have coincided with an influx of fattened Syrian lambs, causing a sharp fall in prices, with the borrowers losing badly as a result. They were therefore not subsequently continued.

Support for Livestock Production



Photo 1: Livestock coop member Faez Iragai collects fodder to feed cows in Balrelis. As a result of artificial insemination promoted by the project, they have increased their cattle holdings two-fold.

IFAD Photo by Jon Spaul

28. **Artificial Insemination.** The project introduced AI to the Bekaa and provided an AI service for over five years. This gave the possibility of much higher performance for dairy farms throughout the valley compared to local bulls, enhancing milk production capability from about 3 500 litres to 6 000 litres plus. The programme also increased farmer awareness of this greater potential. Although the service was discontinued when the project ended, it has been adopted since by veterinarians and technicians now working in the private sector, largely as a result of the project initiative. With increasing demand for

¹¹ Based on the Mission's revised farm models, see appendices to Annex 1.

this service the genetic quality will at least be maintained, if not improved, to the benefit of all dairy farmers in the Valley.

29. **Animal Health.** All (dairy) cattle were vaccinated against Foot and Mouth Disease in most years, and to a lesser extent, against some other diseases. Considerable numbers of productive sheep and goats were vaccinated against pox and enterotoxaemia. This was most useful. Farmers in the Bekaa now have an appreciation of the value of vaccination, and are actively using private and government veterinarians to have their animals vaccinated. There is a better animal health status in the Bekaa now than at appraisal and an improved capability for animal health service delivery now exists, where formerly there was none.

30. **Extension.** The value of extension support provided by the project is difficult to estimate. Extension Officers (EOs) operating from the MCCs have introduced more modern animal husbandry and milk production technology to at least 613 individual producers, resulting in their ability to produce milk of much higher quality than before. Most of the EOs the project trained have resumed fulltime work in other Departments of the MOA, and represent an important technical resource for future livestock extension. Impacts will therefore continue, providing these staff are given adequate resources.

31. **Fodder Production.** The project introduced crop/legume mixtures, conducted field days and produced and distributed a significant quantity of improved fodder seeds. These activities have stimulated dairy production based on an increasing production and use of fodder; this may have been adopted by as many as 649 households. This represents an important change in production techniques, although it is difficult to attribute the project's contribution - much of the stimulus to increase fodder production generally is due to factors extraneous to the project. The contribution of the feed analysis laboratory as part of the feed component has been limited, as has been the effect of interventions to improve rangeland stability and conservation involving the harvesting and reseedling of native pasture species and shrub planting.

32. **Research.** Research into the upgrading of sheep and goats was begun during the project and led to the progressive build-up of flocks at LARI. These started with flocks of about 100 sheep and goats, which, because animals were unavailable from Syria, were procured locally. They were selectively bred and their numbers increased four-fold by 2001, by which time superior individuals had been identified for future work. Representing a significant investment in breeding resources, these flocks had become the basis for the development and distribution of improved breeders to commercial flocks, as originally planned. However, most of the animals were disposed of in 2002 when SLRP stopped funding the activities at LARI and passed over the control and management of project-sponsored activities and resources.

Milk Marketing

33. Although the 1995 milk marketing study proposed establishing MCCs as a means of progressing towards quality-based milk pricing, the study did not estimate the likely operating costs or revenues of the MCCs, or the minimum throughput volumes needed for viability. However, it did conclude that (for milk production and quality to increase) GRL needed to establish a fixed minimum milk price for producers, with the price¹² related to the cost of reconstituted imported milk and the actual production costs at farm level. The first MCC was constructed at Bar Elias in 1998, and the project contracted a milk collection cooperative to arrange supplies: this cooperative was already engaged in collecting milk. Three more MCCs were commissioned in 2001 and six more cooperatives¹³ were contracted to supply them with milk, although none of these cooperatives had ever collected milk before.

¹² The study suggested LBP 600 per litre.

¹³ Following the example at Bar Elias the PMU intended to have one cooperative per MCC, but the MOA insisted on two cooperatives, and identified the cooperatives to be contracted.

34. By the end of December 2001, the four MCCs had operated for a total of 67 months and had collected approximately 12 700 metric tonnes of milk, with an estimated value of USD 3.8 million. This throughput represents about 41% of their total, single shift storage capacity. Technically the MCCs have performed well, producing milk of high quality. However, it was assumed that the processors would pay a higher milk price based on quality and that GRL would introduce and enforce a minimum price – this has not happened. Analysis from Bar Elias indicates that the operating cost of MCCs is about USD 0.08 or LBP 127, per litre – which is far too high at 28% of the current milk price. However, the premium processors were willing to pay for higher quality supplies has resulted in an increase in the farm gate price of milk by approximately LBP 160 per litre (2001 prices), compared to the price (LBP 300) paid by traditional collectors. The higher farm gate price for MCC milk has continued, although prices have fallen every year since 1998, and is now close to two thirds of the recommended support price. However, these price increases have been of benefit to small producers.



Photo 2: Dr Kurdian, a biologist at the Barelias milk collection centre, in the Central Bekaa Valley, tests for fat, protein, and acidity levels. Milk is then pasteurised and sold to dairy producers.

IFAD Photo by Jon Spaul

35. During the period April 2002 – May 2003, all but the first milk collection cooperative withdrew their services, so that only one MCC was operational during the evaluation. The evaluation found that the cooperatives

had often not paid their producers on time, in spite of borrowing start-up and operating capital. This does not augur well for the future of these activities and has presented GRL with an awkward problem. A recent proposal to incorporate an MCC with a milk processor relied for its viability on government continuing to fund the MCC operations.

B. Credit

36. Lebanon has long been regarded as one of the region's most important financial centres. Unlike neighbouring countries, where private banks were either banned or highly restricted, private banks in Lebanon have enjoyed government support and attracted deposits from both national and regional sources. Today Lebanon's financial sector boasts 72 banks with a wide network of over 700 branches, of which 194 are located in the Bekaa. However, by and large, Lebanon's financial institutions are essentially urban. For example, in 2000, approximately 82% of bank credit was provided in Beirut and of the remaining 18%, only a half was disbursed in the Bekaa. No more than 2% of overall credit is reported to have been provided for agricultural purposes and even then, given the strict collateral requirements imposed by the majority of financial institutions, richer farmers with relatively large holdings are likely to have been the primary beneficiaries of such loans.

37. The primary implication of the urban nature of Lebanon's financial sector is that a significant portion of the population, 35% by some estimates, has no access to formal credit. Money lenders are common in the Bekaa, most providing loans with interest rates higher than 100%.¹⁴ The only

¹⁴ All farmers interviewed confirmed the presence of *murabin* or usurious money lenders in their respective villages.

alternative for poorer farmers used to be to access credit through cooperatives, but Lebanon's National Union for Cooperative Credit (NUCC), which was established partly for this purpose, ceased operations in the early 1990s.

Credit Distribution Mechanisms

38. As a result of a credit study conducted in the initial phase of the project, which dealt with possible mechanisms of credit implementation, the project opted to take direct responsibility for managing the credit line. This decision was also influenced by reluctance to meet the costs of contracting an outside party. Two credit units were established in the PMU, one for agricultural credit and the other for rural women, covering the loans for IGAs. The credit units initiated their operations through advertising campaigns which made public the availability of loans and the criteria for becoming a borrower. These criteria were developed following the baseline survey, and specified the income levels, land areas etc used to define members of the target groups. Credit applications were initially received and reviewed by project staff located in the project's five district offices (the extension officers and veterinarians, who received short training courses for this purpose), before being on-passed to the central credit units.

39. Initial loan approvals required that borrowers met all the conditions for loan eligibility, but final approvals were vested in the PCC. A commercial bank, the *Bank al-I'timad al-Libnani* served as the financial intermediary for the project, but did not risk any of its own funds. Rather the bank charged USD 20 to open a file for each borrower, USD 20 per transaction, and USD 2 per warning slip: its responsibility for following up on defaults ended with the issuance of warning slips. The bank was also the depository for the credit funds. After loan contracts had been signed they were forwarded either to the *Bank al-I'timad*, which provided the funds directly to the beneficiaries, or to the project offices which arranged in-kind equivalents (e.g. cattle, forage, etc.).

40. The project calculated standard loan amounts for the different (livestock) activities to be financed; generally the beneficiaries were required to provide a 25% deposit and offer collateral and two guarantors (see details in Annex 2). Livestock loan sizes varied from USD 4 600 for a dairy unit, to USD 2 270 for lamb fattening. The category of loans for milk collection cooperatives has been expanded to include loans for rural women's cooperatives, though no specific allocations for these loans were included in the project funding.

The Approach to Lending

41. Importantly, loans provided to women were not linked to a specific type of economic activity. Training organized by the Rural Women's Unit (RWU) on matters related to loan management has been extensive and, in essence, women who took loans were 'adopted' by the project's RWU. Three years after exposure to USD 500 loans, women were ready for larger credit opportunities, provided through the medium of cooperatives. By comparison, livestock loans were provided for very specific purposes and were quite inflexible. Hence, for livestock, it has been assumed that members of the target group could successfully implement large credit opportunities linked to specific economic activities, whilst women, it was assumed, would be better served by smaller loans that could be used to finance various types of IGAs. The latter approach has proved more effective as well as being more consistent with reaching the intended target groups.

Credit Distributed

42. The cancellation of the small ruminant programme, and, later on, the final shipment of dairy heifers, has meant that the original USD 8.95 million credit line was more than was required. This allowed the project to introduce some new categories for credit, for example the rural women's cooperatives and the milk collection cooperatives, and also to divert some of the credit funds to meet the capital costs in the expanded MCC construction programme. The revised credit activities then amounted to USD 6.62 million. In just under ten years of operations the project has distributed about

USD 3.5 million¹⁵, or 55% of these funds. The summary situation for loan distribution is shown in Table 3 and is given in more detail in Annex 2: the categories shown are the latest ones, i.e. not as shown in appraisal.

Table 3. Summary Credit Disbursements

	Planned loans - numbers	Achieved loans - numbers	%	Planned loans – USD (000s)	Achieved loans – USD (000s)	%
Dairy Cows	2000 ¹⁶	1428	71	2.400	1,453	60
Feed and housing	2000	522	26	1,200	306	25
Lamb/Sheep fattening	500	399	80	854	906	106
Rural Women	500	913	182	250	556 ¹⁷	
Milk collection coops	3	7	233	1,458	484 ¹⁸	-
Rural women’s coops	0	3	-	-	134	-
Totals	5003	3272		6162	3839	

Source: project Records to May 2003

43. Given the relatively slow start made by the project, the above distribution performance is considered very creditable. In total, 3 272 loans have been opened (but not all are continuing, the net figure is 2 683). The women’s loan programme, from the point of view of the credit activities, has been very successful, and has resulted in a revolving fund being established (see further comments below).

Credit Repayments and Credit Management

44. There has been a marked contrast in the project’s experience with loan repayments. In the case of livestock loans, repayments have been exceptionally poor, whilst in the case of the (very small) women’s programme, loan repayments have been exemplary. Summary repayment rates to date are:

- Dairy Cows: (i) Dutch source¹⁹ - 18.3%; (ii) French source – 9.3%
- Forage: 18.3%
- Fattening lambs/sheep: 12.5%
- Individual loans for Rural Women’s: 84%
- Loans to rural women’s cooperatives: 67.7%
- Loans to milk collection cooperatives: 14%²⁰

According to project staff, the most important factor in low repayments for livestock loans has been the prevailing perception among borrowers that these loans are ‘disguised grants’. Further complicating the issue is the fact that some of the farmers, especially those from the Hermel district, considered that the loans were compensation from the Government for destruction of their *hashish* (marijuana) crops.

45. An underlying assumption of the credit design was that the target group, given their meagre resources, could not meet the credit criteria required by banks. This leads to the conclusion that most of the borrowers had never had loans before. In the case of livestock, especially dairying, loans could

¹⁵ This is less than shown in Table 3 as the total in the table includes USD 306 000 which have been recycled in the women’s loans category.

¹⁶ This is increased from the 1000 shown in the appraisal as heifers were distributed singly, not in pairs as originally planned. The number also carries over to the feed/housing loans.

¹⁷ Not reflective of a larger disbursement than that allocated – rather, of recycling initial allocation.

¹⁸ i.e. cooperatives contracted to collect milk after the MCCs were set up. Number is an approximation due to changes in exchange rate.

¹⁹ These cows came from the first imports in 1996, the French cows were imported in 1999/2000.

²⁰ As most of the milk collection cooperatives have now ceased operations, the low repayment is not promising.

be higher than annual incomes. The expectation that an individual borrower, given his/her lack of contact with a formal lending culture, would find it easy to pay back such a loan through regular instalments was very optimistic. However, the instalments (USD 387 and USD 82 for Dutch and French cows respectively) would probably have been manageable by members of the target group, if the farmers had remained committed to timely repayment²¹, but when repayments are missed, this can lead to a spiral of debt. Hence, the difficulty, which may ultimately have contributed to low repayments, is the absolute size of the loans for livestock activities and the lack of any form of progressive introduction of a loan “step ladder” whereby successively larger loans could have been provided once previous loans had been repaid.

46. The central credit Units in the PMU have established high standards of credit management. Credit records have been well kept and regularly analysed, and the intermediary financial institution, *Bank al-Itimad al-Libnani*, has efficiently processed transactions as per instruction from the project. However, at the downstream level in the district offices, there has been fragmented and often poorly documented information on what exactly took place *after* the beneficiaries received the loans: in other words, there has been inadequate follow-up of livestock loans. Criteria for the management of credit are largely undocumented in SLRP files. Although studies took place on the viability of some of the loans for the women’s programme, these were not adequate substitutes for regular monitoring. The evaluation concluded that lack of effective downstream management had at least partly contributed to the problem of low repayment rates. Further complicating the problem of repayment was that firm legal action against defaulters has been avoided by project management. Although presently a number of legal cases are being pursued, action was taken long after payments ceased to be made.

C. The Rural Women’s Programme

Income Generating Activities



Photo 3: Mustafadi Souadsoukoh, makes yoghurt from sheep milk from her home in Baalbek. She has attended a two month course on preparing and preserving food hygienically.

IFAD photo by Jon Spaul.

47. Selection of the target group according to the Appraisal was to be based on “need and interest in undertaking an income generating activity.” This provides a very broad definition of poor rural women. Hence, following the baseline survey, which had the purpose of collecting basic socio-economic data right across the project area, the RWU conducted a small survey specifically directed towards learning more about the socio-economic situation of poor rural women. This considered their needs, access to credit, the income generating activities of interest to women, and those already existing. The RWU also developed loan eligibility criteria, which were intended to clearly focus on the target group. The USD 500 loans were repayable in regular instalments (of USD 98 every six months) over a three-year period, at an interest rate of 9.5%.

