



**IFAD**  
**INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT**  
**Executive Board - Sixty-Third Session**  
Rome, 22-23 April 1998

**REPORT AND RECOMMENDATION OF THE PRESIDENT**

TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO

**THE SYRIAN ARAB REPUBLIC**

FOR

**THE BADIA RANGELANDS DEVELOPMENT PROJECT**



**TABLE OF CONTENTS**

	<b>Page No.</b>
<b>CURRENCY EQUIVALENTS</b>	<b>iii</b>
<b>WEIGHTS AND MEASURES</b>	<b>iii</b>
<b>ABBREVIATIONS AND ACRONYMS</b>	<b>iii</b>
<b>MAP OF THE PROJECT AREA</b>	<b>iv</b>
<b>LOAN SUMMARY</b>	<b>v</b>
<b>PROJECT BRIEF</b>	<b>vi</b>
<b>PART I - THE ECONOMY, SECTORAL CONTEXT AND IFAD STRATEGY</b>	<b>1</b>
A. The Economy and Agricultural Sector	1
B. Lessons Learned from Previous IFAD Experience	2
<b>PART II - THE PROJECT</b>	<b>4</b>
A. Project Area and Target Group	4
B. Objectives and Scope	4
C. Components	5
D. Costs and Financing	6
E. Procurement, Disbursement, Accounts and Audit	9
F. Organization and Management	10
G. Economic Justification	10
H. Risks	11
I. Environmental Impact	12
J. Innovative Features	12
<b>PART III - LEGAL INSTRUMENTS AND AUTHORITY</b>	<b>12</b>
<b>PART IV - RECOMMENDATION</b>	<b>12</b>
<b>ANNEX</b> Summary of Important Supplementary Assurances Included in the Negotiated Loan Agreement	<b>13</b>



**APPENDIXES**

	<b>Page No.</b>
I. Country Data	1
II. Previous IFAD Loans in Syria	2
III. Logical Framework	3
IV. Quantitative Inputs, Targets and Key Project Factors	4
V. Costs and Financing	5
VI. Organization and Management	7
VII. Economic and Financial Analysis	10



### CURRENCY EQUIVALENTS

Currency Unit	=	Syrian Pound (SYP)
USD 1.00	=	SYP 45.0
SYP 1.00	=	USD 0.02

### WEIGHTS AND MEASURES

1 kilogram (kg)	=	2.204 pounds (lb)
1 000 kg	=	1 metric tonne (t)
1 kilometre (km)	=	0.62 miles (mi)
1 metre (m)	=	1.09 yards (yd)
1 square metre (m <sup>2</sup> )	=	10.76 square feet (ft <sup>2</sup> )
1 acre (ac)	=	0.405 ha
1 hectare (ha)	=	2.47 acres

### ABBREVIATIONS AND ACRONYMS

ACSAD	Arab Center for the Studies of Arid Zones and Drylands
AFESD	Arab Fund for Economic and Social Development
AWPB	Annual workplan and budget
BRDP	Badia Rangelands Development Project
CAB	Cooperative Agricultural Bank
CPCC	Central Project Coordination Committee
CPMD	Central Project Management Directorate
CPMU	Central Project Management Unit
DAE	Department of Agricultural Extension
DSU	Development support units
FAO	Food and Agriculture Organization of the United Nations
MAAR	Ministry of Agriculture and Agrarian Reform
PPMU	Provincial Project Management Unit
RMC	Rangeland management committees
RMP	Rangeland management plans
SRADP	Southern Regional Agricultural Development Project
WFP	World Food Programme

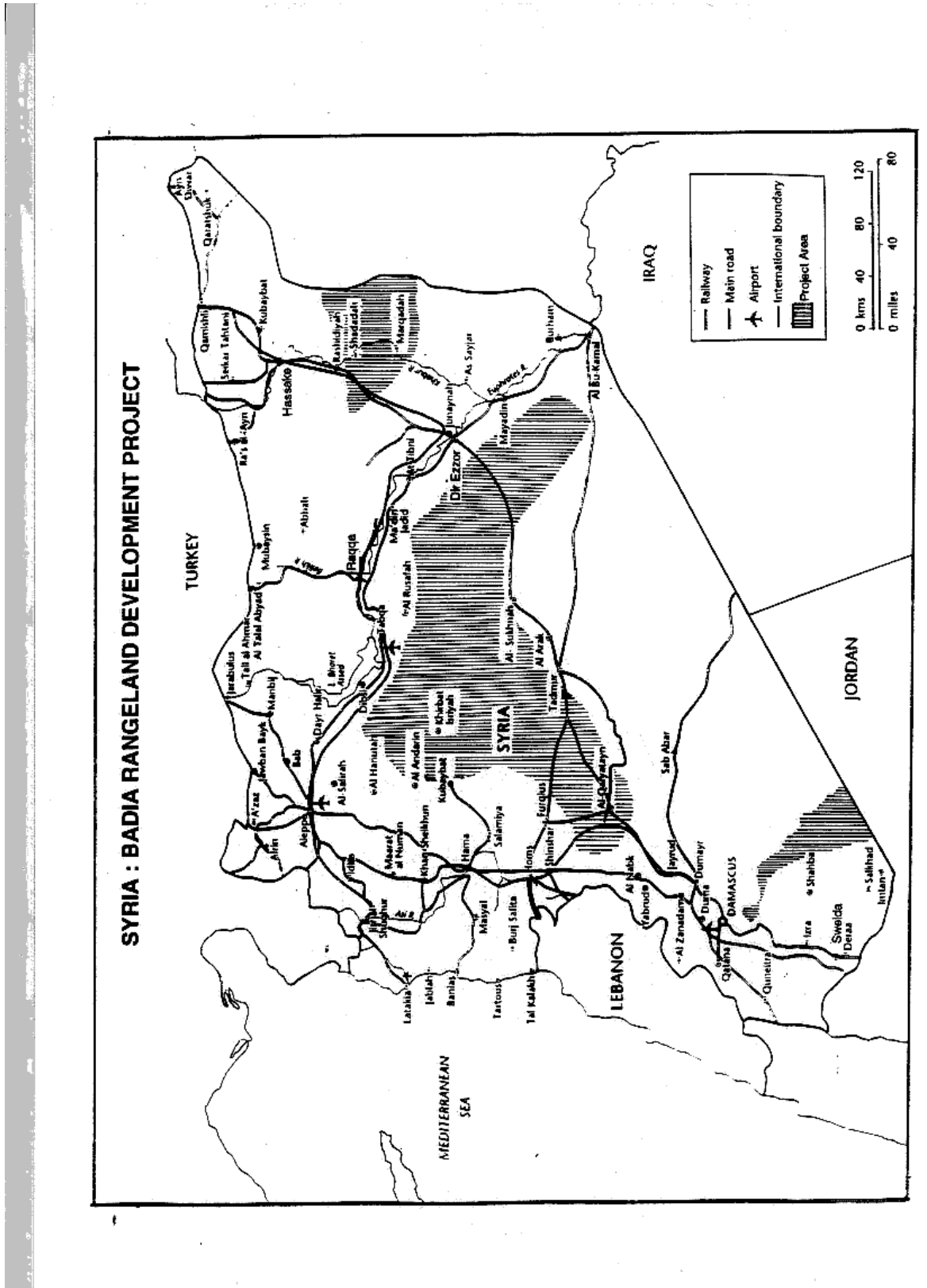
### GOVERNMENT OF THE SYRIAN ARAB REPUBLIC

#### Fiscal Year

1 January - 31 December



MAP OF THE 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.