48. Examination of the profile of borrowers indicates that the majority of women were married, some were single living with their parents, and a few were widows. All three categories needed to work to support their families, and overall, the RWU estimated that about 70% of the beneficiaries

²¹ Which required adequate milk prices and access to marketing outlets.

were poor rural women. Two loans were also given to two local charitable organisations which trained poor rural women in various development activities, such as carpet making, handicrafts, literacy, nutrition and health. Some loan applications were refused (about 25%), mostly due to the applicants' inability to fulfil the loan conditions, such as not having two guarantors, or an appropriate skill for which the loan was required. In some instances, it is possible that the loan conditions may have been prohibitive to poorer women and excluded them from participating in the project.

49. The YMCA was selected from among several tenders to offer women two-month training programmes. The rural women's loans, which were only available after training had been successfully completed, were distributed between 1996 and 1998. Table 4 illustrates the distribution and repayment of these loans:

Table 4. Loans to Rural Women (1996-1998)

Year	No. of women	Value of loans (USD)	Interest Payable (USD)	Capital returned (USD)	Interest Returned (USD)	Repayment rate %
1996	131	65 000	11 528	57 914	10 196	88%
1997	247	123 500	21 736	105 079	18 499	85%
1998	122	61 000	10 736	52 331	9 213	83%
Totals	500	250 000	44 000	215 324	37 836	86%

1/ Loans were given in LBP

The loans were used mostly for food processing; products included various fruit preserves, vegetable pickles, dried herbs, syrups, honey, dried grains, and prepared sauces.



Photo 4: Hannaa Rifaa has started a knitting business after receiving a USD 500 from the project. She is a widow and supports two sons.

IFAD photo by Jon Spaul

50. The most notable feature of the women's credit experience has been the very high repayment rates. Several factors are thought to explain the high repayment rates:

- activities were of interest to the beneficiaries;
- adequate pre-training in basic business skills, such as how to produce goods cost-efficiently and pricing formats, which resulted in products which were immediately marketable;
- The supportive environment built on trust between the beneficiaries and the extension agents;
- The extension agents continuous monitoring of beneficiaries' activities.

This is not to say that there were not some problems – in the Hermel district, for example, repayments were only 43%. Those who defaulted on their repayments were given several warnings, before legal proceedings were instigated.

51. As a result of high repayment rates the RWU was able to establish a revolving fund, subsequently enabling them to give out an additional 459 loans. Overall, therefore, 959 women had benefited from the IGA credit activities at the time of the evaluation. (The high repayment rates in this subsequent phase appear to have been continued, although not all loans have yet been returned: present average rate of repayment is 81%).

52. A study conducted in 2000 on the feasibility of IGAs financed by loans provided to women indicated a wide range of healthy profit margins. Examples from food processing are eggplant pickles, with a profit of 500%, grape vinegar (257%) and cheese (100%). The manufacturing of *melan* (a form of fabric) made a profit of 245%, the sewing of various types of clothes had an average rate of 160%²².

53. The main problem reported to the evaluation was recent difficulties with marketing. Marketing food products was never undertaken through the UNIFEM centre, as suggested in the design, and it is not clear if the centre ever opened. Consequently most women have had to depend on selling goods in their local markets; others only made products to order. Women in Hermel had the most difficulty in marketing their goods, due to their geographic isolation and poor transportation, whilst by comparison, women in Zahle were more easily able to market their goods due to their central location and proximity to larger markets. This may partly account for differences in regional repayment rates, especially for Hermel.

Group Formation Activities

54. The RWU began promoting the establishment of cooperatives in 1999: cooperative were favoured as a group formation approach because the principles of cooperatives are well known in Lebanon, cooperatives have an established legal status and can attract grants and tax exemptions, and the procedure to form cooperatives is not complicated.

55. Between 1999 and 2001, 20 rural women's food production cooperatives were registered.²³ They were the first of their kind in the Bekaa and perhaps also in Lebanon. Some of these cooperatives have allowed men to join, and also women from outside the target group, however, they are not eligible to take loans from the cooperatives. To meet these new circumstances required that project loan conditions were changed, for example applicants now had to be members of cooperatives. The cooperatives were also permitted to apply for loans from the project in their own right (in the same way that loans were included in the design for milk collection cooperatives). Conditions for loans to cooperatives required that they must have collateral equivalent to three times the loan value²⁴, and that the loan must be repaid within ten years, with a one-year grace period. So far three loans have been provided on this basis directly to cooperatives (for USD 134 360), this investment is in addition to the loans granted to individual women, which are usually "pooled" in the cooperative and invested jointly.

56. The introduction of cooperatives has meant that production now takes place on a group basis, rather than individually. In most instances the approach has been for the cooperatives to purchase a range of larger scale food processing equipment, which is kept in one location (usually rented premises). The cooperative is then able to produce a range of outputs, depending on the season. Each cooperative produces its own mix of fruit or vegetable products, depending on the traditional specialty of the village. Renting food processing equipment or grain mills to other villagers has also generated additional income.

57. Several complementary factors have led to the success of these rural women's cooperatives: (i) the RWU extension agents convinced women about the advantages of working within cooperatives, since they were initially resistant to the idea of group-formation; (ii) institutional capacity was developed by training women in appropriate management and organization, marketing, communications, and packaging skills, and (iii) the ongoing monitoring of the cooperatives by the female extension agents.

58. An important impact of the cooperatives has been that they provide employment for their members. Members are paid on average USD 1 per hour, hence they can earn between USD 150 - 200

²² These profit calculations do not take account of labour costs or the use of existing assets.

²³ Out of the 20 cooperatives, two are no longer operational.

²⁴ The collateral submitted was usually land deeds

dollars per month, for five to eight months a year. The work schedules are kept flexible, allowing women to coordinate work and home responsibilities. During the peak season (May-August) many cooperatives hire additional women. In addition to direct employment, members receive a share of the cooperatives' profits, but often opt to leave these dividends with the cooperative. In 2002, nine cooperatives joined together to form an Association, to improve their marketing possibilities. This experience is presently too new to be properly assessed, but is considered a promising development.

59. Despite the successful introduction of group based activities, marketing has remained the single largest challenge to sustainability. As a result, during 2002-2003, all the cooperatives reduced their production. The YMCA has played an important role in marketing cooperative products in Lebanon and in the Arab Gulf states, selling products under its own label "Rural Delights." The YMCA has also recently launched a project for women's food production cooperatives, similar to SLRP, which suggests replication.

D. Project Management

The Autonomy of the PMU

60. The project became effective in November 1993. In order to achieve an autonomous status for the PMU required a decree signed by the Ministers of Finance and Agriculture. The decree (45450) was authorised on 26 July 1994, and allowed the project:

- To create its own financial system and authorities, including preparing an independent budget, within the MOA's budget;
- Passed overall control to a PCC, and day-to-day control to a PMU;
- To set new procurement conditions and levels, including tax free procurement of goods;
- To develop a policy for loans given out by the project;
- To employ its own staff.

61. The decree was time limited to six years, the implementation period of the project, hence expired in July 2000. At this point implementation was not complete, and a further decree was required (1560) to extend these conditions for a further four years, to July 2004. The importance of the autonomy granted to the PMU was the ability it gave to the project to modify implementation plans. In SLRP this has been a major feature in many respects, from the decisions not to construct buildings to the ways in which staff have been recruited and deployed and the decisions to drop a number of interventions. At a later stage funds were re-allocated both between similar categories (credit funds) and also to finance completely new activities (the feed testing laboratory and the MCC). The overall result, which has not been perceived at the time by PMU, was to shift the aims and goals of the project significantly (this aspect is discussed further later on). These changes occurred with the support of the PCC.

Project Organisation and Management

62. Within the MOA, a high level PCC was appointed to receive and approve the work programme and budgets prepared by the PMU and to oversee implementation activities. The PCC, chaired by the Minister of Agriculture, has been attended by the Project Manager, whilst the Project's M&E officer has acted as its Secretary. The PCC has met regularly throughout the life of the project and fulfilled the role envisaged. The autonomous PMU was located at Zahle, headed by the Project Manager: technical advisors and counterparts were also based at the PMU. The Project Manager has two Departments that have directly reported to him during the whole course of project implementation (Departments of M&E and Finance and Administration), and several Divisions or Units which have been established as different activities have been phased in. This has meant that staff numbers have changed over time: in the earlier years of the project (to 1998) a lot of staff were seconded from MOA and LARI; subsequently these numbers have fallen (with the end of animal distribution activities and the hand over of the breeding programme etc to LARI), to be more than replaced by direct

employment of staff for the MCCs. The present staff strength is 114, of which only nine are now seconded (c.f. 44 in 1999). Of this total number 26 are categorised as professional (23%), 30 are categorised as Technicians (26%) and the rest are categorised as labour.

63. The staffing arrangements are complicated in that the project has at least three categories of staff: full time, seconded and part time. Staff salaries are treated as coming from three budget sources, the TA funds, funds for direct employment, and staff paid for by MOA. In addition, SLRP has liberally interpreted the roles of the TA experts, so that they have been treated as executive officers, with managerial responsibilities (and no counterparts)²⁵. The situation for 2003 is shown in the Organisation Chart.

64. The evaluation was impressed with the standards of staffing throughout the project; although it is difficult to relate present standards to the early 1990s, there appears to be now no lack of technical competence.

65. **Budgets and Audits.** Project budgets have been prepared annually and submitted through the PCC to the MOA; counterpart funds have always been provided by MOA, although with some delays. The project now requires approximately LBP 4 billion for annual expenditures (USD 2.7 million), which is nearly three times the annual operational cost estimated by the Appraisal; this accounts for 11% of the MOA budget (in 2003). With assistance from the CI and IFAD, established financial procedures have been followed with regard to the use of funds. The special account has proved very effective in expediting project implementation and there have been no reported problems with replenishments. By the end of June 2002 the IFAD loan was 74% disbursed with a small outstanding commitment remaining. Audit processes have been satisfactory.

Institutional Strengthening

66. **Technical Assistance (TA).** The 108 man months of long- and short term TA was for livestock management, breeding, forage production/range management, credit cooperatives and monitoring and evaluation. According to project records the TA actually received amounted to 278 man-months (see Table 5). This very significant increase is partly accounted for by careful local shopping for appropriate skills (the Appraisal costed all TA at generous international rates but the project contracted mostly Regional specialists) and partly by the inclusion of the Finance/Procurement function (full time for six years), which was originally intended to be part of project direct employment. The use of TA to perform managerial functions also saved money on staff positions.

Table 5. Technical Assistance Received by SLRP

Specialization	Start	End	Total
Chief Technical Advisor	01/09/95	31/12/01	76 months
Finance/procurement	01/01/94	31/12/03	120 months
Credit/cooperatives	01/12/95	31/07/96	8 months
Forage	15/02/96	31/12/97	22.5 months
Animal Extension	09/08/99	15/07/03	47.25 months
Milk Technology		(2000)	2 months
Animal breeding		(1999)	1.5 months
Animal Extension		(2002)	1 month
Total			278.25 months

Source: PMU records

67. **Staff Training.** Project staff have received training both in Lebanon and overseas. This has undoubtedly enhanced the capacity of MOA, which was a major objective of the project. About 66 staff members participated in 15 training courses held outside Lebanon, covering subjects such as milk recording, collection and marketing, animal production and farm management, artificial insemination

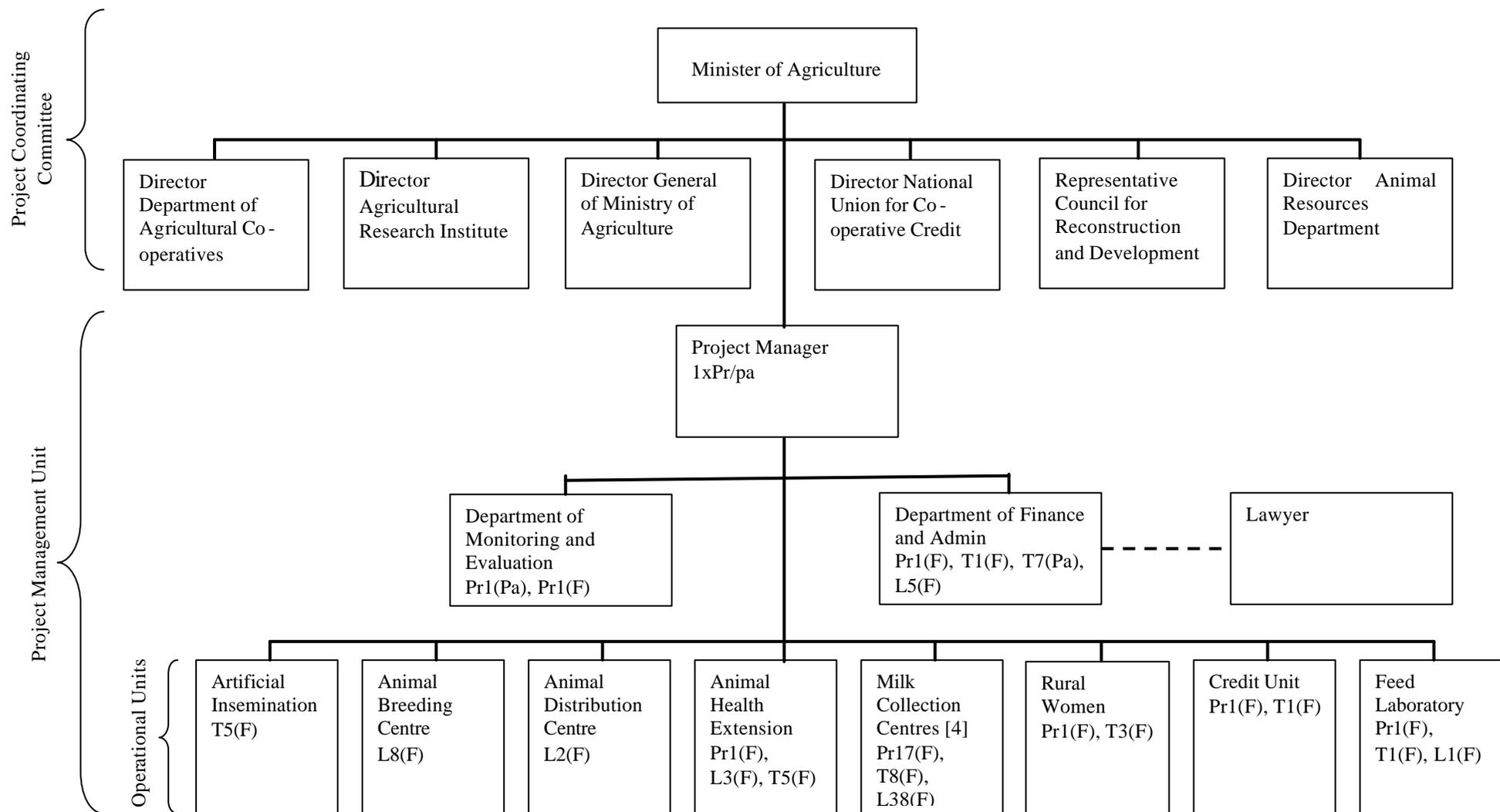
²⁵ See further comments under Institutional Strengthening.

and credit. The in-country training was intended to provide technical knowledge on subjects related to the MCC, such as milk testing and quality control and the science and technology of milk. Training was also provided on animal breeding, feeding, housing and fertility. About 24 local training courses were held. The training programme is detailed in Annex 4, Appendix 2.

68. **Beneficiary Training.** A significant amount of training has been provided to beneficiaries. Project records show that 770 farmers received training in the production of animal feed, forage crops and pastures, whilst about 660 farmers received training in maintaining milk hygiene and quality. Many small stockholders also attended general courses on the management, feeding, health and housing for animals. The project also provided a significant number of training opportunities specifically for rural women: records indicate that 297 rural women were trained in food processing technology, business management and marketing.

69. Interviews with staff confirmed that the TA and training provided had been both meaningful for their project tasks and matched their needs. The evaluation found that the recipients of this training were either still working for the project or the Ministry, or were in a closely aligned occupation. It is concluded, therefore, that the training and TA provided were both necessary for the start of the project and are having an ongoing impact in increasing the capacity of the Ministry, as many of the seconded staff have now returned to their original roles. Overall, the project objective of institutional strengthening is assessed to have been significantly achieved.

SLRP – Organisation Chart and Staffing Levels, 2003



Key: Pr = Professional, T = Technician, L = Labourer.

F = Full Time, Pa = Part Time

Numbers e.g. Pr1(F) = One Full Time Professional

Monitoring and Evaluation

70. **System Design.** The objectives of the M&E system as described in the appraisal report were to:

- establish a reporting system through which delivery of inputs and comparison of achievements of physical and technical inputs with schedules in the AWPBs could be documented; and
- implement a baseline survey from which monitoring indicators for the assessment of project impact could be extracted.

The reporting system was to include a full range of monitoring and evaluation indicators, identified and developed by an M&E Specialist included in the project's TA budget (for 12 man-months).

71. **M&E - Implementation.** Despite the emphasis in the design on institutional strengthening, the TA for M&E was never recruited – this is the only example of TA not being used as designed in the project. Instead, a local M&E officer was hired (plus an assistant) on a part time basis, without the requirement to be resident in the project area. The main activities of the unit, according to the staff, have been: (i) frequent inspections of project staff operations in the field, and (ii) preparation of a follow-up to the baseline survey at project closure. Overall, the reporting frequency as described in the appraisal has been followed: monthly reports from the project Units have been sent to the project manager, who has on-passed them to the M&E unit where they have been compiled into semi-annual project progress reports. These reports compare achievements to the physical targets given in the AWPBs, and are used by the project management and the PCC in making management and strategic decisions.

72. At the end of 1999, on the initiative of a GTZ funded Technical Adviser who was concerned with milk marketing, a project database was established to monitor the performance of the imported dairy cows. The database provided information on milk yields, reproduction and mortality rates, the incidence of disease and results from the laboratory analysis of milk from the MCCs. This information was compiled monthly and quarterly. In 2000 the database was extended to cover all dairy cows in the Bekaa Valley which had been ear-tagged, with the result that it was then not possible to distinguish between project-supplied cows and other dairy cattle. In practice it is not possible to trace the location of animals supplied through SLRP or to collect performance data which might provide proxy indicators of impact.

73. **Baseline Survey and Mid-Term Review.** The baseline survey was commissioned through a private contractor in 1994, and provided relevant benchmark data that could be used by the M&E unit for monitoring project implementation, assuming that many of the project beneficiaries would be drawn from the survey sample. However, no key indicators, as specified in the design were ever derived from the survey. The MTR never took place. The reasons given to the evaluation for this were that, firstly, IFAD concluded that sufficient supervision and follow-up missions had already taken place, and secondly that the autonomous status granted to the PMU meant that strategic changes in direction could be adopted without the necessity for a formal MTR. This meant that the lack of regular monitoring of the economic or social impacts of the project was never queried. However, the M&E unit has undertaken a number of economic impact assessments covering loans to women, including the lamb fattening enterprises. Overall, the priority given to M&E has been lower than expected.

IV. PERFORMANCE OF THE PROJECT³³

A. Relevance of Objectives

74. In terms of replenishing the livestock resources of the Bekaa the evaluation found the original project objectives to be relevant to the needs of the rural poor and to government objectives at design stage. The programme for introducing improved heifers for smallholder distribution was potentially useful at the time of design. However, the slow start to the project and the late arrival of the animals led to an overall decline in the relevance of this objective. The first consignment of heifers arrived more than five years after project design. During this time many farmers had found other means to replace their stock and commercial development in the dairy industry changed the characteristics of the sector. In addition, this objective could have remained relevant to the intended target group if the mechanism of distribution had been better targeted, that is, if the arrangements for distribution had been more favourable to resource poor farmers. This illustrates that in post-conflict situations there is a need for rapid and focused intervention approaches to restore lost production resources, especially for IFAD target groups.

75. The objective of improving animal health services was paramount at design and remains as relevant at the time of the evaluation. The objective of developing responsive livestock research and extension services was a necessary adjunct to upgrade the livestock sector in the Bekaa. It was recognised as being vital to restore the extension services in the Bekaa, and this has been pursued by the project and is being continued through the Ministry. The objective remained very relevant to the livestock sector and smallholders in the Bekaa at the time of the evaluation.

76. In terms of influencing government to facilitate credit provision, this did not happen directly, but was made possible through the decree which gave the PMU autonomy, and included establishing a credit mechanism. This objective was vital at the time of design, as no formal credit facilities were available to the target groups, and to a large extent it remains relevant at the time of evaluation as credit access has only partly improved.

77. Institutional strengthening for MOA was identified in the design as a vital requirement for implementation, on the basis that services had been badly disrupted and the civil war had stopped almost all HRD. Significant resources were allocated, covering staff training and an expensive programme of technical assistance. Judged from staff assessments and performance the objective was relevant as designed, was actively pursued by the project management and has been achieved. Significant training has also been provided for project beneficiaries either through the staff of the project or through NGOs. Although there is a need to continue training as a routine activity, the specific high intensity and rationale for this objective given in project design is no longer necessary.

78. Overall, the way the project objectives were stated clearly illustrates that they were the product of development thinking in the early 1990s. They lacked clarity of the urgency for post-conflict reconstruction and linking it with sustainable development (which would be a main feature now), include a women's programme which is almost an "add-on" to the design, have limited beneficiary participation and hardly mention civil society actors. Nevertheless, the objectives were relevant for achieving the stated aims of the project within the Government's development ambitions at the time. The relevance of the project objectives at design was assessed as very high by the evaluation, but for some of them this relevance has subsequently been reduced. Overall, the relevance of objectives at the time of the evaluation is substantial.

³³ The evaluation methodology followed uses three composite evaluation criteria: project performance (composed of relevance, effectiveness and efficiency) rural poverty impact (composed of six impact domains, sustainability, innovations and gender equality) and performance of partners (including IFAD, implementing agencies, and the cooperating institution). The ratings used to assess performance using these criteria are high (4), substantial (3), modest (2) and negligible (1). For the sustainability criterion the rating used is highly likely (4), likely (3), unlikely (2) and highly unlikely (1).

B. Effectiveness

79. Effectiveness of the project is assessed as the extent to which the objectives described above have been achieved and have impacted on the lives of the rural poor, as per project's overall goal. The evaluation assessment of effectiveness in impacting the poor can be seen in the Project Effectiveness Matrix (see Appendix 4). Overall, this indicates that the project has been effective in impacting on many of the areas which influence the lives of the poor. Key aspects are as follows:

- SLRP has been very effective in translating the credit design into real loan opportunities, however, was not as effective in creating a field level framework within which these opportunities could both be monitored and sustained. Access to financial services for rural women did increase, albeit not beyond project closure. Over USD 3.5 million was disbursed in an area that had until then been largely neglected by financial institutions.
- Although the manner in which loans provided by SLRP to rural women and rural women's cooperatives did not ensure clear sustainability from the start, it did spark a process that appears to be leading to a real change in financial institutions that address the rural poor. A new regulatory framework for rural credit is likely to emerge over the next two to three years that would result in a far more poor sensitive approach to credit provision.
- Access to information and knowledge was improved for all project beneficiaries. All those who acquired loans received complimentary training arranged by the project (at the very least, basic information relating to loan acquisition, management and execution; and, in the case of rural women, skills in various crafts and industries), and technical standards of production were enhanced through the extension services.
- An example of institutions of the rural poor being encouraged by the project is the formation of cooperatives, which, although part of the RWP, were accessible to men as well. A certain amount of institutional strengthening for these cooperatives has been provided. The experience of collective working and social solidarity has been positive and has produced sustainable impacts.
- Women participants have benefited directly from project activities in terms of gender equity and empowerment.
- Although marketing has been problematical and the project could have done more in the realm of marketing, clearly those who did acquire loans became more experienced, and somewhat more empowered, vis-à-vis the market place, through a better understanding of the needs to gear production to market demands.
- All livestock producers in the project area can now benefit from the informed support services of extension officers (EOs). But although EOs provide guidance and information, this is hardly based on improved technological packages, with the possible exception of forage recommendations. Although livestock research was activated at Terbol for small ruminants, it was never brought to fruition. The result is that whilst the technology in the dairy industry has been modernised, the breeding stock and production methods for smallholders' sheep and goats are still traditional.
- Although the project will have an increasing impact on the dairy industry in the Beka, through organic growth in the dairy herd supplied and its followers, the evaluation was not able to quantify with any certainty the extent to which these benefits have reached, and will reach the IFAD target group, or indeed the actual beneficiary numbers.

80. On balance, from the above assessments, the effectiveness would appear to be high. However, the project achievements are somewhat undermined by the lack of evidence of its reach over a wide

strata of the poorer smallholders as intended at design. Whilst this is well recorded and the outreach has been outstanding in the RWP, for the livestock interventions, which were the focus of about 80% of project resources, the outreach was considered limited. Overall, effectiveness of the project is considered substantial but could have been much higher with respect to rural poverty reduction.

C. Efficiency

Farm Models

81. SLRP presents two major difficulties in making quantitative assessments of efficiency. The first is that the Project financial recording system has not sought to differentiate between interventions, so that allocating expenditure to livestock or other activities is at best an informed judgment, and the second is that the recording of benefits and beneficiary numbers has hardly occurred, mostly because monitoring and impact indicators have not been defined. This situation has been further exacerbated because of: (i) the extension of support services to all farmers in the Valley, as intended in the design, was not associated with systematic attempt to identify and quantify actual benefits, and (ii) changes in design which have occurred during implementation.

82. Given these constraints, the evaluation opted to prepare farm models for the dairy enterprises, which in any case absorbed the bulk of the project resources. The models are mainly intended to indicate the levels of profitability for individual producers: they have been projected over a ten year time frame, which allows at least some comparison with project costs incurred over the same period. Following discussions with project staff, three models have been prepared reflecting the evaluation and staff agreement on the likely recipients of the dairy cows. Project staff estimated that at the time of distribution, 60 percent of the 1012 distributed heifers went to poorer households, and 40 percent went to less poor households, but acknowledged that the actual numbers of cows given either to proxy borrowers or sold off to larger scale producers post distribution, was unknown. Given the lack of project records on this issue, it was not possible for the evaluation to verify the project staff estimates of who actually raised the cows distributed, or who received the benefits. However, it was concluded that the heifers were likely to have ended up in three kinds of farms:

- Small farms operating in the more remote and drier districts, which were unable to benefit particularly from support services and used traditional production methods, but were able to sell milk directly to local consumers at reasonable prices. In this model production levels are generally low, at 4500 litres per lactation, feed quality and quantity is well below optimal and calving occurs every other year.
- Slightly larger farms operating throughout the Valley which had access to support services but operated in very competitive markets and sold milk to local milk collectors, but at low prices. In general production parameters remain low in this model, because of very low receipts and admixture with local cattle.
- Larger scale farms operating in the higher rainfall districts (Zahle and West Bekaa), which have adopted intensive production methods and sell milk to the MCCs or directly to dairy processors. Lactation performance (6000 litres) reflects better feeding and management as a result of adoption of extension messages. The milk price is based on LBP 500 per litre paid by the cooperatives and processed through the MCC, less the 8% collection levy normally charged. This model reflects the consolidation of herds which has occurred.

83. The models estimate additional production from the cows obtained directly or indirectly from the project, without taking account of the other cows in the herd. The models were also calculated with and without loan repayments; in reality loan repayments for dairy cows have been so low that the latter situation will be more representative. The comparative results in terms of net income per cow for the three scenarios are summarised below, more detailed models and their underlying assumptions can be found in Annex 1, appendices 1-2 (available on request from the IFAD's Office of Evaluation).

Table 6. Annual Income per Cow, Excluding Investment Costs (USD)

Model Type	Project Year									
	1	2	3	4	5	6	7	8	9	10
2 cow enterprise, selling at high local prices	586	790.	905	872	937	1 002	717	763	814	868
2 cows, selling to local milk collectors	53	77	115	86	97	103	75	79	84	90
High productivity herd	1 020	700	900	800	900	828	890	854	860	860

Source: Mission Estimates

84. The first and third models above achieved similar net incomes, the former from a reasonable milk price with limited costs, the latter because of higher productivity. However, both herd size and absolute producer numbers in the first model are very limited. The difference between the first and second models is the milk price (*circa* LBP 500 per litre cf. LBP 300), which has a significantly positive impact on the financial viability of the enterprise. This second model illustrates that farms with a four to five cow herd produce milk volumes which are too large for local sale but too small to attract the higher price paid by cooperatives. Such farmers are forced to sell their milk to local collectors, which significantly reduces the returns per cow and renders such enterprises marginal at best. In the judgement of the evaluation the second model is not viable, and illustrates why a number of small producers have gradually withdrawn from milk production: their animals have almost certainly been absorbed into the larger herds represented by the third model. This was corroborated during fieldwork, when the evaluation found that only a few small-scale farmers with project distributed cows could be traced, whereas larger scale farmers with several project cows were readily apparent.