## SYRIAN ARAB REPUBLIC

### BADIA RANGELANDS DEVELOPMENT PROJECT

#### LOAN SUMMARY

<b>INITIATING INSTITUTION:</b>	IFAD
<b>BORROWER:</b>	Syrian Arab Republic
<b>EXECUTING AGENCY:</b>	Ministry of Agriculture and Agrarian Reform (MAAR)
<b>TOTAL PROJECT COST:</b>	USD 104.9 million
<b>AMOUNT OF IFAD LOAN:</b>	SDR 14.95 million (equivalent to approximately USD 20.2 million)
<b>TERMS OF IFAD LOAN:</b>	20 years, including a grace period of five years, with an interest rate of one half of the reference interest rate per annum as determined by the Fund annually
<b>COFINANCIERS:</b>	Arab Fund for Economic and Social Development (AFESD)  Cooperative Agricultural Bank (CAB)
<b>AMOUNT OF COFINANCING:</b>	AFESD: USD 65.0 million CAB: USD 1.8 million
<b>CONTRIBUTION OF BORROWER:</b>	USD 16.7 million
<b>CONTRIBUTION OF BENEFICIARIES:</b>	USD 1.3 million
<b>APPRAISING INSTITUTION:</b>	IFAD
<b>COOPERATING INSTITUTION:</b>	AFESD



## PROJECT BRIEF

**Goals.** The project will re-establish the productive capacity of Syria's Badia resources covering 3 million ha in eight provinces. It will establish and implement over eight years a replicable participatory methodology for sustainable natural resources conservation and management.

**Target Group.** The direct project beneficiaries will be some 16 800 families organized in livestock cooperatives commonly grazing the land controlled by the cooperative to which each belongs. Animal production is the main source of income. Small and medium herdsmen represent about 80% of the target group and own about 70% of the sheep herds. About one third of them are believed to live below the poverty threshold. The vast majority are illiterate.

The increasing degradation of the rangelands, the result of a combination of excessive utilization, destructive behaviour and inappropriate policies, has drastically diminished the contribution of land to the feeding of flocks of sheep and hence to the Bedouins' economic well-being. The situation has further deteriorated since the recently decreed total ban on barley cropping in rangelands. In addition, the high population growth and the high illiteracy among the Bedouin community have limited the prospects for off-farm income-generation.

**Project Assistance to the Target Group.** Being participatory in design and in implementation, the project will assist beneficiaries in: (a) organizing themselves into homogeneous groups; (b) recovering rangeland productivity through reseeded, shrub planting and land resting; and (c) developing livestock through genetic improvement of Awassi breeds and provision of veterinary services. In addition the project will: (a) provide beneficiaries with credit to purchase Awassi breeds, small milk processing and cheese making units and water transport facilities; (b) increase water supply through construction and/or rehabilitation of boreholes and development of water harvesting systems; (c) ease movement of people, goods and services from/to Badia through up-grading and/or rehabilitation of rural roads; and (d) train beneficiaries to acquire technical and socio-economic skills.

**Beneficiary Participation.** During implementation, project beneficiaries will be responsible for managing the rangelands and water resources available to them. At the group level they will approve all investment plans prior to their submission to project authorities for insertion in annual work plans and budgets. The financial contribution of beneficiaries to project cost is USD 1.5 million. This will cover part of the operating and maintenance of water supply facilities; part of the cost of stewardship for rangelands under resting and reseeded; and the cost of credit provided by the project for the purchase of improved Awassi breeds, water transport facilities, and milk processing units.

**Cost and Financing.** Total project cost is estimated at USD 104.9 million, to be financed jointly by IFAD (USD 20.2 million); the Arab Fund for Economic and Social Development (AFESD) (USD 65.0 million); the Government (USD 16.7 million); the Cooperative Agricultural Bank (CAB) (USD 1.8 million); and the beneficiaries (USD 1.3 million).



**REPORT AND RECOMMENDATION OF THE PRESIDENT OF IFAD  
TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO  
THE SYRIAN ARAB REPUBLIC  
FOR  
THE BADIA RANGELANDS DEVELOPMENT PROJECT**

I submit the following Report and Recommendation on a proposed loan to the Syrian Arab Republic for SDR 14.95 million (equivalent to approximately USD 20.2 million) on intermediate terms to help finance the Badia Rangelands Development Project. The loan will have a term of 20 years, including a grace period of five years, with an interest rate of one half of the reference interest rate per annum as determined by the Fund annually. It will be administered by the Arab Fund for Economic and Social Development (AFESD) as IFAD's cooperating institution.

**PART I - THE ECONOMY, SECTORAL CONTEXT AND IFAD STRATEGY<sup>1</sup>**

**A. The Economy and Agricultural Sector**

1. Syria has a land area of 185 000 km<sup>2</sup> of which about 6 million ha are cultivated by some 450 000 families. About 1.1 million ha are irrigated and the balance is rainfed. Total population is estimated at 14.88 million (mid-1996), and from 1991 to 1996 annual average growth rate was 3.2%. About 50% of the total population is classified as rural of which just under 50% are women.

2. Economic growth has fluctuated substantially over recent decades mainly due to climatic conditions, but has generally been higher than population growth. Following a major relaxation of currency controls in the late 1980s and early 1990s, this process has been driven to a substantial degree by large in-flows of remittance income, repatriation of private capital held abroad and by rapid development of an export-oriented oil business. Real Gross Domestic Product growth averaged 7.1%/year for 1995 and 1996. Gross National Product per capita was estimated at USD 1 120 for 1995. The national economy remains prone to inflation (estimated at 20% for 1996).

3. Syria has a Mediterranean climate with hot summers and cool winters. For agricultural planning purposes, Syria's land mass is divided into five agricultural settlement zones, based on the total amount of annual rainfall and rainfall reliability. These zones correspond to five different agro-climatic sectors. The high potential zones (I and II), receiving 350 mm or more of precipitation annually, are concentrated in the west of the country and make up about 27% of the total area. The other three zones receive progressively less rainfall; zone V (mainly in the centre and east of the country) makes up 55% of all land and is considered unsuitable for cultivation. The low rainfall zones, receiving an annual average of 200 mm or less, are known as the Badia. In 1995 legislation banned cultivation in the Badia which should now be used exclusively for extensive grazing.

4. Livestock is an important sector: the total herd is estimated at about 13 million sheep, 1.2 million goats, 800 000 cattle, and about 10 000 camels. The livestock sector is less subject to annual and seasonal fluctuations than agricultural production, absorbs over 20% of the work force in the rural sector, provides sought-after foods, supplies raw materials for manufacturing industries and

---

<sup>1</sup> See Appendix I for additional information.





generates export revenue. The livestock sector is characterized by fairly low productivity resulting from low levels of rangeland contribution and the high cost of foodstuffs.

## **B. Lessons Learned from Previous IFAD Experience**

5. Valuable lessons have been learned, especially from the IFAD-supported Southern Regional Agricultural Development Project (SRADP), and these will be applied to the new proposed project: (a) the Government has demonstrated that it is capable of executing complex projects; (b) the active involvement of women, both as extension agents and as participants, took time to develop. Women are now playing an increasingly important role in SRADP and their activities and achievements are well beyond those envisaged at appraisal. In the Badia areas, where women have traditionally played a less active role in socio-economic development, progress is likely to be less rapid. There is also a greater need for improvement of basic services, including drinking water and education, and literacy training; and (c) in spite of the excellent Government project management capabilities action is needed in specific management areas such as monitoring and evaluation of project activities. Lack of systematically kept and up-to-date documentation and the generally poor levels in computer literacy are further constraints to be addressed .

6. The mid-term evaluation (1997) of the Food and Agriculture Organization (FAO) Rangeland Rehabilitation and Establishment of Wildlife Reserve in Syrian Steppe Project at Al-Talila made several recommendations which, although specific to the FAO project, are also of relevance to the Badia Rangelands Development Project (BRDP). The evaluation suggested that: more emphasis be given to reseeding shrubs and less to replanting; a resource conservation and management group be established for each cooperative involved; World Food Programme (WFP) food rations should not be provided for rangeland rehabilitation activities as the need for them was not clearly demonstrated and they could give wrong messages about why rangeland rehabilitation should be carried out; stronger links be maintained with the International Centre for Agricultural Research in the Dry Areas (ICARDA) and the Arab Center for the Studies of Arid Zones and Drylands (ACSAD); use should be made of participatory approach techniques; and, the women's programme continue to identify income-generating activities and organize training.

7. Outside Syria, the IFAD-funded project which is likely to be the richest in terms of significant experiences and lessons for BRDP is the Livestock and Pasture Development Project in the Eastern Region in Morocco. The project's mid-term review has highlighted the following lessons: (a) since non-exclusiveness is a key element in the success of pastoral projects and because of the need to adjust carrying capacity to the rangelands resources in line with herd size, the project should not seek to exclude the "richer" pastoralists and should accept some leakage in reaching the most vulnerable. Local economic elites are likely to be leaders in local development, and bringing them on-side may be the only way to enable the target group to participate; and (b) "traditional" ethnic groups, such as the Bedouins, are capable of rapid change in economic behaviour if it can be shown that it is in their interest.