85. It must be emphasised that the above projections exclude financing costs (i.e. loan repayments). For small producers if financing costs are included, then potential returns are much reduced and the risks to poor households could be heightened. To reduce risk it is essential that milk flows are sustained, which requires high standards of both feeding and breeding; if the cows are allowed to go dry, this would affect both the ability to repay the loans and, possibly, household food security.

Overall Cost/ Benefit for the Dairy Herd

86. Using the high productivity model described above, and estimating the growth in the herd (plus followers)³⁴. The total income generated at the end of 2002 by the introduced dairy cows, after the payment of financing costs, is estimated at USD 1.8 million. The estimation of the costs incurred by the project to this point in providing support services to dairy farmers are summarised below: these cover operational costs, whereas all investment costs in civil works, equipment and cars are considered public investments³⁵.

Table 7. SLRP Operational Costs for Dairy Support Activities USD (000s)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	Totals
Distribution Centre	0	0	70	14.6	8	10.4	87	4.9	14.3	209
Credit support	3.8	18.5	24.4	24.5	19.4	21.8	16.9	22.9	17.9	170.2
Extension Services	5.4	42.6	82.1	59	56.5	71.2	83.8	111.6	86.9	599
MCC					19.4	68.5	125.6	250.7	240	704.2
Totals	9.2	61.1	176.8	98.1	83.8	103	187.5	139.4	119	1,682

Source: finance office, PMU

³⁴ For details see Annex 1, appendix 3 (available on request from the IFAD's Office of Evaluation).

³⁵ Data constraints do not allow for an estimation of the depreciation and present value of the project investment items.

At the end of 2002 therefore, an approximation of the operational costs of the dairy interventions is USD 1.7 million, or roughly the same as the income generated.

87. However, the longer term growth curve of the income generated in the dairy herd model indicates that after 2002, the annual net benefits should increase. This means that, provided farmers have access to support services at similar costs to those assumed in the model, and that marketing circumstances remain the same, then it would seem that the growth curve can be sustained without further project support. This suggests that the project can be said to have contributed to the development of a viable dairy industry in the Bekaa valley – at least for larger scale producers.

88. Overall, therefore, the evaluation concluded that the incremental benefits for farmers in the Bekaa from the introduction of the dairy herd were likely to be substantial, compared to the costs incurred by the project in providing these benefits. Despite this conclusion, the farm models suggest that the introduced technology do not appear to have been appropriate for many of the small scale farmers who were the initial target group of the project, rather it was appropriate only for those farmers able to sell their milk at high local prices in niche markets, or to large scale, high productivity farmers. The efficiency of the project in achieving its intended benefits for poor smallholders is therefore modest.

89. The performance of the project overall is estimated by the evaluation as substantial.

V. RURAL POVERTY IMPACT

90. Poverty in Lebanon is not as conspicuous as in other developing countries, but deeper examination reveals the presence of poverty, especially in rural areas. Access to basic services and economic participation is determined by geography, reflecting an approach to development which is still quite centralised. Moreover, there are the “old poor” who have always been marginalized from social and economic benefits, mostly concentrated in rural areas, and the “new poor” whose livelihoods were destroyed during the war, but no recent statistics are available to describe more rigorously this distribution. A major safety net for the poor is remittances sent from family émigrés. To assess the project’s impacts and outreach, the evaluation conducted a small impact survey covering 40 farmers, selected randomly from the PMU records. Results showed that:

- 33 of the farmers had received pregnant heifers through the project, but 23 of them (70%) had sold them. Of the remaining ten farmers, seven indicated that they had incomes between LBP 80 000 – 600 000³⁶, and hence were from the target group.
- Seven farmers had taken loans for sheep fattening; from this group five farmers were from the target group.

A. Impact on Physical and Financial Assets

91. **Dairy Farmers.** The evaluation found that there was a strong sense of insecurity among many small farmers, no longer because of the aftermath of the civil war, but because of economic uncertainties. Farmers who had received heifers, believed that this had increased the security of their livelihoods, and a number had managed to increase the size of their herds, further enhancing their physical assets. Herd increases derived either from natural growth or through a USAID project covering the Bekaa. For such farmers improved incomes arose from increased milk production and the sale of offspring. However, for the limited number of poorer farmers, who received and retained heifers, such increased incomes have generally not been sufficient to remove their vulnerability and dairying is considered high risk: relative benefits have depended on the level of poverty, local circumstances and availability of other sources of income to mitigate risk (see examples in the boxes).

³⁶ Data from two questionnaires were missing.

Case 1: Fawzia has four dependent sons. She received an imported heifer from SLRP by trading in three local cows, and sells five kg of milk per day (at LBP 750 per kg.) to local villagers. Subsequently she has purchased two other cows. Although two of her sons are of working age, they have been unemployed for over a year. Last year Fawzia became ill and the medical expenses made the family's situation deteriorate significantly, so she was not able to repay the loan for the cow or loans for her other debts.

Case2: Nayfeh is the wife of a small farmer, who received a heifer from the project and also worked in a plastics factory. Two years ago, after her husband became bed ridden and his salary was reduced to half, Nayfeh took over the care of their heifer. She sold the milk to people in the village, and later joined a Rural Women (RW) cooperative to learn different food processing techniques. As a result, she began making cheese and yoghurt and sold it alongside the milk. Gradually, she bought more cows and renovated an annex of their house and turned it into a little store where she now sells her products.

92. **Other Agricultural Activities.** The evaluation found that with the prevailing prices of fodder and meat lamb fattening was no longer considered profitable and had not contributed to increasing household physical or financial assets.

93. **Rural Women** The evaluation concluded that for many of the rural women who had taken loans through the Rural Women Programme (RWP), their financial assets had increased. This conclusion arises from the high levels of profit achieved in many IGAs, the freedom of women to select activities financed by the credit and is also influenced by the possibility of women employment in the cooperatives. However, women beneficiaries explained that the returns from IGAs and employment earnings were still insufficient to buy big items such as household appliances, although they have enabled them to contribute to household expenses.

94. **Access to Financial Services.** Through the SLRP a total of 2 683 households have been provided with access to credit, either for livestock or income generating activities. Previously poor households took loans from family members, since they seldom qualified for bank loans, hence credit access has improved.

B. Impact on Human Assets

95. The project has provided training for a large number of beneficiaries. For farmers this has included training in animal health, animal nutrition, breeding, and artificial insemination and forage production. Most farmers who attended the SLRP training courses indicated that they had benefited from the training and were applying their new skills: these courses were open to all farmers in the area. Through the RWP, 1105 women have been trained in income generating activities and basic business skills: these two activities were considered complementary and have assisted women to use their loans efficiently. Women have also received courses in nutrition and sanitary methods of food processing, knowledge which is reportedly on-passed to female relatives and neighbours, who have also then adopted these methods. Overall, while the project has no doubt affected positively human assets, it has also resulted in increased workloads for many households. Women's workloads have increased through their employment in the cooperatives, although only in the processing season, whilst men's workloads, and probably children's workloads as well, have increased with caring for more livestock.

C. Impact on Social Capital and Empowerment

96. There have been two contrary experiences in social capital in SLRP. Dairy farmers did not experience any empowerment, rather they realised their helplessness in the face of milk collection cooperatives which they were unable to influence. Farmers expressed their dissatisfaction about not having any negotiating power, and are aware that the problem is because they are not united. In many

ways this was a missed opportunity to increase the impact of the project on social capital. If milk collection cooperatives had been formed from producers, the chances of success would have been greatly increased. In contrast, through the small RWP, 1 105 women have become members of women's cooperatives, and have experienced improved livelihoods and empowerment. Cooperative working has allowed members to put aside their different affiliations, uniting them in facing common goals and challenges. The social cohesion established is considered sustainable and could have profound impacts, if it is increased in scale. This experience of cooperative working is not common in Lebanon. In general cooperatives are still not considered as useful self-help organizations, rather they are known as entities established to get financial assistance and/or political backing.

97. The establishment of MCCs and the RW cooperatives by the project has given beneficiaries a greater sense of empowerment in the marketing of their products. Many dairy farmers who were selling to milk processors shifted to selling milk to the MCCs when they received higher milk prices, and generally had more trust in the MCCs than the processors. The establishment of the RW cooperatives has generally improved marketing opportunities, including the assistance received from the YMCA. Members have felt more empowered vis-à-vis marketing through these cooperatives.

D. Impact on Food Security

98. Discussions undertaken during the evaluation with Lebanese Red Cross staff in Zahle and a Ministry of Health representative, suggested that malnutrition did not exist among the rural poor of the Bekaa. The major problem highlighted was the inability of the poor (especially mothers who are unable to nurse) to purchase milk for infants, as it is both expensive and has a short shelf life. Cow or goat milk is rejected because of high bacteria and fat contents: this is reportedly a prevalent problem for all the poor in Lebanon.

99. However, the evaluation concluded that the project had moderately increased household food security in the project area. For dairy farmers some of the extra milk produced has been kept for home consumption, whilst women employed in cooperatives, who have an additional source of income anyway, are also able to purchase products at wholesale prices. An unintended benefit for poor households, which are not dairy farmers, is that the drop in the price of milk may have made dairy products more affordable.

100. The project has encouraged the uptake of new forms of technology, which have helped either to raise the levels of productivity (for farmers) or have provided alternative income sources (for women). Through the RWP new food products, such as prepared sauces and instant mixes for local dishes have been developed and/or promoted, and organic ranges have been introduced. In addition, women have become more knowledgeable about nutrition, which, in combination with better access to food suggests the possibility of improved family diets and maybe even health status.

E. Impact on the Environment and Communal Resource Base

101. The livestock component has probably had a small positive impact on the environment. There is no possibility that the introduction of the heifers resulted in overgrazing, as they are not grazed, but mostly remain housed on the farms. The fodder produced to support them, if grown on-farm, is fertilised with farmyard manure, hence soil fertility and soil structure on these farms has probably improved as a result. Too few sheep were imported to have had any negative grazing impact, and the lamb fattening operations were based on locally produced lambs, raised partly in sheds and partly on grazed crop residues. This activity has resulted in no net increase in small ruminant numbers, therefore there has been no increase in grazing pressure. Their manure has contributed to the fertility of arable lands on which they are grazed and this value is amply demonstrated by their freedom to graze without charge. The project also introduced rangeland management and reseeding practices in the sheep grazing areas, with some positive effect.

F. Impact on Institutions, Policies and the Regulatory Framework

102. Whilst the project has improved access to credit for poor rural women, and has demonstrated the demand for such credit, this was not associated with any changes to the existing institutional arrangements for credit provision. In fact the arrangements are short term and not sustainable (see sustainability). Through the RWP, 20 cooperatives have been formed: these are the first women cooperatives in the Bekaa, and have demonstrated the usefulness of cooperatives as self help organizations through which women can improve their livelihoods. The Bureau of Cooperatives in Zahle suggested to the evaluation that these cooperatives could be a role model for similar cooperatives in the Bekaa. The Institutional Strengthening provided for the MOA has significantly enhanced the capabilities of some of the Ministry staff, but to see the wider impacts of these changes requires that the staff concerned be deployed and funded appropriately; it is unclear if this will actually occur given the MOA funding constraints. The evaluation could find no impacts on the policy or regulatory frameworks.

G. Impact on Gender Equality and Women Empowerment

103. Gender equality was not a specific project objective in the appraisal. However, the RWP has effectively enhanced women's social status and empowered them as a result of the success of the RW cooperatives. More women are now able to work outside their homes, have demonstrated their self-reliance, and as income earners, their decision-making role in the household has been strengthened. This has also applied to single women, who whilst still living with their families, have been granted greater independence as a result of contributing to household incomes. This is illustrated by women's increased ability to travel alone, so that they can now participate in workshops or exhibits in the country, or outside (for example, some have gone to Syria and Jordan). In cooperatives with men as members, women reported that they are less inhibited and worked with them, as equal partners.

H. Sustainability

104. **Livestock.** At the time of the Completion Evaluation, there seemed to be less opportunity for farms to continue producing milk from small numbers of cows. The circumstances of small farm dairy production have changed since appraisal and small-scale dairy enterprises are likely to be marginal or unprofitable at the current cost of concentrates and the level of milk prices. While some small farms will remain by supplying local niche markets, small production units in general are likely to be forced out as farm sizes increase and the dairy industry in the Bekaa develops. It is difficult to assess whether the heifer import/distribution activities funded by the project could have been sustainable in the long term. If the loans had been repaid would it have been logical to continue importing? In the evaluation judgement this could not have been a likely outcome, as many other sources of dairy animals have developed in the private sector; essentially the "kick start" for the dairy industry is now completed.

105. The project comprehensively addressed the need for support services for livestock production, although the emphasis as the project was implemented shifted almost exclusively to the needs of the dairy industry. The services which can be offered through the private sector are likely to prove sustainable providing they are not undercut by competition with government (see below). However, sustainability of the services which are normally funded by government - extension and research - appear much less certain. In the case of animal health and livestock extension the capacity has been created in the MOA, but the extent to which it will be used will depend on the policies adopted for support for the livestock industry in general and the funding available.

106. The delivery of AI stopped when the project ended, but it has been adopted since and is being continued by veterinarians and technicians working in the private sector. There is some evidence of an increasing demand for this service. The necessary inputs are also available for the AI programme to expand as demand for AI increases. However there are some concerns over the government policy of providing AI services at no cost, which undercuts the emerging private sector capability. This also

applies to the delivery of vaccination and animal health services. Neither can be sustained in the face of highly subsidised government competition.

107. The MCCs and the milk collection cooperatives have had some positive impacts on pricing at the level of individual households supplying the MCCs, but it is questionable as to whether this improved milk price can be sustained in view of the withdrawal of most of the collection cooperatives and the continuing uncertainty over the operation of the MCCs themselves. Some difficult decisions have to be made which will be determined by wider policy issues. For example if the government wishes to continue subsidising MCCs operations, then higher achieved milk prices can be on-passed to the small producers. However, if MCCs are required to meet their own long term operating expenses, then it is difficult to see how this additional layer of expense will ever be funded. In the competitive environment of the dairy industry, it is unlikely that processors will readily agree to provide the necessary funding.

108. **The Provision of Credit.** The sustainability of credit provision depends on the arrangements made to create, by project closure, an autonomous self-reliant mechanism that can perpetuate the provision of credit to the poor in the Bekaa. However, the way in which credit has been provided by SLRP has meant that at the end of project activities, credit provision would stop. It must be noted that although there is a revolving fund for women's credit, this is not the same as establishing an **autonomous mechanism** which can manage these resources and provide a wide range of needed rural financial services. Loans were not provided to women in 2003, but could have been had such a mechanism been established.