8. **Syria's Policy for Poverty Eradication.** Poverty alleviation, at the top of Government's priorities, has been increasingly addressed through improvement in land productivity and optimization of resource use. The means employed by the Government to alleviate poverty in the rural areas include land distribution, direct government intervention in pricing of strategic commodities, and safeguarding the interests of the rural population from monopolistic exploitation. Agricultural credit is the major poverty alleviation tool. The Cooperative Agricultural Bank (CAB), being State-controlled, provides assistance to all agricultural and rural investment activities and charges lower than commercial rates.



9. **The Poverty Eradication Activities of Other Major Donors.** There is a range of on-going activities sponsored by UN agencies including: FAO, the United Nations Development Programme (UNDP), WFP, the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA) and the World Health Organization (WHO). Two activities are of special relevance to BRDP: one is the FAO Rangeland Rehabilitation and Establishment of Wildlife Reserve in Syrian Steppe Project, which ran from 1993 to June 1998, with a total budget of USD 3.1 million, and which is expected to be extended. The project aims to develop appropriate techniques for sustained use of rangelands and establish a model for a wildlife reserve integrated with domesticated animal grazing. FAO also has activities including animal health, policy development and training including support to SRADP II. In conjunction with ACSAD and the German Agency for Technical Cooperation (GTZ), the Government has since 1993 executed a research programme on erosion monitoring and control at Jebel Al Bishri in the Dir Ezzor Badia. This programme includes planting of shrubs and trees, run-off harvesting, social and economic investigations and rangeland rehabilitation. The other important activity is WFP's participation in the three ongoing IFAD-supported projects in Syria. Support has been provided to trainees, particularly women, and food-for-work for selected activities. WFP has also been actively involved in a forestry project and is about to launch a micro-credit project for women. UNDP has provided the technical assistance to SRADP II and, together with UNICEF and WHO, is coordinating the Healthy Village Project for the provision of community health services.

10. **IFAD's Strategy in Syria.** The focus of IFAD's intervention in Syria is to support the poorer segments of the rural population through the promotion of better use of natural resources, protection of the environment, raising productivity and halting the marginalization and deterioration of living conditions in areas which are moving closer to or even below the poverty line. This concern has been expressed in the on-going projects which focus principally on the liberation of agricultural potential through the removal of rocks from otherwise perfectly arable land in high potential areas. Areas that should now receive particular attention are the remote arid and semi-arid areas where inappropriate resource management has created increasingly severe problems in terms of long-term productivity and ecological balance, particularly in the Syrian Badia. In order to achieve maximum results, other activities need to be developed which strengthen the process of innovation and which tend to improve the living conditions of the rural population, with special emphasis on the economic situation of women. The development of human resources has been receiving much attention through training and promotion of income-earning opportunities within and outside the rural sector.

11. **Project Rationale.** In the past, the Badia provided a very large proportion of the nutritional requirements of the livestock pastured there, and thus made a major contribution to the Bedouins' livelihood. Increasing degradation of the Badia, the result of a combination of excessive utilization by grazing animals and shrub-gathering for fuel and cultivation, often supported by inappropriate policies, has drastically diminished the forage contribution of the Badia; and hence the need to restore the production of the rangelands to its potential.

12. However, focusing exclusively on restoring the physical production and productivity of the Badia rangelands would overlook the severity of the problems of infrastructure and socio-economic conditions. There is a need for balance in the development programme, and for attention to other constraints including: education/literacy, water supplies and rural roads. In addition, attention should be given to security of land tenure and sociological fabric.

13. Given the nature of the problems and the perceived solutions, the project will be executed within a strong participatory setting: groups of beneficiaries' cooperatives, traditional groupings and others will be involved in all stages and aspects of project implementation of concern to them directly



and indirectly. This does not imply that there should be no formal relationships. The outcome of the participatory process in any given group will be the acceptance of agreement between the group and project authorities which will clearly define the respective contributions and responsibilities.

## **PART II - THE PROJECT**

### **A. Project Area and Target Group**

14. The proposed project area covers around 3.0 million ha (or 29% of the total Badia surface) spread over eight provinces. The largest section, covering about 2.5 million ha, corresponds to the core project area (provinces of Hama, Homs, Aleppo, Raqqqa and Dir Ezzor). The second, covering 400 000 ha (Hassake) and the third 60 000 ha (Daraa and Sweida), can be considered as large-scale pilot areas to test and guide further development programmes for later extension under similar conditions.

15. The project area includes about 16 800 families or about 170 000 people who are expected to benefit directly from the project and a further 10 200 households to obtain indirect benefits. Average family size is about 10 members, considered normal in Badia communities where families tend to be large. Children comprise 58% of project area population. The majority of inhabitants are illiterate, only 22% having primary level education and of which 6% have attended secondary school.

16. The permanent Badia settlements, where perhaps half of the population is found much of the time are characterized by low levels of social services and facilities - particularly drinking water. Animal production is the major source of income, while about 11% comes from off-farm work and remittances from immigrants. About 80% of all flocks are between 50 and 100 ovine units. One third of households may be below the poverty threshold.

17. As a result of the cultivation ban, herders in the Badia are now facing an additional crisis. A number of small and medium stock owners, in particular, have been forced to sell some of their productive ewes and the deterioration of their economic situation may lead them to a state of poverty that makes it difficult to rebuild their flocks.

18. The Bedouin woman plays a fundamental role in managing domestic affairs and contributes fully in many animal production activities. A recent survey showed that 78% of housewives take part in sheep-rearing activities while 15% do domestic work only. Women and girls are typically responsible for firewood/fuel and water-fetching if these occur within a reasonable distance from the home. Milk processing is also considered women's work, which further increases the workload of women during spring.

### **B. Objectives and Scope**

19. The project will re-establish the productive capacity of Syria's Badia resources over 3.0 million ha in eight provinces. The project will establish and implement a replicable participatory methodology for sustainable natural resources conservation and management. The project will be the first large-scale integrated operation aimed at preserving the environment and improving the well-being of the Bedouin community.



### C. Components

20. The project, to be implemented over eight years, will consist of five components: (a) rangeland development, through rehabilitation of native plant cover and introduction of community-based management technologies; (b) livestock development through breeding, management, health and product processing; (c) rural infrastructure - water supplies and rural access roads; (d) community development including the establishment of institutional arrangements capable of implementing a fully participatory approach including programmes specifically designed to improve educational levels (literacy) and the socio-economic status of women; and (e) project management.

21. **Rangeland Development.** The most pertinent technologies that could ensure a rapid healing of the ecosystems and simultaneously provide a substantial increase in forage output are: reseeding on 170 000 ha (including shrubs and herbaceous species), fodder shrub planting on 100 000 ha and resting on 890 000 ha. Detailed site specific plans will be a combination of beneficiaries' requirements as expressed in participatory meetings and technical practicalities, and will be formalized as rangeland management plans (RMP). Once the beneficiaries have become involved, their grazing lands defined and rehabilitated, it will be necessary to establish on a participatory basis rangeland management committees (RMC) to institute and maintain rotational grazing.

22. The main support activity for rangeland rehabilitation will be the establishment management and production of adequate planting material (seeds and seedlings). Two seed farms will be established. The project will provide necessary equipment for seed production, cleaning and grading, including tractors, agricultural equipment, office supplies and vehicle/machinery operating costs.

23. To ensure that adequate information is available concerning the physical resources of the project area the project will fund: the production of a natural resource inventory, including a phyto-ecological map on a scale of 1/100 000, land occupation and rangelands thematic maps; and the establishment of a data management system to store all data relevant to Badia resources.

24. **Livestock Development.** The productivity per animal unit will be improved through the following activities: genetic improvement of Awassi breeds; application of improved herd management, feeding and veterinary services; and improved utilization of the existing feed resources.

25. The project will undertake the distribution, over six years, of 1 500 improved Awassi rams among small sheep owners to improve the productivity of their existing ewe flocks. Purchase of rams will be facilitated through credit made available through the CAB. Successful livestock improvements (whether through better nutrition, improved flock management, or the use of superior genetics) depend on well-maintained animal health. Veterinary centres (one in each province) will be established by PY3. Each centre will be provided with basic equipment.

26. Milk processing and cheese making will be modernized in order to increase income and improve hygiene and health aspects. About eight comprehensive milk processing units will be established for demonstration, and credit will be made available for about 100 additional moveable smaller units to be purchased by individual beneficiaries or groups.



27. **Rural Infrastructure.** Project activities for water supply and utilization recognize that in the Badia there is no absolute overall shortage of water but that much of it is of too poor a quality for human consumption and/or is in places where it is not easily accessible. The project will support activities aimed at increasing water supply in the project area. This will be achieved through: construction and/or rehabilitation of borehole wells, earth embankments, water harvesting tanks; and provision of credit for the procurement of water transport facilities.

28. Roads development comes as a response to the fact that the economic performance of rural communities and their social welfare will markedly improve where all-weather roads are made available. The project therefore includes a road development programme based on a priority ranking and comprises the upgrading of about 545 km to all-weather rural road specifications.

29. **Community Development.** This component must be seen as the linchpin of all project activities as it will establish the necessary support institutions for Badia development. The development support units (DSUs) that the project will establish will be the home base for project staff in charge of implementing the participatory methodology and of providing technical support/advice to the project beneficiaries. These staff will be fully trained and supported with appropriate communication facilities. In a way similar to what is occurring in the agricultural extension units elsewhere in Syria, these units will also be the focal points for specific programmes, including literacy/education training and women's development. Women's programmes, particularly training and provision of credit for small income-generating activities as well as the communication skills and technology development elements of this component, will be back-stopped from the Department of Agricultural Extension (DAE), which has acquired substantial experience in these matters, especially under the other on-going IFAD-supported projects in the country.

30. **Project Management.** The principal bodies to be involved in project management will be: (a) a Central Project Coordination Committee (CPCC); (b) a Central Project Management Directorate (CPMD) at the Ministry of Agriculture and Agrarian Reform (MAAR) head office in Damascus and; (c) Provincial Project Management Units (PPMUs). Implementation will follow the general principle that all project components be executed in full consultation with the beneficiaries by the existing relevant technical departments of MAAR at central and provincial levels. The only exception will be the management of the steppe rehabilitation and development support service activities, responsibility for which will be directly vested in the CPMD and delegated specifically to PPMUs and DSUs in accordance with approved annual work plans.

#### **D. Costs and Financing**

31. **Cost.** The total project cost net of duties and taxes is estimated at SYP 4.2 billion (USD 93.9 million) in base costs or SYP 6.1 billion (USD 104.9 million) including contingencies. Foreign exchange costs amount to USD 34.5 million (33% of total cost). Costs will be incurred over an eight-year period and any taxes or duties will be funded by the Government.

**TABLE 1: SUMMARY OF PROJECT COSTS<sup>a</sup>**  
(USD '000)

<b>Components</b>	<b>Local</b>	<b>Foreign</b>	<b>Total</b>	<b>% of Foreign Exchange</b>	<b>% of Base Costs</b>
Rangeland development	21 252	15 838	37 090	43	39
Livestock development	2 617	2 431	5 048	48	5
Rural infrastructure					
Water supplies	12 250	5 486	17 736	31	19
Rural roads	14 661	2 245	16 906	13	18
<b>Subtotal</b>	<b>26 911</b>	<b>7 732</b>	<b>34 642</b>	<b>22</b>	<b>37</b>
Community development					5
Development units	2 771	1 970	4 741	42	5
Women's development	3 371	261	3 631	7	4
Communication	629	1 186	1 815	65	2
<b>Subtotal</b>	<b>6 771</b>	<b>3 416</b>	<b>10 187</b>	<b>34</b>	<b>11</b>
Project management	4 240	2 715	6 955	3939	7
<b>Total base costs</b>	<b>61 790</b>	<b>32 133</b>	<b>93 923</b>	<b>34</b>	<b>100</b>
Physical contingencies	2 814	702	3 516	20	4
Price contingencies	5 782	1 698	7 480	23	8
<b>Total project costs</b>	<b>70 386</b>	<b>34 532</b>	<b>104 919</b>	<b>33</b>	<b>112</b>

<sup>a</sup> Discrepancies in totals are due to rounding.

32. **Financing.** The project will be financed jointly by IFAD, AFESD, the beneficiaries, CAB and the Government as follows: IFAD: USD 20.2 million (19.2%); AFESD: USD 65.0 million (62%); CAB USD 1.8 million (1.8%); beneficiaries USD 1.3 million (1.5%); and the Government: USD 16.7 million (16%). Cofinancing of categories and components has been avoided wherever possible.

**TABLE 2: FINANCING PLAN**

(USD '000)

Components	IFAD		AFESD		CAB		Beneficiaries		Government		Total		Foreign Exchange	Local (Excl. Taxes)	Duties and Taxes
	Amt.	%	Amt.	%	Amt	%	Amt	%	Amt	%	Amt	%			
Rangeland development	12 313	29.9	20 638	50.0	-	-	582	1.4	7 620	18.0	41 152	39.2	16 748	24 403	
Livestock development	999	18.1	3 679	66.0	393	7.1	-	-	461	8.0	5 531	5.3	2 588	2 942	
<b>Rural infrastructure</b>															
Water supplies	68	0.3	16 782	84.0	1 188	6.0	758	3.8	1 170	5.9	19 967	19.0	6 106	13 861	
Rural roads	-	-	16 928	88.0	-	-	-	-	2 312	12.0	19 240	18.3	2 539	16 701	
Subtotal	68	0.2	33 710	86.0	1 188	3.0	758	1.9	3 482	8.9	39 207	37.4	8 646	30 562	
<b>Community development</b>															
Development units	601	11.5	2 794	53.6	-	-	-	-	1 813	34.8	5 208	5.0	2 100	3 108	
Women's development	3 571	84.0	501	11.8	181	4.3	-	-	-	-	4 253	4.1	306	3 947	
Communication	164	8.3	1 115	55.9	-	-	-	-	714	35.8	1 993	1.9	1 269	725	
Subtotal	4 337	37.9	4 410	38.5	181	1.6	-	-	2 527	22.1	11 455	10.9	3 674	7 780	
<b>Project management</b>															
CPMU and PPMUs	2 022	28.3	2 550	35.7	-	-	-	-	2 575	36.0	7 147	6.8	2 673	4 474	
Monitoring and Evaluation	427	100.0	-	-	-	-	-	-	-	-	427	0.4	203	224	
Subtotal	2 449	32.3	2 550	33.7	-	-	-	-	2 575	34.0	7 574	7.2	2 876	4 698	
<b>Total disbursement</b>	<b>20 166</b>	<b>19.2</b>	<b>64 987</b>	<b>62.0</b>	<b>1 762</b>	<b>1.7</b>	<b>1 340</b>	<b>1.3</b>	<b>16 665</b>	<b>16.0</b>	<b>104 919</b>	<b>100.0</b>	<b>34 532</b>	<b>70 386</b>	

<sup>a</sup> Discrepancies in totals are due to rounding.







## E. Procurement, Disbursement, Accounts and Audit

33. **Procurement.** Procurement of goods to be financed from the proceeds of the loan shall be subject to the procurement procedures of the cooperating institution. To the extent possible, goods shall be bulked into sizeable bid packages in such a manner as to permit the optimal use of competitive bidding. Before the commencement of procurement, the Borrower shall furnish to the cooperating institution, for approval, a list or lists of goods to be procured and the proposed grouping of these goods. Each contract for the supply of planting materials, equipment and vehicles and motorcycles estimated to cost USD 150 000 equivalent or more shall be awarded following the international competitive bidding (ICB) procedures of the cooperating institution. Each contract for the supply of planting materials, equipment and vehicles and motorcycles estimated to cost less than USD 150 000 shall be awarded on the basis of competitive bidding advertised locally, in accordance with procedures satisfactory to the cooperating institution.

34. The award of any contract referred to in paragraph 33, estimated to cost USD 100 000 equivalent or more, shall be subject to prior review by the cooperating institution. With respect to contracts not governed by paragraph 33, the Borrower shall furnish certified or conformed copies of each such contract, one to the Fund and two to the cooperating institution, together with an analysis of the respective bids and recommendations for award, promptly after their execution and prior to the submission to the Fund of the first application for withdrawal of funds from the loan account in respect of such contracts.”