109. In the case of loans to women the project has chosen to use cooperatives as channels for loan funds, which was an important step towards delegating credit provision to an indigenous institution. However, this decision was not followed by the highly needed additional steps that would have transformed these cooperatives from mere recipients of loans, into institutions that could provide credit to their members on a continuous basis. This would have been possible had SLRP provided loans as seed money towards a revolving fund managed by these cooperatives (or linked them with a willing larger financial intermediary). A network of such revolving funds managed by cooperatives would have constituted a major and sustainable improvement in credit provision in the Bekaa. In the case of loans for livestock, the exceptionally poor repayment rates have greatly reduced considerations of sustainability of credit provision.

110. **The Sustainability of Income Generated.** In order to assess the sustainability of income generated, evidence is needed of the growth of the initial investment and/or reinvestment of profits. Evidence for this is scanty for livestock loans, but profits made by cooperatives often appear to be reinvested. However, a responsive marketing mechanism has not been developed, which could help to protect the future of the investments already made. Despite this, women's loans for food processing, which are relatively flexible in that products can be adjusted to market requirements, are likely to be sustainable. By comparison, loans for cows and sheep fattening which were obviously much more inflexible are not likely to be sustainable. Overall, the conclusion is that marketing constraints have contributed to reducing sustainability of the activities financed.

111. **The Rural Women's Programme.** The entrepreneurial and social development benefits which individual rural women have received through participating in the RWP have been considerable, and these are presently sustainable, without further inputs from the project. However, because the cooperatives are all relatively new, they are not in a position to "graduate" as fully independent entities, as yet. The financial viability of these cooperatives would almost certainly be greatly improved if they could develop better marketing arrangements. Their marketing advantage lies in their innovative food products, which are suitable for everyday modern demands (e.g. instant dip mixes, prepared sauces and organic products). However, the cooperatives are unable to advertise or market their products directly in the major cities because of lack of funds: at present they rely on the market niches they have found and the YMCA, which sells their products under its cooperative label. This strategy reduces their profit margins and maintains their anonymity. One possibility would be to use

capital from reserve funds for marketing activities, rather than dispersing additional loans: this might initially be tried on an experimental basis to determine cost-benefits. To date, the cooperative spirit and determination demonstrated has been remarkable, and augurs well for the future.

112. The present arrangements for the continuation of the RWU, which has proved effective in managing the funds provided by IFAD, are uncertain within SLRP. The best arrangement would be for the RWU to be incorporated with the Cooperative Bureau in Zahle, but with its own budget, which would make its future independent of the future of the livestock activities in SLRP. It would also place the RWU in a more logical institutional setting. The difficulty in doing this is that the PMU has been established as an autonomous entity – it is uncertain if the RWU would actually be able to undertake its role effectively if it was so transferred³⁷.

I. Innovation/Replication

113. **Women’s Self Help Cooperatives.** The model of women’s self help cooperatives developed through the RWU is very innovative for Bekaa and is replicable and could be scaled up in other parts of Lebanon. There are some evidence that the YMCA has already adopted this model and is using it elsewhere.

114. **Artificial Insemination.** The project introduced AI to the Bekaaa. As a mechanism for introducing improved genetic potential, AI is particularly useful, and can be considered a contextual innovation. However, both coverage and efficiency are likely to be low unless AI is provided by competent and adequately motivated operators. In the context of maintaining the improved genes which have been introduced to the Valley through SLRP, USAID and those heifers now being imported by the private sector, its overall contribution has been useful, but probably comparatively small. As an initiative to compensate for a shortage of bulls, AI is inherently unsound. Many heifer introduction programmes have failed because it was assumed that AI would do the work of bulls. In the project context AI did not provide enough ‘bull power’, matings having been mainly provided by local bulls. The conclusion is that AI was a necessary intervention, but should not be replicated or scaled up to substitute for bulls where these are thought to be lacking. As an innovation for improving the genetic potential in some herds, but used in addition to bulls, the use of AI could be replicated.

J. Other Poverty Impacts

115. One other additional impact as a result of SLRP is that there is now a better acknowledgement of the importance of credit in rural areas. SLRP has illustrated the magnitude of demand for credit, which could be useful in future to enhance attention to rural finance targeted to the poor.

116. Overall, given the above analysis, the evaluation concluded that project’s contribution to sustainable rural poverty impact in the Bekaa has been modest. This takes into consideration the original intentions of project design and the distribution of project expenditures at completion.

VI. PERFORMANCE OF THE PARTNERS

A. Performance of IFAD

117. IFAD’s performance at the design stage has partly been assessed above under “relevance of objectives”, with the exception of the implementation arrangements. Because data was either not available or was out-of-date, the design rightly allowed for an extensive baseline survey and studies to complete the description of the target groups and to decide on milk marketing and credit arrangements. Perhaps the poor information base, relating to these crucial features of the project, should have sounded a note of caution for the design team, to formulate a better defined flexible approach with

³⁷ This is because the RWU would not be empowered to handle funds in the way it has been able to under SLRP.

greater involvement of IFAD. These important features were decided in the early stages of implementation, no doubt agreed with the CI while the extent of IFAD's involvement is unclear.

118. The evaluation concluded that insufficient attention was given to the elaboration of the new project features mentioned above. The baseline did not lead to clear identification of the target group, the credit arrangement did not take into consideration the sustainability factor and the decision on milk marketing arrangements has stalled. In addition, little was said in the design about cooperatives, and there was insufficient attention paid to their role. Given the history of cooperatives in Lebanon, this was an oversight.

119. During implementation project management has exercised its authority by modifying some aspects of the original project proposals without assessing their coherence with the intended project objectives and goals and their consequences on the expected poverty impact of the project. These changes have been introduced with no feedback from beneficiaries and little assessment of project impacts. The lack of participatory M&E system is particularly noteworthy in SLRP as it should have been the means through which important strategic decisions were made both by the project management and the PCC. The fact that no MTR took place also played a role. The reason given for this was partly the intensive level of supervision and follow up; this implies that both IFAD and the CI can be said to have been in full agreement with the changes and decisions made. In addition, as mentioned earlier, the relevance of the livestock interventions declined rapidly. This was due to the slow start up to the project, the difficulties experienced with the small ruminant programme, and the rapid development of the dairy industry. Despite the design flexibility allowed, this aspect was not fully addressed.

120. Overall, the evaluation concluded that IFAD had performed well in facilitating a design that was appropriate to the circumstances at the time, but had performed modestly, together with the CI, in providing guidance to the project in making strategic decisions during implementation.

B. Performance of the Cooperating Institution

121. The start up mission for SLRP took place in 1994 and was followed by seven supervision missions, the last one taking place in April 2002. This is approximately one supervision per year. The missions normally comprised two officers from AFESD, and lasted for four days. Project staff reported favourably on support received from the CI. In addition SLRP has received four implementation follow-up missions from IFAD. Project Status Reports, available from 1997 and based on review of the CI reports, mostly indicate a very satisfactory implementation situation, as illustrated in Table 8.

Table 8. Selected Project Ratings from PSRs

Indicator*	2001	2000	1999	1998	1997
Compliance with loan covenants	1	1	2	2	1
Availability of counterpart funds	1	1	1	1	S
Compliance with procurement procedures	1	2	2	3	1
Achievement of physical targets	1	2	2	2	1
Technical assistance progress	2	2	2	2	1
Performance of the M&E system	2	2	2	2	S
Coherence between AWPB and implementation	2	2	2	2	S
Project management performance	1	2	2	2	1
Development impact	1	2	2	2	2
Expected benefits	1	2	2	2	2
Beneficiary participation	2	2	2	2	2
Institution building	1	1	1	1	1

* 1=problem free; 2 = minor problems; 3 = major problems, improving; 4 = major problems, not improving; S = satisfactory.

122. In comparing the snapshots presented by the above ratings, especially the latest set, with evaluation findings would tend to suggest that too positive a picture has been presented. This particularly applies to the development indicators, (development impact, expected benefits and beneficiary participation): these must only relate to the rural women's programme in order to be assessed so positively. For the performance of livestock activities realistic ratings would be much higher (lower performance). It is unclear how the CI could have assessed these development indicators, as no data were available in this regard. In addition, the evaluation would question the high rating of the M&E system, which in its judgement has not been as effective as expected.

123. The indications from these ratings are that while the CI rightly acknowledged the implementation capability of the project management, its performance was modest in that it did not pay enough attention to the strategic direction of the project, the rationale for the introduction of new activities, the poverty impacts generated on the ground and the intended participatory approach.

C. Government and its Agencies (including project management)

124. **The Ministry of Agriculture.** Establishing the autonomy of the PMU has been a major factor influencing the implementation of the project. This autonomy, plus the incorporation of the TA into the management structure, meant there has been strong central management for the project, with little need to call on support from the MOA. However, in the organisation structure the role of MOA is clearly seen as controlling the direction of the project through the PCC, as five of the seven members are senior executives of the MOA. Despite this, it appears that much of the technical decisions of the project was actually left to the PMU at Zahle, including making the changes in the design and implementation arrangements referred to previously. Only some decisions, for example to build the MCCs, have been approved by the PCC (and the CI, IFAD and OPEC).

125. Staff have been seconded from the MOA as required (but mostly on a part time basis) and the project has been supported in its direct recruitment. Budget approvals and counterpart funds have mostly been provided in a timely manner. The MOA facilitated the involvement of LARI as an implementing partner, including the backstopping agreement with ICARDA, but also allowed LARI to cease operations once project funding was no longer available.

126. The MOA successfully arranged the extension of the decree establishing the PMU once it was obvious that the project required more time for implementation.

127. **The Project Management Unit.** The project was quite slow to start; this was explained by the time required to prepare the decree granting autonomy to the PMU and to find suitable accommodation in the Bekaa for the PMU and the District Offices. Up to 2001, almost project closure for IFAD, the project implementation was going well and even the milk collection centres were operating to the benefit of small producers. Hence it would appear that for most of the project life the project management has effectively pursued the implementation in a dynamic and technically competent fashion. Most of the present difficulties have arisen since then. The project management used great innovation to arrange the programme of technical assistance, and has very successfully implemented the training activities for staff and beneficiaries. This has resulted in considerable and sustainable institutional strengthening for the MOA. Although the TA has been overall effective, it was unable to stem the rate at which heifers were lost or to offer suggestions as to how these losses might have been reduced. The programme for rural women has been very successful in its implementation and has been usefully expanded from its original design parameters.

128. However, as mentioned earlier, the evaluation was concerned at some of the decisions reached during implementation, which have affected the direction and sustainability of the project, the extent of outreach to the target groups and the impacts achieved for poorer beneficiaries. For example, the credit arrangements made with the commercial bank were not conducive to sustainability of credit supply for the poor and the decision not to hire TA to design a proper M&E system complete with appropriate indicators has affected the effectiveness of this system. With hindsight, the decision to

build MCCs was also questionable as it did not include sufficient financial or economic analysis or address the question of an exit strategy post project completion. Of great concern to the evaluation was the inability to identify actual beneficiaries of the livestock activities in any number, and socio-economic status or to find records of the support they had received. This suggests the project has not been geared to maximise impacts for the poor.

129. **Lebanon Agricultural Research Institute.** Although research programmes were started at LARI, and considerable investment in reconstruction took place³⁸, the programmes were only continued as long as SLRP provided the funding. As soon as they became the responsibility of LARI, they were stopped. Whilst this is regrettable, and has significantly detracted from the potential poverty impact of SLRP with respect to small ruminants, the reason given is apparently the inability of MOA to provide funding for recurrent expenditure.

130. There are no specific indications that SLRP has affected the regulatory framework or pro-poor policies of the GRL. The cooperative Department at Zahle was unable to support the women's cooperatives because of budget constraints. However, the credit arrangements adopted in the RWP, and the associated training and support provided to the cooperatives could be replicable, if this experience were to be adopted by another funding agency. On balance, despite the numerous positive aspects outlined above, the overall performance of the implementing agencies could have been higher in supporting project poverty impact and sustainability.

D. Performance of Non-Government and Community Based Organizations

131. Cooperatives were mentioned in the design proposals for arranging milk collection and processing, and USD 1.5 million was included to support three of them. There was an allusion to the necessity of group formation for women, but were no proposals for the inclusion of NGOs or CBOs. In the design neither cooperatives nor any other organizations were considered as partners in the implementation, rather they were simply to provide services. Possibly as a result there have been two completely opposite experiences with cooperatives during implementation, the poor contribution of the cooperatives which were contracted for milk collection compared with the very positive experience with the RW cooperatives, which were developed as genuine partners. The NGO YMCA was contracted to provide training for women, which was done effectively but its overall involvement was limited, as per the design.

E. Performance of Co-financiers

132. The OPEC fund co-financed the livestock credit activities. Project sources reported that OPEC has been a full and active partner in the project, despite the problems with credit recovery. The fund approved partial resource re-allocation construct the MCCs and its performance has overall been substantial

VII. OVERALL ASSESSMENT AND CONCLUSIONS

A. Livestock

133. **Livestock Distribution.** The livestock interventions were well conceived in the design to achieve the project's stated objectives. Overall, the dairy cattle provided by the project in total have made a contribution and will continue to contribute to the overall restocking of the dairy industry in the Bekaa Valley. Organic growth in the herd means that in total the project has now contributed an estimated 1 500 milking cows (about 7% of the total herd in the Valley) and 3 000 followers, and these numbers will increase steadily. This represents a useful economic boost to production and earnings for the farmers concerned. Revised farm financial models suggest that very small-scale dairy farmers (less than four cows) who can sell into niche local markets can achieve useful incomes, but medium

³⁸ Estimated at USD 1 million.

scale producers (greater than four cows), especially those relying on traditional milk collectors, are likely to go out of production.

134. Despite this overall positive contribution, ultimately the scope of the livestock interventions has shifted to promoting a modern dairy industry for a relatively small number of beneficiaries, rather than the originally intended reach to a larger number of poorer farmers. Providing only one cow per beneficiary was not sound, and the distribution has been more appropriate to larger farmers. There has also been herd consolidation and on-sale of animals, but the extent is unknown (although the small impact survey suggested that about 70% of heifers could have been on-passed). The removal of the sheep and goat interventions has inevitably significantly reduced the potential poverty outreach, has affected the coherence of components objectives with overall project goals, and has impinged on the poverty impacts of the project. The evaluation was unable to confirm the numbers of actual beneficiaries reached nor their socio-economic status, but as these only relate to the heifer distributions, the conclusion must be that the restocking activities **for the intended target group** through SLRP have been modest.