35. International technical assistance will be hired, and training provided in accordance with the relevant guidelines through direct contracting and force account, respectively. Those recruited will have qualifications, terms of reference and conditions of employment satisfactory to the Fund.

36. **Disbursement.** The proposed loan from IFAD of USD 20.2 million equivalent will be disbursed over eight years. The disbursements will be on the basis of statements of expenditure (SOE) for payments under contracts of USD 20 000 or less, with supporting documentation prepared by MAAR and made available to supervision missions and auditors; for all other expenditures, on the submission of full documentation.

37. **Accounts and Audit.** The Government will open and maintain a special account in the name of the project in USD in a bank, acceptable to IFAD. The special account will be for the purpose of pre-financing IFAD's share of the project expenditure, on terms and conditions satisfactory to IFAD. The special account will be opened with an initial amount of USD 1.5 million estimated as equivalent to the IFAD share of the first six months of project expenditure. The closing date of the loan is 31 December 2006.

38. All project accounts, including the special account, and all Government accounts and SOEs for each fiscal year will be consolidated and audited in accordance with appropriate auditing principles and practices consistently applied by auditors acceptable to IFAD. Government will furnish certified copies of audit reports to IFAD within six months of the end of the fiscal year.

39. **Retroactive Financing.** The project director was appointed and in position by October 1997; the Damascus office is partially equipped and secretarial and computer operators have been assigned. It is proposed that subject to agreement between the Government and IFAD a retroactive financing facility be put in place. Items which might be retroactively financed include: a study tour by three to five project staff from Damascus and the provinces to visit and study the IFAD project in Morocco so that the experiences gained could be incorporated in BRDP early in project life; and an awareness programme by the communication section of DAE concerning the forthcoming project. The facility





which will have to be agreed between the Government and IFAD will not cost more than USD 50 000 equivalent.

## F. Organization and Management

40. The project will be implemented through a full participatory approach. The observed and expressed willingness of the community to participate in the project and contribute to the full realization of the objectives will be the basis for the problem-census/problem-solving statement. A detailed RMP will be established, the project staff will calculate/determine the logistical and cost implications, and will continue discussion with the community to ensure that potential conflicts within the community or changes of mind could be accommodated/resolved. Concurrent with the completion of its RMP the community will establish a RMC from amongst those members of the community who actively contributed to the RMP. The RMC will organize community activities, including the provision of labour, needed for the implementation of the RMP, monitor the progress, provide the stewards necessary for guarding the resting areas, liaise with the technical staff in demonstrating technological packages connected both with rangeland development and with livestock, water supplies, human health, literacy and other project associated activities.

41. Overall project management and coordination will be the responsibility of the MAAR. Implementation will be through a CPMU headed by a project director. At province level the project activities will be implemented/coordinated through a PPMU established in each province. The project will be executed under the guidance of a CPCC at national level with PPMUs under the guidance of Provincial Project Coordinating Committees (PPCC). These procedures parallel those in the on-going IFAD supported projects in Syria.

### Reporting and Supervision

42. **Reporting.** The CPMU will submit six-monthly progress reports to the CPCC which after approval of the Minister of Agriculture and Agrarian Reform will be forwarded to IFAD and AFESD. The reports will cover the overall progress of each component and sub-component of the project both physically and financially and in comparison with the approved annual workplan and budget (AWPB). An annual monitoring report will be prepared by the monitoring and evaluation officers of the CPMU, under the supervision of the Central Project Management Director. The report will be submitted to the financiers not later than 31 May of each year.

43. **Supervision.** The project will be implemented through the existing government financial and administrative procedures combined, for the first time in Syria, with the active participation of the beneficiaries in all aspects of planning, design and implementation of the project interventions in their rangelands. This innovative feature will call for a more intensive and systematic level of supervision by the cooperating institution than is customary. Accordingly provisions will be made for a regular six-monthly supervision of the project activities.

## G. Economic Justification

44. The main benefit of the project will be the sustained rehabilitation of a significant proportion of the Badia, together with the demonstrated effectiveness of a replicable participatory approach to planning/implementation and monitoring which will return to the Bedouin communities the management control of the resources upon which their livestock enterprises and livelihood depend.

45. The main project output will be increased fodder supplies in and from the Badia. These are estimated as being equivalent to about 188 000 t of barley grain. Using the figure of 16 800 flock



owners this will be equivalent to an annual cost saving for each shepherd of about USD 1 700. Because of the decreased reliance on very labour-intensive hand-feeding it is reasonable to assume that labour input per unit of livestock production will be reduced, i.e., rangeland rehabilitation is likely to increase labour productivity of Bedouin households. This effect cannot be estimated.

46. Improved animal production will result from the incremental fodder produced by the project whilst increased productivity will be achieved mainly through the interaction of husbandry improvement with the genetic programme by making available substantial numbers of rams and improved coverage of vaccination against major endemic diseases. The improved Awassi rams to be distributed through project credit will be from blood lines which have already shown superior performance.

47. The project is expected to have a beneficial effect on the social conditions of the Bedouins, especially the women. The principal programmes to achieve this are a large-scale literacy training (allowing the Bedouins to attain the level of other regions of the country), increases in water supplies for human and animal consumption and through a training and assistance programme aimed mainly at women. The rural roads improved under the project will bring advantages to all members of the community increasing communications, commerce and general mobility. Transport costs are expected to decrease and the availability of goods and services to increase, which will improve the welfare of the communities.

48. There is a general, if implicit, project focus on reducing the workload for women. The proposed rangelands development programme, for instance, will contribute to this through the mechanism of reducing the need to hand-feed the sheep, typically undertaken by women. Similarly, a more readily available water supply will also help in improving the situation of women. This evolution is capable of releasing time for women for other activities, prominently including literacy classes, and to engage in income-earning activities, if they so wish.

49. An economic analysis has been carried out over a 20-year period. Including only those costs directly related to productive activities, the resulting Economic Internal Rate of Return (EIRR) is estimated at 20.7%. Sensitivity analysis shows that EIRR is generally robust, declining to only 14.5% with a cost overrun and a benefit shortfall of 20% respectively. If all project costs are included, the estimated EIRR is 15.7%

## **H. Risks**

50. The project is not risk-free. Areas of risk include: (a) the scale of the project is large and the Badia is a harsh and difficult area. However, Syria has experience of successfully implementing large projects, and further, because the project activities are substantially devolved to the provinces there are in effect eight projects closely related but not interdependent. Evidence of a healthy rivalry between provinces, evidenced during appraisal mission field visits, further reduces any possible disadvantages of scale; (b) climatic aspects, especially rainfall fluctuations and quantity of first autumnal rains, are determinant factors for forage output and reseeding and resting technology success; (c) owners of large flocks may attempt to dominate the use of the developed areas, thereby marginalizing smaller owners. To reduce this risk, the number of animals allowed to graze within rehabilitated areas will be defined by the RMCs (the membership of which includes small herders) in relation to the rights of the respective owners. The proposed project-supported stewardship of rehabilitated rangeland will assist in alleviating attempts to "grab" land.



## **I. Environmental Impact**

51. The project will have a strong positive impact on the environment through re-establishment of the productive capacity of the rangelands and introduction of sustainable management practices.

## **J. Innovative Features**

52. The project design incorporates for the first time in Syria the innovation of a truly participatory approach. Given the nature of the problems and the perceived solutions the project will be executed within a strong participatory setting: groups of beneficiaries' cooperatives, traditional groupings and others will be involved in all stages and aspects of project implementation that concern them directly and indirectly. The outcome of the participatory process with any given group will be the acceptance of agreement between the group and project authorities which will clearly define the respective contributions and responsibilities.

## **PART III - LEGAL INSTRUMENTS AND AUTHORITY**

53. A loan agreement between the Syrian Arab Republic and IFAD constitutes the legal instrument for extending the proposed loan to the borrower. A summary of the important supplementary assurances included in the negotiated loan agreement is attached as an annex.

54. The Syrian Arab Republic is empowered under its laws to borrow from IFAD.

55. I am satisfied that the proposed loan will comply with the Agreement Establishing IFAD.

## **PART IV - RECOMMENDATION**

56. I recommend that the Executive Board approve the proposed loan in terms of the following resolution:

RESOLVED: that the Fund shall make a loan to the Syrian Arab Republic in various currencies in an amount equivalent to fourteen million nine hundred and fifty thousand Special Drawing Rights (SDR 14 950 000) to mature on and prior to 1 March 2018 and to bear an interest rate of one half of the reference interest rate per annum as determined by the Fund annually, and to be upon such other terms and conditions as shall be substantially in accordance with the terms and conditions presented to the Executive Board in this Report and Recommendation of the President.

Fawzi H. Al-Sultan  
President



**SUMMARY OF IMPORTANT SUPPLEMENTARY ASSURANCES  
INCLUDED IN THE NEGOTIATED LOAN AGREEMENT**

(Loan Negotiations concluded on 12 March 1998)

1. The Government of the Syrian Arab Republic (the Government) shall, for the purposes of the project, open and maintain in a suitable bank, acceptable to IFAD, a Special Account in United States dollars, on terms and conditions satisfactory to IFAD.
2. The Government shall take reasonable measures to ensure that the project is carried out with due diligence in regard to environmental factors and in conformity with national environmental legislation and any international environmental treaties to which it may be a party, including the maintenance of appropriate agricultural pest management practices, where applicable. To that end, the Government shall ensure that the pesticides procured under the project do not include any pesticide that is either proscribed by the International Code of Conduct on the Distribution and Use of Pesticides of the Food and Agriculture Organization of the United Nations (FAO), as amended from time to time, or listed in Tables 1 (Extremely Hazardous) or 2 (Highly Hazardous) of the World Health Organization (WHO) Recommended Classification of Pesticides by Hazard and Guidelines to Classification 1996-1997, as amended from time to time.
3. Project management and coordination shall be under the overall responsibility of the MAAR through (a) a Central Project Coordination Committee (CPCC); (b) a Central Project Management Unit (CPMU) headed by the project director; (c) Provincial Project Coordination Committees; and (d) Provincial Project Management Units (PPMUs).
4. The following are the additional conditions precedent to the effectiveness of the loan agreement:
  - (a) the CPCC shall have been established in accordance with paragraph 3 of Schedule 4 of the loan agreement;
  - (b) the CPMU at the central level and the PPMUs shall have been established in accordance with paragraphs 5 and 7 of Schedule 4 of the loan agreement; and
  - (c) the project director and the provincial project directors shall have been named in accordance with paragraphs 2 and 7 of Schedule 4 of the loan agreement.



## COUNTRY DATA - SYRIA

<b>Land area (km<sup>2</sup> thousand) 1994 1/</b>	<b>184</b>	<b>GNP per capita (USD) 1995 2/</b>	<b>1 120</b>
<b>Population (million) 1995 1/</b>	<b>14</b>	<b>Average annual real rate of growth of GNP per capita, 1985-95 2/</b>	<b>1.0</b>
<b>Population density (population per km<sup>2</sup>) 1995 1/</b>	<b>77</b>	<b>Average annual rate of inflation, 1985-95 2/</b>	<b>15.8</b>
<b>Local currency</b>	<b>Syrian Pound (SYP)</b>	<b>Exchange rate: USD 1 =</b>	<b>SYP 45</b>
<b>Social Indicators</b>		<b>Economic Indicators</b>	
Population (average annual rate of growth) 1980-95 1/	3.2	GDP (USD million) 1994 1/	16 783
Crude birth rate (per thousand people) 1995 1/	39	Average annual rate of growth of GDP 1/ 1980-90	1.5
Crude death rate (per thousand people) 1995 1/	5	1990-95	7.4
Infant mortality rate (per thousand live births) 1995 1/	32	Sectoral distribution of GDP, 1995 1/	
Life expectancy at birth (years) 1994 3/	67.8	% agriculture	n.a.
Number of rural poor (million) 1/	n.a.	% industry	n.a.
Poor as % of total rural population 1/	n.a.	% manufacturing	n.a.
Total labour force (million) 1995 1/	4	% services	n.a.
Female labour force as % of total, 1995 1/	26	Consumption, 1995 1/	
<b>Education</b>		Government consumption (as % of GDP)	n.a.
Primary school enrolment (% of age group total) 1993 1/	105	Private consumption (as % of GDP)	n.a.
Adult literacy rate (% of total population) 1994 3/	69.8	Gross domestic savings (as % of GDP)	n.a.
<b>Nutrition</b>		<b>Balance of Payments (USD million)</b>	
Daily calorie supply per capita, 1992 3/	3 175	Merchandise exports, 1995 1/	3 970
Index of daily calorie supply per capita (industrial countries=100) 1992 3/	100	Merchandise imports, 1995 1/	4 616
Prevalence of child malnutrition (% of children under 5) 1989-95 1/	n.a.	Balance of trade	- 646
<b>Health</b>		Current account balances (USD million)	
People per physician, 1993 1/	<i>1 159</i>	before official transfers, 1995 1/	- 477
People per nurse, 1993 1/	<i>1 047</i>	after official transfers, 1995 1/	440
Access to safe water (% of population) 1990-96 3/	85	Foreign direct investment, 1995 1/	65
Access to health service (% of population) 1990-95 3/	90	Net workers' remittances, 1995 1/	385
Access to sanitation (% of population) 1990-96 3/	83	Income terms of trade (1987=100) 1995 1/	145
<b>Agriculture and Food</b>		<b>Government Finance</b>	
Cereal imports (thousands of metric tonnes) 1994 1/	952	Overall budget surplus/deficit (as % of GDP) 1994 1/	-3.8
Food imports as percentage of total merchandise imports 1993 1/	19	Total expenditure (% of GDP) 1994 1/	26.6
Fertilizer consumption (hundred grams of plant nutrient per arable ha) 1994/95 1/	636	Total external debt (USD million) 1995 1/	21 318
Food production index (1989-91=100) 1995 1/	129	Total external debt (as % of GNP) 1995 1/	118.3
Food aid in cereals (thousands of metric tonnes) 1994-95 1/	59	Total debt service (% of exports of goods and services) 1995 1/	4.6
<b>Land Use</b>		Nominal lending rate of banks, 1995 1/	n.a.
Agricultural land as % of total land area, 1994 1/	75	Nominal deposit rate of banks, 1995 1/	n.a.
Forest and woodland area (km <sup>2</sup> thousand) 1990 1/	7		
Forest and woodland area as % of total land area, 1990 1/	4		
Irrigated land as % of arable land, 1994 1/	19.6		

n.a. not available.

Figures in italics indicate data that are for years or periods other than those specified.

1/ World Bank, *World Development Report*, 1997

2/ World Bank, *Atlas*, 1997

3/ UNDP, *Human Development Report*, 1997



### PREVIOUS IFAD LOANS IN SYRIA

Project	Initiating Institution	Cooperating Institution	Lending Terms	Board Approval	Loan Effectiveness	Current Closing date	Loan or Grant Acronym	Approved L/G Amount	Disbursement as % of Approved Amount
Southern Regional Agricultural Development Project	IBRD	IBRD	I	31 Mar 82	23 May 83	30 Jun 88	L-I-95-SY	15 700 000	48
Southern Regional Agricultural Development Project II	IFAD	AFESD	I	09 Sep 92	10 Mar 93	31 Dec 01	L-I-311-SY	12 600 000	25
Jebel al-Hoss Agricultural Development Project	IFAD	AFESD	I	06 Sep 94	19 Jan 95	31 Dec 02	L-I-311-SY	8 250 000	0
Coastal/Midlands Agricultural Development Project	IFAD	AFESD	I	06 Dec 95	07 Jul 96	31 Dec 03	L-I-363-SY	13 650 000	5