135. **Support Services.** The project successfully developed livestock support services, which helped contribute to the rapid development of the dairy industry throughout the Valley. Whilst it did not prove possible to estimate numbers of farmers supported by these services with any accuracy, the evaluation concluded that the combination of the improved veterinary, vaccination, AI and fodder services and demonstrations had played an important role overall and at least touched on the activities of many farmers. The limitation on outreach has been the lack of a communications component. However, for beneficiaries who received the pregnant heifers the extent of full-time support before and after distribution was under-estimated; this may have contributed to the high numbers of fatalities. Fortunately, the insurance scheme worked well and provided compensation.

136. The success of the support activities has owed much to the extensive training and TA programmes. Many staff who were seconded to provide these services have received useful training to upgrade their skills: as they have returned to their full-time positions in the MOA, they will serve to enhance the capacity of the Ministry. The project has also stimulated private sector services for livestock support, but at the time of the evaluation they remain fragile. The feed testing laboratory appears inadequate for project needs. It might be better designated as a National resource, supporting the whole livestock sector.

137. **Milk Marketing.** Although there was a successful initial experience with milk collection cooperatives and centres, the basis on which this was rapidly expanded and the arrangements made could have been better conceived. It is unlikely that Milk Collection Centres can be **commercially** viable, and they are likely to require continuous subsidies in the foreseeable future. Unless the Government regulates milk prices and fosters producer-led milk cooperatives this problem will continue. To a large extent their services are those which, in a more advanced dairy industry, the private sector processors should themselves provide. Government could operate them as a state activity, but their success is predicated on a reliable system of milk collection, which did not exist at the time of the evaluation.

138. **Environmental Impacts.** The evaluation concluded that in their totality the livestock activities of SLRP were likely to have a positive impact on the environment. This balances the considerations of moderate increases in the number of animals with the promotion of forage and the benefits of organic manure. The project also introduced rangeland management and reseeded practices in the sheep grazing areas, with some positive effects.

B. Credit

139. Overall, the project design of the credit interventions was in accord with the credit approaches of the early 1990s, i.e. was concerned with 'opportunities provided', rather than as an 'approach to self-development' that needed to be gradually introduced and nurtured. The mechanism chosen by the

project did little to correct this situation, and there was lack of appreciation of the need to establish a system of rural financial services that would be sustainable without project support. This is regrettable for the very promising experience with loans to women's activities, which could be continued.

140. Total loan numbers (of 3 272) is a project achievement to be commended. Changes to the project credit design were made during implementation to reflect the circumstances in the project area, but these underestimated the importance of effective credit management at the field level, hence there has been inadequate technical follow up expertise to support what was a new experience for the project's farmer beneficiaries. The result has been that the project's credit system for livestock was geared solely to distributing loans, but was not adequate to undertaking the monitoring which could have predicted the difficulties which eventually arose. The lack of specialist knowledge to follow up on the credit supplied did not equip the project to cope with adverse circumstances.

141. Beneficiaries perception that project loans are "disguised grants" had a significant negative impact on repayment rates for the livestock loans. The absolute size of loans and the borrower's lack of experience with formal loans, however, served to further complicate the problem. The project could have attempted to pursue an approach that gradually introduced farmers to the idea of formal credit through the implementation of a transitional phase.

142. The impacts from credit on the income levels of rural women beneficiaries has been very positive, though a quantitative measure is not feasible given the lack of adequate monitoring at the field level. This conclusion therefore comes from the examination of a number of case studies during evaluation field work.

143. The experience of SLRP is yet another example of the importance of factoring 'sustainability' from the very outset into project credit activities. A distinction must be drawn between the extent to which a project was successful in providing meaningful credit opportunities to the rural poor and the extent to which it succeeded in creating an autonomous system that can perpetuate these opportunities and ensure the provision of a wide range of rural financial services to the poor. Such a system was not designed for SLRP.

C. Rural Women

144. Whilst the design of the Rural Women's Programme was appropriate, a factor in the success achieved was that the RWU devoted remarkable efforts to learn about their target group's needs and interests, prior to implementing project activities. As a result, they were able to offer women training in income generating activities which were relevant to their economic environment.

145. Qualified and culturally sensitive extension agents have been an important catalyst for achieving programme objectives. The sensitivity of the RWU staff allowed them to cross social and other barriers and facilitated women's participation in the programme. The close relationships built up then led to effective support systems for the target group, especially for first time creditors, including monitoring of the activities.

146. The experience of SLRP demonstrated that the organization of poor rural women into self-help groups has been an effective means of encouraging their empowerment. This can only be achieved, however, by adequate education of the target group in the concepts and benefits of group formation and group working. Group formation, in this case through cooperatives, has also resulted in improved social cohesion.

147. Another demonstrated lesson through SLRP is that sustainable income generating activities for women require more than credit and training since the most challenging task has proved to be the marketing of the products. It would have been preferable if this had been given more attention in the design.

148. Rural Women Cooperatives have gradually played a central role in the livelihood of beneficiaries. They are places where they can earn incomes, where they can take pride in their work and where they are able to socialise with other women from the community. However, after three years of implementation, the cooperatives' continuation is not guaranteed and they are financially still vulnerable, mostly because of difficulties in marketing all their output. Further support will be necessary to ensure the continuation of the cooperatives. Despite this, the experience has very good potential and could well be replicable in other parts of Lebanon.

D. Project Management

149. **Direction.** Given the initial limited experience of internationally funded development projects, SLRP has been well implemented and managed. By according the project management financial and administrative autonomy, GRL has made the project management more responsible for project achievements, and this is reflected in the modifications to project design during implementation. However, management has lacked relevant indicators of development impacts and beneficiary feedback to guide the direction of these changes. In addition, coherence of these changes with the overall poverty goals of the project was not assessed.

150. **Institutional Strengthening.** This activity has been well implemented and has resulted in considerable strengthening of the MOA, as intended in the design. The effects of the project support could be widespread and sustainable if MOA is able to fund the appropriate activities.

151. **Monitoring.** The M&E unit has successfully compiled data on physical and technical achievements by means of a well functioning reporting system. The good reporting and compilation has not however been matched by corresponding analysis. There has been no involvement of project beneficiaries in the monitoring efforts and no regular feedback from beneficiaries has been established.

152. **Impact Assessment.** The M&E system as implemented had limited rigorous assessment of the poverty reduction impacts of the distributed livestock. The absence of data on beneficiaries who actually received livestock and their socio-economic status is also noteworthy. Impact indicators (e.g. the adoption rates following demonstrations and training, increases in income or milk yields following livestock enterprises or adoption of new forage packages etc) have not been developed, hence the difficulties in undertaking regular impact assessment. Moreover, the system does not permit the identification of project services which have been provided for project funded livestock.

153. **Sustainability of the PMU.** The PMU has now delivered its services regarding project stated objectives. However, GRL has been left with a difficult situation with respect to the MCC, which may necessitate the continuation of the PMU, albeit in a different guise. Special arrangements might usefully be made for the continuation of the RWU, if a suitable mechanism can be developed to allow the RWU to continue its credit activities for IGAs.

VIII. INSIGHTS AND RECOMMENDATIONS

Post Conflict Situation (i) - Creating Social Cohesion

154. An unexpected but very significant effect of the project has been the extent of social cohesion which has been fostered as a result of the formation of cooperatives for rural women. In Lebanon there are strong traditional allegiances, and after 17 years of civil war these have acted, to some extent, to keep groups apart. However, the cooperatives, formed as a means of bringing women together for their financial advantage, have led to the identification of common concerns and interests, thus diffusing barriers and building social capital. The formation of the women's cooperatives in SLRP owes much to the prior success experienced with individual loans and the trust built up between the

extension agents and the beneficiaries: initially women were not interested in group formation, but were persuaded of the advantages.

155. The impacts of this experience have been seen economically, socially and at policy level. Economically, the initial feelings of vulnerability and insecurity have largely been substituted by feelings of empowerment and security, as incomes have increased and been shown to be sustainable. Socially, the collective work ethic, equal partnership and joint risk taking have drawn the group members together, facilitating the exchange of old allegiances with new. At the policy level, the formation of these cooperatives has given the Government a means of realising its policies for social and economic development in poor rural villages.

156. The opportunity exists to build on and extend this experience. The evaluation strongly recommend that a wide range of support for the present rural women's cooperatives be continued, as they are still new experiences and require assistance to ensure they can "graduate" to being fully independent. Specifically, GRL should consider continuing funding for the Rural Women's Unit as a support mechanism for the cooperatives, and should devise a means to reinstate the loans for individual women. In addition, more assistance should be provided with product marketing, possibly by reinforcing linkages to appropriate NGOs.

Post Conflict Situation (ii) - Restocking

157. The basic rationale for re-stocking is to restore lost production and provide the means for farmers to earn a living. In the case of SLRP, although the project was designed in 1991, the first consignment of heifers did not arrive until late in 1996. Five years was too long to wait. Inevitably, many livestock farmers would by then either have moved on, or found other means of replacing their lost stock. By 1996 restocking was possibly not what was required anyway, as it interfered with the commercial development then taking place in the dairy industry of the Bekaa. In addition, the heifers were only available as part of a credit package which, for the intended beneficiaries, was very large in comparison to their incomes, or may even have been their first contact with formal credit.

158. Whilst these arrangements may be appropriate in some development circumstances, they were hardly conducive to the prevailing post conflict situation in Lebanon. The requirement was for very speedy action to restore production, followed at a later date by considerations to link it with sustainable development measures (e.g. re-couping some of the costs involved). For example the two-heifer units could have given to smaller and poorer farmers on the basis that the first two female calves were returned. The key consideration should have been to establish the flow of benefits as soon as possible: rapid organic growth of the dairy herd would then act to accelerate the benefit flow.

159. IFAD thinking on post-conflict developments has recently been greatly revised. SLRP is an example of why this revision was necessary, at least for a livestock project.

Choosing Credit Activities

160. The credit experience in SLRP sheds yet more light on the importance of creating a sustainable mechanism for the provisions of rural financial services. Rather than place the emphasis on how quickly loans are provided and, ultimately, on how many loans are disbursed, emphasis should be placed on creating a system which - regardless of how gradual or how modest in terms of absolute loan numbers - has the potential to grow incrementally and perpetuate itself on the basis of its self generated resources. The credit experience also highlights the importance of flexibility when it comes to how loans are to be utilised: there are two contrasting examples in the project, one very successful because it is flexible, the other problematic because it is not flexible. Credit systems in people-centred projects need to avoid enforcing a particular economic activity. Beneficiaries, rather, should have the freedom (within limits) to embark on economic activities that are consistent with market demand. Indeed, market demand, a constantly changing dynamic, cannot be forecast with absolute certainty during project design, hence loans should not be rigidly attached to a particular activity.

161. Moreover, small economic activities can be risky. Where a project offers loans only for a limited range of activities, then the project staff who promote the loans have to take a measure of responsibility for their success. It is more realistic for staff to discuss a range of options, and then let the individual beneficiaries decide on their preferences.

The Targeting of Dairy Interventions

162. In SLRP potential recipients of dairy cows were selected on the basis of applications submitted by individuals who met the poverty criteria suggested in the Appraisal, augmented by findings from the baseline survey. Another consideration for the project was the need to ensure a reasonably balanced distribution throughout the project area. With hindsight, this approach created problems both with the support of the animals and also with marketing. These difficulties have reduced the impacts of the intervention, and probably contributed to re-distribution of the animals to non-intended beneficiaries.

163. The idea that high producing dairy cattle could be the means of increasing incomes for poorer households relied on the existence of local markets for the products and, most importantly, ready access either to bulls or AI. Small dairy units (of two cows) located over a wide geographical area made meeting these needs exceptionally difficult. A preferred approach may have been first to develop local farmer organisations (such as cooperatives) based on a village or other defined areas, then to supply the animals. This would aim to increase the “density “ of production so that, for example, collective milk marketing and the keeping of a bull might be justified as bringing benefits to all the producers. Keeping bulls should especially be emphasised in this regard, because bulls are far more efficient in maintaining productivity than AI, but can only be used with local herds. AI is a cheaper, but riskier option for small producers.

164. The conclusion is that in the case of high producing dairy cows, the targeting mechanism as designed was always going to lead to a reduction of potential benefits to the poor and to greatly complicate the implementation of the livestock activities.

Milk Collection Cooperatives

165. The milk marketing system introduced using milk collection cooperatives and MCC was based on a study which only evaluated the technical requirements of collection. The study needed to include financial and economic analyses describing the production and flow-throughs which the MCCs needed to be viable at various milk prices. In addition, post-project exit strategies were also required.

166. At the time of the evaluation most of the milk collection cooperatives had withdrawn their services, with the result that three of the four MCCs were shut. However, this should not be interpreted as meaning that cooperatives could never undertake this role. In fact the project experience suggests that milk collection cooperatives can be effective under the right circumstances.

167. In particular, to sustain milk collection, cooperatives should be established for this purpose only, and their charters should fully reflect the interests of their members, most of whom should be small milk producers. Membership also needs to be based on contributory shares, so that each member has a financial interest in the cooperatives’ success. In addition, such cooperatives need to have sufficient working capital so as to pay their producers on time, and they need exclusive collection areas, allocated on the basis of milk production density. The starting point to address the problem of marketing for small scale milk producers is to promote the establishment of reliable milk collection cooperatives: only then may MCCs have a role.

168. It should not be forgotten that the project design suggested a possible role for cooperatives in milk collection, and nearly USD 1.5 million was allowed to develop this possibility. In a more general sense, it is important not to assume that all cooperatives are the same. The success of the RW cooperatives illustrates just how useful and beneficial properly constituted and run cooperatives can be in the development effort, whilst the modest experience with many of the milk collection cooperatives

demonstrates some of the difficulties. Where cooperatives are to be utilised in future IFAD-supported projects, great care needs to be exercised in the principles underlying their selection.

A Role for the Private Sector

169. With limited funding available to the MOA and to ensure sustainability, an important element in the development of the livestock sector is the encouragement of the private operators to take an increasing role. This is an important plank of GRL policy. Although the delivery of AI services stopped when the project ended, it has been adopted since and is being continued by veterinarians and technicians working in the private sector. Vaccination and animal health services are similarly available, but in both cases have to compete with subsidised government services. ***If the government wishes to encourage private sector activities in the provision of AI, then it needs to limit its role to regulating the service and ensuring that technicians are properly trained and work to industry standards. For vaccinations, Government should regulate and control vaccine quality and type, and identify and restrict itself to supplying the public-good vaccinations.***

When a WID Programme Will Succeed

170. The Rural Women's Programme in SLRP exemplifies the thinking in the 1990s; the "women's programme" is almost an add-on to the overall design, with little integration with other components and few resources (only 2% of base costs). Lessons learned from such experiences in the 1990s have resulted in the development of IFAD's gender mainstreaming strategy. However, women's IGAs, from the past and present, continue to have common attributes: the activities are almost always determined around handicrafts, food processing and raising small livestock and the mechanisms for marketing women's products are rarely included as a design feature. As a result, the potential enhancement of women's livelihoods has always been constrained.