I = intermediate

## LOGICAL FRAMEWORK

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<b>Development Objectives</b> <ul style="list-style-type: none"> <li>• Preserve the environment</li> <li>• Re-establish the productive capacity of rangelands</li> <li>• Improve well-being of herders households &amp; rural households</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in land productivity</li> <li>• Reduction in degradation</li> <li>• Increase in quantitative and qualitative production of livestock</li> <li>• Increase in herders income</li> </ul>	<ul style="list-style-type: none"> <li>• Baseline and subsequent surveys</li> <li>• Environment Assessment</li> <li>• Socio economic Studies/Surveys</li> </ul>	<ul style="list-style-type: none"> <li>• Government of Syria and beneficiaries fully adhere to bottom-up participatory approach and project's strategy</li> </ul>
<b>Strategies</b> <ul style="list-style-type: none"> <li>• Bottom-up participatory implementation</li> </ul>	Number of RMCs formed Number of RMPs adopted	<ul style="list-style-type: none"> <li>• Surveys and progress reports</li> </ul>	
<b>Immediate Objectives</b> <ul style="list-style-type: none"> <li>• Introduction of replicable management practices</li> <li>• Integrated technico-socio-economic development dimensions</li> </ul>	<ul style="list-style-type: none"> <li>• Number of RMPs adopted</li> </ul>	<ul style="list-style-type: none"> <li>• Surveys and assessment studies</li> </ul>	
<b>Outputs</b> <ul style="list-style-type: none"> <li>• Rangeland development related institutions strengthened</li> <li>• Rangeland management group formed</li> <li>• Areas of Rangeland rested</li> <li>• Shrubs planted for forage production</li> <li>• Areas of rangeland reseeded</li> <li>• Production of fodder increased</li> <li>• Livestock health improved</li> <li>• Milk &amp; meat production and processing increased</li> <li>• Roads network upgraded</li> <li>• Quantitative and qualitative supply of water improved</li> <li>• Illiteracy reduced</li> <li>• Rural incomes increased</li> </ul>	<ul style="list-style-type: none"> <li>• Increased in fodder &amp; livestock production</li> <li>• Strong adequately equipped &amp; staffed institution</li> <li>• No. of groups formed and actually operating</li> <li>• No. of ha rested and/or reseeded</li> <li>• No. of ha planted with shrubs</li> <li>• No of animals treated and cured</li> <li>• Cost of transportation from/to Badia Area</li> <li>• No. of beneficiaries trained</li> <li>• No. of beneficiaries with increased production, assets and income</li> </ul>	<ul style="list-style-type: none"> <li>• Progress reports</li> <li>• Supervision reports</li> <li>• Procurement documents</li> <li>• M&amp;E reports</li> <li>• Socio-economy surveys</li> <li>• Project supervision</li> <li>• Mid-term evaluation and review reports</li> </ul>	<ul style="list-style-type: none"> <li>• Community leaders and herders prepared to form and use small groups</li> <li>• No major ethnic conflicts and no major intrusions by outsiders</li> <li>• Beneficiaries to grasp, through training and technical assistance, natural resources management techniques.</li> </ul>
<b>Inputs</b> <ul style="list-style-type: none"> <li>• Equipment for land and livestock development and communication.</li> <li>• Civil works for roads and water facilities and buildings</li> <li>• Provision of credit for purchasing animal, water transportation units and milk processing units;</li> <li>• Training of staff members and beneficiaries</li> <li>• Provision of technical assistance.</li> </ul>	<ul style="list-style-type: none"> <li>• No of tractors, vehicles and other machinery procured and deployed in the project area</li> <li>• No. veterinary centres rehabilitated</li> <li>• No. of credit applications processed and approved</li> <li>• No. of staff members and beneficiaries trained</li> <li>• No. of field visits</li> <li>• No. of man/months of technical assistance provided locally &amp; internationally</li> </ul>	<ul style="list-style-type: none"> <li>• Progress reports, Workplans</li> <li>• Progress reports</li> <li>• Project documents</li> <li>• M&amp;E reports</li> </ul>	







## QUANTITATIVE INPUTS, TARGETS AND KEY PROJECT FACTORS

OBJECTIVES	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	Total	INSTRUMENTS	Incremental	
											- 188 000 t of barley equivalent - Animal production cost saving : USD 1 700 per beneficiary household - Social benefits not quantifiable	
INPUTS (USD)											Other project characteristics:	
Civil Works	1 36	2	11 53	11 1	9 2						The main instruments utilized in the implementation of the listed components are listed as follows: Contracted bidding (local or international )- Recruitment of consultants Individual or group lending	
Equipment	750	8	3 78	96	71	99	56	58	36 2			
Vehicles	2 54	2	181	45	27	7	17	15	13 3			
Planting materials		572	1 00	1 0	1	1	1	1 16	5 4			
TA and Studies	1 2	718	552	151	74	76	78	144	7 3			
Training	792	766	915	680	634	719	736	740	3 0			
Credits		385	590	616	387	144	147	150	5 9			
OUTPUTS												
Increased Forage Output (million fodder units)	234	230	228	242	271	301	328	354	2 1			
Water supply unit (No.)		234	240	240	250				1 0			
Water transportation units (No.)		25	30	30	15				100			
Roads (km)			200	200	145				545			
Community development (USD'000)	2 26	1	1 11		1	1	1	1 38	11 4			
<b>PROJECT COSTS</b>		<b>FINANCING</b>				<b>BENEFICIARIES</b>		<b>ECONOMIC ANALYSIS</b>				
	USD million				USD million		%	Estimated		EIRR		
Rangeland Development	37	%			20.1		19	No. of household beneficiaries.: 16 800	Base	20%		
Livestock Development	5	39			61		58	No. of beneficiaries = 170 000	Cost increase 20%	18%		
Rural Infrastructure	34	5			20		19	Cost per household b. = USD 6 250	Benefits decrease 20%	17%		
Rural Infrastructure	10	37			1.8		1.8	Cost per beneficiary: USD 617.				
Community Development	7	11			1.5		1.5					
PMU		7										
Contingencies	3.5											
Physical	7.5	4										
Prices		8										

## COSTS AND FINANCING

### EXPENDITURE ACCOUNTS BY FINANCIERS (USD '000)

	IFAD		AFESD		CAB		Beneficiaries		Government		Total		For. Exch.	(Local Excl. Taxes)	Duties and Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
<b>INVESTMENT</b>															
<b>CIVIL WORKS</b>															
Buildings	-	-	1 968	80	-	-	-	-	492	20	2 460	2.3	726	1 734	-
Water infrastructure and roads	-	-	26 997	80	-	-	-	-	6 749	20	33 746	32.2	7 445	26 301	-
<b>Subtotal</b>	-	-	<b>28 965</b>	<b>80</b>	-	-	-	-	<b>7 241</b>	<b>20</b>	<b>36 206</b>	<b>34.5</b>	<b>8 171</b>	<b>28 034</b>	-
<b>EQUIPMENT</b>															
Agricultural	-	-	10 245	90	-	-	-	-	1 138	10	11 383	10.8	10,884	499	-
Other	-	-	1 784	90	-	-	-	-	198	10	1 982	1.9	1 452	529	-
<b>Subtotal</b>	-	-	<b>12 029</b>	<b>90</b>	-	-	-	-	<b>1 336</b>	-	<b>13 364</b>	<b>12.7</b>	<b>12 336</b>	<b>1 028</b>	-
<b>VEHICLES</b>	2 230	41	3 223	59	-	-	-	-	-	-	5 453	5.2	5 453	-	-
<b>PLANTING MATERIALS</b>	7 300	100	-	-	-	-	-	-	-	-	7 300	7	-	7 300	-
<b>TECHNICAL SUPPORT</b>															
Technical Assistance	-	-	871	100	-	-	-	-	-	-	871	0.8	794	77	-
Studies	-	-	2 136	100	-	-	-	-	0	-	2 136	2	1 341	795	-
<b>Subtotal</b>	-	-	<b>3 007</b>	<b>100</b>	-	-	-	-	<b>0</b>	-	<b>3 007</b>	<b>2.9</b>	<b>2 134</b>	<b>873</b>	-
<b>TRAINING</b>															
Staff	2 248	100	-	-	-	-	-	-	-	-	2 248	2.1	1 182	1 066	-
Beneficiaries	3 734	100	-	-	-	-	-	-	-	-	3 734	3.6	221	3 513	-
<b>Subtotal</b>	<b>5 982</b>	<b>100</b>	-	-	-	-	-	-	-	-	<b>5 982</b>	<b>5.7</b>	<b>1 403</b>	<b>4 579</b>	-
<b>CREDIT</b>															
<b>Subtotal</b>	<b>15 512</b>	<b>21</b>	<b>47 224</b>	<b>64</b>	<b>1 762</b>	<b>2.4</b>	<b>396</b>	<b>0.5</b>	<b>8 839</b>	<b>12</b>	<b>73 732</b>	<b>70.3</b>	<b>30 687</b>	<b>43 045</b>	-
<b>RECURRENT</b>															
<b>SALARIES AND ALLOWANCES</b>															
INCENTIVES	788	100	-	-	-	-	582	8.5	6 231	91.5	6 813	6.5	-	6 813	-
<b>OPERATION AND MAINTENANCE (O&amp;M)</b>															
Civil works O&M	-	-	3 688	91.1	-	-	362	8.9	-	-	4 050	3.9	-	4 050	-
Equipment O&M	-	-	4 441	100	-	-	-	-	-	-	4 441	4.2	434	4 007	-
Vehicles O&M	-	-	9 634	100	-	-	-	-	-	-	9 634	9.2	2 890	6 744	-
<b>Subtotal</b>	-	-	<b>17 763</b>	<b>33.4</b>	-	-	<b>362</b>	<b>2</b>	-	-	<b>18 125</b>	<b>17.3</b>	<b>3 325</b>	<b>14 800</b>	-
Annual supplies	3 866	70	-	-	-	-	-	-	1 595	30	5 461	5.2	521	4 940	-
<b>Subtotal</b>	<b>4 654</b>	<b>15</b>	<b>17 763</b>	<b>57</b>	-	-	<b>944</b>	<b>3</b>	<b>7 826</b>	<b>25</b>	<b>31 187</b>	<b>29.7</b>	<b>3 846</b>	<b>27 341</b>	-
<b>Total</b>	<b>20 166</b>	<b>19</b>	<b>64 987</b>	<b>62</b>	<b>1 762</b>	<b>1.7</b>	<b>1 340</b>	<b>1.3</b>	<b>16 665</b>	<b>16</b>	<b>104 919</b>	<b>100</b>	<b>34 532</b>	<b>70 386</b>	-