171. Despite the above comments, the women's programme in SLRP has undoubtedly been the most successful intervention in the project. The main reasons for this were that, firstly, the staff of the RWU were of high skills and calibre, were given autonomy and responsibility in implementing the small programme, and they proved very capable of adapting it to local circumstances, mainly by consulting widely with potential beneficiaries. Secondly, the credit access which was offered proved very profitable, hence became very popular. Thirdly, the programme incorporated during implementation some key additional elements that ensured success, these included: (i) the development or enhancement of relevant entrepreneurial skills; (ii) a mechanism to identify changing market demand, (iii) the use of affordable and available local resources; and (iv) a suitable support mechanism, such as extension agents, NGOs, or a combination of these. This illustrates that, given the right approach by the implementers, even a traditional WID design can be successful.

Project Support for ERR Calculations

172. All government sponsored development projects are implemented using government specified budgeting and accounting procedures. If IFAD requires that post-project ERRs are to be calculated, then it is necessary to ensure that relevant and appropriately consolidated data are available to evaluation missions. This is not something that can be assumed unless it has been previously specified. In the case of SLRP, all four components contained funding elements which were concerned with livestock development, which meant that it was inevitably going to be complex to extract relevant data. In addition, no clear indication were given to M&E to gear data collection during implementation accordingly. In these circumstances the estimation of efficiency factors for the project becomes a very complex task. The evaluation has then to resort to a second best approach (not in terms of an ERR), which is likely to decrease the robustness of the exercise. The lesson is that if IFAD wishes to give priority to the estimation of ex-post rates of return, guidelines for appropriate project record keeping have to be provided and steadily adhered to: this is not only in terms of the costs incurred, but also in terms of the benefits generated.

APPENDICES

Appendix 1: Approach Paper

Appendix 2: Project data

Appendix 3: Methodological Framework for Project Evaluation

Appendix 4: Impact and Effectiveness Matrices

REPUBLIC OF THE LEBANON

SMALLHOLDER LIVESTOCK REHABILITATION PROJECT

Completion Evaluation - Approach Paper

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A. Background and Rationale

Background

1. The Smallholder Livestock Rehabilitation Project (SLRP), which closed at the end of June 2002, started at a time when the country was emerging from seventeen years of civil war. Basic services and infrastructure required complete rehabilitation, and the Ministry of Agriculture (MOA), which was gradually being re-organized, had no experience in the implementation of internationally funded projects. The project was the first assistance provided by IFAD to Lebanon and was intended to rebuild the smallholder livestock sector in the Bekaa Valley, thereby raising the standard of living of about 8 500 small and poor rural families. This goal was further defined through a number of development objectives, viz:

- Assisting the Government in helping farmers to replace their lost stock with improved breeds, and strengthening animal health services;
- Influencing the Government to undertake important institutional changes in order to provide adequate farm support services such as credit for meeting the needs of smallholders, including women;
- Developing livestock research and a responsive extension service for the generation and dissemination of improved technological packages;
- Improving human resources through the provision of training for farmers and concerned technical staff of the Ministry of Agriculture.

2. These objectives were translated into four components in the design: (i) Strengthening Support Services; (ii) Agricultural Credit; (iii) Off-farm IGAs and studies; and (iv) support for the Project Management Unit. The credit was to be provided for 2 400 families to purchase high quality dairy cows, Awassi sheep and Shami goats, and to 500 rural women to take up suitable income generating activities. The total project cost was estimated at USD 21.9 million, of which IFAD provided a loan of about USD 10 million at intermediate terms, and OPEC cofinanced with a loan of nearly USD 5 million. Although the project was approved in April 1992, implementation did not start until the latter part of 1993.

3. Since SLRP there have been a further three projects in the Lebanon, which are all ongoing. The second and third projects approved continued the theme of rehabilitation of the agricultural sector (in irrigation, terracing and SWC, and support for institutional strengthening). In late 1998 a COSOP was initiated and finalised following the completion of a rural poverty assessment and mapping exercise in 2000. This produced a new strategy in which the socio-economic causes of rural poverty are to be simultaneously addressed through agricultural development, improvement of health and social services, education, income generation, marketing, promotion of cooperatives and associations, and most importantly provision of rural credit. The fourth project (which is not yet effective), emerging from the COSOP, supports the establishment of a rural finance system to provide credit for farmers, the landless, rural women and fishermen through producer cooperatives.

Rationale

4. Whilst, following the most recent COSOP of Lebanon (2000), the main emphasis of support has shifted to the provision of rural finance, the new strategy still calls for a balanced programme, (i.e. covering agriculture development, improvement of health and social services, education, income generation, marketing, and the promotion of cooperatives and associations). The completion evaluation of SLRP would indicate how experience from SLRP can contribute to the adoption of these principles. In addition, the evaluation would provide feedback from project beneficiaries that would permit a better understanding of preferred options for the use of credit in the rural areas, and the obstacles faced by small and poor producers in increasing their outputs.

B. Objectives of the Evaluation

5. The project completion report of SLRP, which was prepared in September 2002, presents a mostly positive picture of project achievements in which various producer services have been successfully established and where sufficient stock of very high quality has been introduced into the Bekaa to “kickstart” the dairy industry. However, it has been reported that the overwhelmingly successful aspect of the intervention is the women’s credit which has led to the establishment of a number of local producer and marketing organisations and has reportedly significantly increased household incomes. Very high repayment rates have led to the establishment of a revolving fund, suggesting a sustainable activity. Based on the evaluation rationale the evaluation objectives would be:

- i. To assess the extent to which project objectives were achieved and the efficiency of the intervention;
- ii. To assess the impact on rural poverty and the prospect of sustainability of this impact;
- iii. To assess the implementation experience, identify successful and innovative approaches used during implementation, as well as the difficulties encountered and the means used to address them, and to draw out lessons from this experience, especially those relevant to the ongoing and future projects in Lebanon;
- iv. To identify potential successful activities which could be replicated and/or up-scaled.

C. Expected Outcomes

6. The expected outcomes from this evaluation would be:

- A clearer understanding of the impacts of the project on the target groups through updating of the baseline survey and undertaking participatory assessments in selected project areas.
- An analysis of the technical and socio-economic issues and constraints that faced the project, the ways they have been addressed and the continuing difficulties faced by beneficiaries and the project managers which may affect sustainability.

- A succinct draft evaluation report presented in standard IFAD format which describes the evaluation findings, including rating the main evaluation criteria. This may be discussed in-country before finalisation, when it is published electronically on the IFAD web site.
- An “Agreement at Completion Point”. This records the agreement of the Core Learning Partnership (see below) on the actions to be taken to realise the major conclusions of the evaluation

D. Evaluation Issues

7. The evaluation would be conducted using the standard approach developed by OE¹ which requires the assessment of three main evaluation criteria, these are:

- Performance of the Project
- Impact of the Project on Rural Poverty and
- Performance of the Partners

The evaluative judgments necessary to assess these criteria are built up from detailed examination of a large number of contributing sub-criteria (Annex 1). Evaluators are also required to give ratings to the assessed criteria. To assist and guide this process OE has developed a series of key questions and matrices as evaluation tools, which would systematically be used by the completion evaluation.

Within this overall approach, the evaluation would also address a number of specific issues which have arisen towards the end of the implementation period and which are presently of concern to GRL– the intention would be to contribute to the decision process concerning the future of the project-induced activities. These issues are described below:

- i. ***The benefits accruing to small producers from the milk collection arrangements.*** An important outcome from the project has been the development of a large number of small milk producers organised into producer coops that supply the milk collection centres. Recent events have suggested that this arrangement is not sustainable, and that some small producers have already opted out. The evaluation would examine the options available and the proposals put forward in order to assess their possible impacts on typical project beneficiaries who are small scale producers.
- ii. ***The continuity of government funded activities.*** At the time of project closure GRL expressed the wish to continue certain of the project-established activities, especially the extension mechanism and the animal health and artificial insemination services, which are available free of charge to support all milk producers in the Bekaa valley. However, the PCR suggested that GRL was probably not able to fund all these activities and that many should be provided by the private sector. The evaluation would assess this core issue and surrounding questions which affect the sustainability of the project benefits for the intended beneficiaries.
- iii. ***The experience with the promotion of local organisations.*** The project has promoted cooperatives as a means of arranging for local group formation both for milk collection and for self help activities. The lessons from this experience are very relevant for the future and deserve

¹ This approach is fully described in “A Methodological Framework for Evaluation – Main Criteria and Key Questions for Project Evaluation” (MFE). The criteria selected are consistent with the emerging consensus among International Financial Institutions and the Development Assistance Committee of the Organization for Economic Cooperation and Development on criteria applicable to evaluating development projects. They have been derived from IFAD’s Strategic Framework 2002-2005, the current institutional need to place stronger emphasis on impact assessment, and the need to provide some measure of accountability to IFAD’s governing bodies on its performance and eventually on its contribution to the achievement of the Millennium Development Goals.

further assessment. In particular the evaluation would, firstly, investigate the roles played by the various stakeholders and the support provided by the project and, secondly, suggest the conditions necessary to replicate/upscale positive aspects of this experience.

- iv. ***The future of smallholder livestock in the Bekaa Valley.*** Although not able to make progress with sheep and goats, the project has been able usefully increase to the numbers of bovines (by about 80% of target) and has addressed critical issues in animal health, feed and the quality of stock. Whilst this supports overall GRL developments aims for increased production, it is not clear if this has not been at the expense of the poorer smallholders. The evaluation field work will include socio-economic surveys to assess the impacts on these groups; these will serve both to quantify benefits specific of livestock and the difficulties faced by the small producers and will provide a picture of the preferred activities for rural households.

E. The Core Learning Partnership

8. **Core Learning Partnership.** A Core Learning Partnership (CLP) is formed for each evaluation to steer the evaluation process throughout its cycle. The CLP serves as a platform for effective and real time transfer of knowledge and learning generated through evaluation. In the case of SLRP the views of members of the CLP will be solicited in finalising of the Approach Paper, to help with arranging field work and counterparts, to discuss findings, conclusions and recommendations, and finally, to identify the key lessons to be included in the Agreement at Completion Point. Initial suggestions for members of the CLP are:

Mr L. Lahoud (MOA -Director General)
Dr Mohamad Farran (MOA – Advisor to the Minister)
Dr Joseph Tarabieh (Director of Cooperatives Department, MOA)
Mr Ali Raad Abdullah (SLRP Project Director)
Ms Neila Choueri (SLRP – Women’s Programme)
Mr Darwish Nouredine (SLRP – Head of M&E)
Mr Fayez Eraji (Head, MCCs)
Dr Mervat Badawi (Director, Technical Department - AFESD)
Mr Said Aissi (Assistant Director General, Operations - OPEC)
Dr M. Bishay (IFAD – Deputy Director Office of Evaluation)
Mr A. Abdouli (IFAD - Country Programme manager for Lebanon)

F. The Evaluation Process

9. Apart from the CLP, the participatory approach requires the active participation of all project stakeholders and the beneficiaries of the project. The evaluation process will involve intensive consultations with partners and beneficiary surveys and semi-structured interviews to gather the necessary data to arrive at evaluative judgements. Hence the evaluation involves the implementing organisations, CBOs, the cooperating institution and the co-financiers. The evaluation process is managed supervised and coordinated by a designated IFAD Senior Evaluation Officer (in this case Dr M. Bishay).

10. The actual OE evaluation mission, which is responsible for collating all the data and making the evaluative judgements, will consist of locally and internationally recruited consultants working closely with PMU counterparts. The Mission Leader will undertake an initial visit to Lebanon to finalise the arrangements for the evaluation and to meet project implementing partners and some beneficiaries. In the case of SLRP it is foreseen that a follow-up socio-economic survey will be required to update some aspects of the baseline survey and a sample survey may be required to assess child nutrition status in the Bekaa. The options available would be discussed during the initial field visit by the Mission Leader.

11. The stages of the evaluation process, the activities proposed for each stage, the responsible agencies and the suggested deadlines are summarised in Table 1.

Table 1: Suggested Schedule and Responsibilities for the Evaluation of SLRP

Stage	Activities	Responsibilities	Deadlines
1. Review	Compile all relevant documentation for the evaluation, summarise and review as necessary	PMD to supply documentation, OE to review and compile	End Aug
2. Prepare the Draft Approach Paper	Outline to cover: (i) identification of focus of evaluation and issues; (ii) approach; (iii) suggestion for timing; (iv) suggestion for CLP; (v) suggestion for partners; (vi) identification of skills/consultants. Reconnaissance field visit to discuss/modify/agree approach paper, and agree on CLP members.	OE to prepare the Draft Approach Paper. OE to identify consultants and contact potential mission members.	Sep 28-Oct 4th
3. Finalise Approach Paper	Finalise Approach Paper Send it to partners for comments	OE to prepare Approach Paper and TORs; send to relevant agencies for comment before finalisation.	By Oct 12th
4. Fieldwork	Finalise mission work programme in-country. Undertake field work including focused group discussions, PRAs and other discussions as required Wrap-up meeting	MOA, project staff and other implementation agencies All partners involved in the project Mission to prepare aide memoire; and discuss with MOA and other agencies as agreed	13-14th Oct 15 – 25 th Oct 30 th Oct/ 1 st Nov
5. Reporting	Prepare draft report and initial ACP - circulate for comments In-country discussions on draft report, agree on amendments Finalise/agree ACP	Mission/OE prepares, circulated to CLP members OE modifies report as agreed CLP members plus other agencies concerned	mid-Dec mid Jan 2004 by end Jan 2004
6. Dissemination	Electronic publication of main report.	OE	By end Feb 2004

G. Mission Composition

12. Dr Mona Bishay, Senior Evaluator, Office of Evaluation, IFAD is the Officer in charge of this evaluation and the mission supervisor. The evaluation mission is composed of the following consultants:

Mr F. Butcher: Mission Leader and Institutions Specialist
 Dr M. Hashem: Sociologist and gender specialist
 Mr R. Kennard: Livestock expert
 Mr O. Imady: Credit Specialist

In addition Ms L Joensen (from OE) would join the mission as an Associate professional Officer with particular responsibility to assist in analysing the data from the socio-economic surveys, in the estimation of the ex post ERR and in assessing M&E aspects and compiling the evaluation matrix.

Annex 1
Summary Structure - Evaluation Criteria and Sub-Criteria

Criteria and Sub-criteria	Comments
1. PERFORMANCE OF THE PROJECT (PP)	Evaluated soon after implementation completion (combines 1.1 to 1.3)
1.1 Relevance of Objectives	Extent to which project objectives, as formally documented at the time of evaluation, are relevant to the needs of the rural poor, to IFAD's regional and country strategy (COSOP) and Government's policies and strategy for poverty alleviation.
1.2 Effectiveness	Extent to which relevant project objectives, as understood and documented at evaluation, were met by the project
1.3 Efficiency	Extent to which the project achieved, or is expected to achieve, benefits commensurate with inputs, based on economic and financial analysis or unit costs compared to alternative options and good practices.
2. IMPACT ON RURAL POVERTY (IRP)	Combines 2.1 to 2.7
2.1 Impact on Physical and Financial Assets	Evaluation questions are provided
2.2 Impact on Human Assets	“
2.3 Impact on Social Capital and People Empowerment	“
2.4 Impact on Food Security	“
2.5 Impact on the Environment and Communal Resource Base	“
2.6 Impact on Institutions, Policies and the Regulatory Framework	“
2.7 Over-arching factors - Sustainability - Innovation and Replicability/Scaling up - Impact on Gender Equity and Women Empowerment	Reflects rational expectations of sustainability Reflects the Catalytic Role of IFAD Assessment of impacts on gender is mainstreamed into 2.1 – 2.6 above and consolidated here
3. PERFORMANCE OF THE PARTNERS (PT)	Combines 3.1 to 3.5
3.1 IFAD	Adequacy of original design, follow up during implementation and partners selection
3.2 CI	Adequacy of the supervision function
3.3 Government and its agencies	Focuses on Government responsibility and ownership for the intervention
3.4 NGOs/CBOs	Focus on the role of these partners in capacity building and empowerment of the poor
3.5 Cofinanciers	Focus on the degree of engagement in poverty alleviation objective and flexibility during implementation

Appendix 2

Smallholder Livestock Rehabilitation Project Loan Status (Loan No. 305-LB)

Total project cost (USD mill)	21.89
IFAD financing (USD mill)	9.96
Government contribution (USD mill)	4.79
Beneficiaries contribution (USD mill)	2.22
Co-financer: OPEC Fund (USD mill)	4.92
Board Approval	15 Apr 92
Loan Signing	23 Jun 92
Loan Effectiveness	08 Dec 93
Project Completion Date	30 Jun 01
Loan Closing Date	30 Jun 02
Cooperating Institution	AFESD
Disbursement rate as at 23/07/2004 (%)	100
Project Status	Closed

Source: Loan Agreement, LGS Status of Funds by Category as at 23 July 2004, PPMS

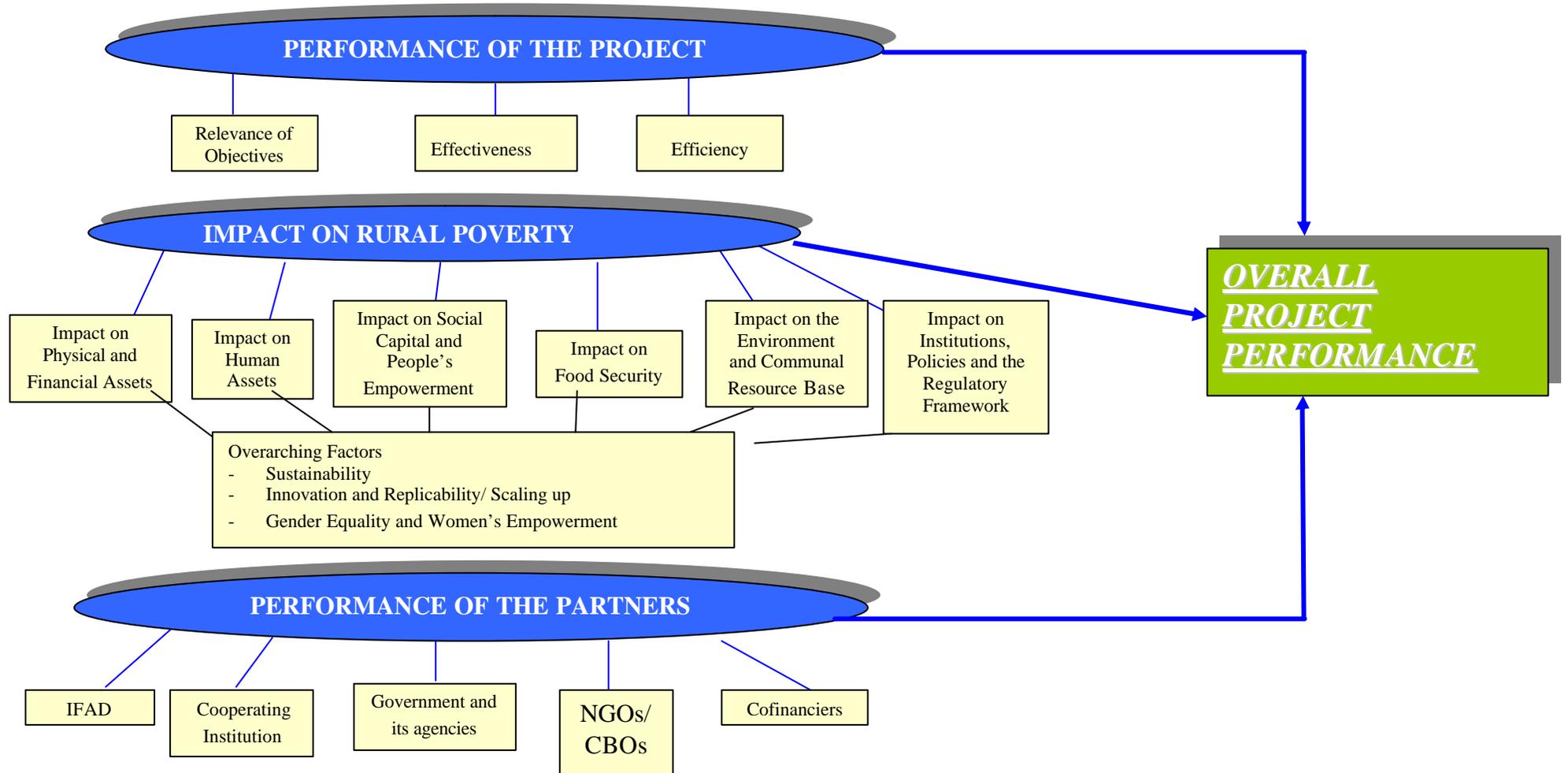
Reallocation of IFAD financing by categories (SDR million) Loan No. 305-LB

#	<i>Project activities by categories of expenditures</i>	<i>Original</i>		<i>Reallocation</i>		<i>Change against original</i>	
		<i>SDR</i>	<i>%</i>	<i>SDR</i>	<i>%</i>	<i>SDR</i>	<i>%</i>
1	Civil works	0.11	1.51	0.21	3.62	0.10	88.58
2	Vehicles, equipment, machinery & supplies	1.27	17.40	2.75	47.89	1.48	116.3
3	Credit	2.77	37.95	2.07	36.03	-0.70	-25.4
4	Project operating costs and allowances	0.5	6.85	0.32	5.56	-0.18	-6.53
5	Consultants services, TA & training	1.18	16.16	0.40	6.90	-0.78	-66.45
6	Unallocated	1.47	20.14	0.00	0.00	-1.47	-100.00
	Total	7.30	100	5.73	100	-1.6	-21

Sources: Loan Agreement, LGS Status of Funds by Category as at 11 March 2004 and Supervision reports.

Appendix 3

METHODOLOGICAL FRAMEWORK FOR PROJECT EVALUATION



Appendix 4

Impact and Effectiveness Matrices*

MAIN DOMAINS OF IMPACT	Key Questions for Impact Assessment in Rural Communities Affected by the project (changes to which the project has contributed)	Assessment of Change (1)				Reach of Change (3)				Dynamic Processes ** (4)	Sus. Pot. *** (5)
		Presence and Direction of change (+) (0) (-)	What has changed (Indicators)	Extent of Change: (Rating) *4/3/2/1		How Many (households and people)	Who (1) (Poor/ poorest/ better of)	Who (2) M/F	Project contrib. 4/3/2/1	4/3/2/1	4/3/2/1
				How much	(Rating)						
I. Physical and financial assets	1.1 Did farm households' physical assets change (i.e. farmland, water, livestock, trees, equipment, etc.)?	+	Livestock	1298+ cows	2	700 hh	BO	M	4	3	2
	1.2 Did other household assets change (houses, bicycles, radios, etc.)?	0	-	-	1	-	-	-	-	-	-
	1.3 Did infrastructure and people access to markets change (transport, roads, storage, communication facilities, etc.)?	+	Milk flow Coop prods.	-	M=1 F=3	-	F=P	M/F	M=1 F=3	M=1 F=3	N=1 F=2
	1.4 Did households' financial assets change (savings etc.)?	+	assets	-	2	2058 hh	All	M/F	4	3	4
	1.5 Did rural people access to financial services change (credit, saving, insurances, etc.)?	+	Credit access	19 coops	4	1409 hh	P	M/F	4	2	2
II. Human assets	2.1- 2.6 Not applicable										
	2.7 Did women and children workload change?	+	Extra activities	-	3	2058hh	All	F	4	3	3
	2.8 Did adult literacy rate and/or access to information change?	+	skills	4	4	2058+hh	All	M/F	4	3	M=1 F=2
III. Social capital and people empowerment	3.1 Did rural people organizations and institutions change?	+	Coops	19	3	605	All	M/F	4	4	2
	3.2 Did social cohesion and local self-help capacity of rural communities change?	+	Coops	4	4	605	All	M/F	4	4	4
	3.3 Did gender equity and/or women's' conditions change?	+	IGAs Participation	3	3	605	All	M/F	4	3	3
	3.4 Did rural people feel empowered vis a vis local and national public authorities and development partners? (Do they play more effective role in decision making?)	+	Coops			605	All	M/F	4	3	3
	3.5 Did rural producers feel empowered vis a vis the market place? Are they in better control of inputs supply and marketing	M- F+	- Coops	- 19'	1 2	700+ 605+	All	M/F	3 4	No 2	No 2
IV. Food Security	4.1 and 4.4 Not applicable										
	4.2 Did household food security change?	+	Food stocks	-	-	2058	All	M/F	2	1	2
	4.3 Did farming technology and practices change?	+	Technology	4	4	8500+	All	M/F	3	3	3
	4.5 Did agricultural production change (area, yield, production mix, etc.)?	+	fodder	1	1	-	BO	M	1	2	2
V. Emt & common resources	5.1 Did the natural resource base status change (land, water, forest, pasture, fish stocks...)?	+	Pasture shrubs	1	1	-	-	-	1	1	2
	5.2 Not applicable										
VI. Institutions, policies, and regulatory framework	6.1 Did rural financial institutions change?	+	Coops	19	2	605	All	M/F	4	2	2
	6.2 Did local public institutions and service provision change?	+	Capacity	3	3	-	All	M/F	4	2	2
	6.3 Did national/sectoral policies affecting the rural poor change?	0	-	-	-	-	-	-	-	-	-
	6.4 Did the regulatory framework affecting the rural poor change?	0	-	-	-	-	-	-	-	-	-

Notes: Rating: 4= High; 3= Substantial; 2= Modest; 1= Negligible. Also used to indicate values in the "how much?" column. Values estimated to end June as most figures available to this point.

Appendix 4

Impact and Effectiveness Matrices*

MAIN DOMAINS OF IMPACT	Key Questions for Impact Assessment in Rural Communities Affected by the project (changes to which the project has contributed)	Expectation of Impact (Project Stated Objectives)				Effectiveness Rating (Achievement Against Stated Objectives) 4/3/2/1			
		Reach Who?	Change What?	Change How Much?	Reach how Many?	Reach Who?	Change What?	Change How Much?	Reach how Many?
I. Physical and financial assets	1.1 Did farm households' physical assets change (i.e. farmland, water, livestock, trees, equipment, etc.)?	Small +poor hh	Dairy cows	2000	1000	3	3	3	3
	1.2 Did other household assets change (houses, bicycles, radios other durables, etc.)?	-	-	-	-	-	-	-	-
	1.3 Did infrastructure and people access to markets change (transport, roads, storage, communication facilities, etc.)?	All ben.	Market access	-	-	3	2	2	4
	1.4 Did households' financial assets change (savings etc.)?	All ben.	IGAs	-	2900	4	2	-	3
	1.5 Did rural people access to financial services change (credit, saving, insurances, etc.)?	All ben.	Skills	\$4.7mn	2900	4	4	4	4
II. Human assets	2.1 – 2.6 do not apply								
	2.7 Did women and children workload change?	Women	IGAs	-	500	4	4	-	4+
	2.8 Did adult literacy rate and/or access to information and knowledge change?	All ben.	Skills	-	8500	4	4	4	4+
III Social capital and people empowerment	3.1 Did rural people organizations and institutions change?	Men	Coops	-	1000	1	4	4	2
	3.2 Did social cohesion and local self-help capacity of rural communities change?	-	-	-	-	3	3	3	3
	3.3 Did gender equity and/or women's' conditions change?	Women	IGAs	-	500	4	4	4	4
	3.4 Did rural people feel empowered vis a vis local and national public authorities and development partners? (Do they play more effective role in decision making?)	-	-	-	-	2	2	3	4
	3.5 Did rural producers feel empowered vis a vis the market place? Are they in better control of inputs supply and marketing of their products?	Dairy coops	Market access	-	1000	1	1	1	1
IV. Food Security (Production, Income and Consumption)	4.1 + 4.4 do not apply								
	4.2 Did household food security change?	All ben.	Food+ incomes	-	All ben.	4	3	3	4
	4.3 Did farming technology and practices change?	Dairy + sheep	technolog y	Small	1400	3	3	3	3
	4.5. Did agricultural production change (area, yield, production mix, etc.)?	Dairy, sheep	yield	Small	8500	3	1	1	3
V. Envnt and common resources	5.1 Did the natural resource base status change (land, water, forest, pasture, fish stocks...)?	Sheep and goats	rangeland	-	1400	1	1	1	1
	5.2 Does not apply								
VI. Institutions, policies, and regulatory framework	6.1 Did rural financial institutions change?	All ben.	Credit access	\$4.7 mn	2900	3	3	3	3
	6.2 Did local public institutions and service provision change?	All ben.	capacity	-	8500	4	4	3	4
	6.3 Did national/sectoral policies affecting the rural poor change?	-	-	-	-	-	-	-	-
	6.4 Did the regulatory framework affecting the rural poor change?	-	-	-	-	-	-	-	-

* See paragraph 37 of the text.