## EXPENDITURE ACCOUNTS BY COMPONENTS - TOTALS INCLUDING CONTINGENCIES (USD'000)

			RURAL INFRASTRUCTURE		COMMUNITY DEVELOPMENT			Total	
	RANGELAND DEVELOPMENT	LIVESTOCK DEVELOPMENT	Water Supplies	Rural Roads	Development Units	Women development	Communication		Management
<b>Investment Costs</b>									
<b>CIVIL WORKS</b>									
Water infrastructure	-	-	16 782	-	36	-	-	-	16 818
Roads	-	-	-	16 928	-	-	-	-	16 928
Buildings & housing	1 131	540	-	-	630	-	-	159	2 460
<b>Subtotal</b>	1 131	540	16 782	16 928	666	-	-	159	36 206
<b>EQUIPMENT</b>									
Agricultural	6 940	-	-	-	-	-	-	-	6 940
Service equipment	4 256	-	-	-	-	186	-	-	4 443
Office equipment	102	499	-	-	104	-	-	122	826
Communication	-	-	-	-	-	-	201	-	201
Furniture & other	6	296	-	-	279	315	-	58	954
<b>Subtotal</b>	11 304	795	-	-	384	501	201	180	13 364
<b>VEHICLES</b>	1 810	968	-	-	893	-	522	1 259	5 453
<b>PLANTING MATERIALS</b>	7 300	-	-	-	-	-	-	-	7 300
<b>TA and STUDIES</b>									
Technical Assistance	563	-	-	-	28	-	-	280	871
Studies	1 851	-	68	-	-	-	-	217	2 136
<b>Subtotal</b>	2 413	-	68	-	28	-	-	497	3 007
<b>TRAINING</b>									
Staff	627	544	-	-	486	109	11	471	2 248
Beneficiaries	86	176	-	-	10	1 972	-	-	2 244
Literacy trainers fees	-	-	-	-	-	1 491	-	-	1 491
<b>Subtotal</b>	713	720	-	-	496	3 571	11	471	5 982
<b>CREDIT</b>	-	655	1 585	-	-	181	-	-	2 420
<b>Total Investment Costs</b>	24 671	3 678	18 435	16 928	2 467	4 253	734	2 566	73 732
<b>Recurrent Costs</b>									
<b>SALARIES AND ALLOWANCES</b>									
Salaries	4 167	206	-	-	392	-	187	1 147	6 098
Allowances	107	271	-	-	165	-	-	171	715
Incentives	-	-	-	-	-	-	-	788	788
<b>Subtotal</b>	4 274	477	-	-	557	-	187	2 106	7 601
<b>OPERATION ANDTENANCE</b>									
Civil works O & M	-	-	1 532	2 312	160	-	-	45	4 050
Equipment O & M	3 946	-	-	-	270	-	225	-	4 441
Vehicles O & M	4 002	1 098	-	-	1 677	-	694	2 163	9 634
<b>Subtotal</b>	7 948	1 098	1 532	2 312	2 108	-	919	2 209	18 125
<b>ANNUAL SUPPLIES</b>									
Labour	3 953	-	-	-	-	-	-	-	3 953
Sundries and miscellaneous	306	279	-	-	77	-	154	693	1 508
<b>Subtotal</b>	4 258	279	-	-	77	-	154	693	5 461
<b>Total Recurrent Costs</b>	16 480	1 854	1 532	2 312	2 741	-	1 260	5 008	31 187
<b>Total PROJECT COSTS</b>	41 152	5 531	19 967	19 240	5 208	4 253	1 993	7 574	104 919
Taxes	-	-	-	-	-	-	-	-	-
Foreign Exchange	16 748	2 588	6 106	2 539	2 100	306	1 269	2 876	34 532



## ORGANIZATION AND MANAGEMENT

### A. The Participatory Approach

1. Following the selection and training of staff in participatory methodology and the selection of the first areas where the project might commence rangeland rehabilitation, i.e., areas where technical success was likely assured, the first contact will be made with the community leaders in the selected areas. The introductory meetings with community leaders will be followed by meetings with the whole community. At this stage, and together with the whole community, over several meetings a **problem census statement** will be developed expressing community, technical staff and government felt needs and priorities. The next step will be the **solution statement**, setting out the problem census, in relation to the community/project goals, objectives and possible technical packages, infrastructural and other project contributions, e.g., credit. The observed and expressed willingness of the community to participate in the project and contribute to the full realization of the objectives will be assessed at this point and the general consensus formulated into a preliminary **problem-census/problem-solving (PCPS)** statement.

2. Further data will inevitably be required before a detailed plan can be formulated/finalized. Many of these data will be available to and collected by the community for compilation by the project staff. During the final stage a detailed Rangeland Management Plan (RMP) will be established, the project staff will calculate/determine the logistical and cost implications, and will continue discussion with the community to ensure that potential conflicts within the community or changes of mind can be accommodated and resolved. The final proposal will include detailed arrangements of beneficiary contributions and responsibilities and the contributions of the project. These will be agreed in an open meeting with the community and included in a final plan to be submitted through PPMU to CPMU for inclusion in the next AWP&B.

3. Concurrent with the completion of its RMP, the community will establish a Rangeland Management Committee (RMC) from amongst those members of the community who actively contributed to the RMP. This committee, will have a membership drawn from the community, local grass roots-oriented organizations, e.g., the General Union of Women (GUW), and a project staff representative who will act as secretary but have no voting right. Community members will be elected at a general assembly and hold office for 1 or 2 years or as decided by the community; one seat will be exclusively reserved for a woman. The RMC will be the interface for community-project dialogue relating to the ongoing operation of the project and particularly the rangeland rehabilitation. The RMC will guide the implementation of their RMP (i.e., participatory planning/implementation); and be responsible for the monitoring of their RMP at local level, i.e., participatory monitoring. These two activities will be innovative introductions to agricultural development in Syria. The Government has indicated that it accepts the need for the participatory approach as a pre-requisite if development interventions in the Badia are to be sustainable.

4. The RMC will work closely with and be guided by the rangeland and other technicians provided by the project. The RMC will organize community activities, including the provision of labour, needed for the implementation of the RMP, monitor the progress, provide the stewards necessary for guarding the resting areas, liaise with the technical staff in demonstrating technological packages connected both with rangeland development and with livestock, water supplies, human health, literacy and other project associated activities.



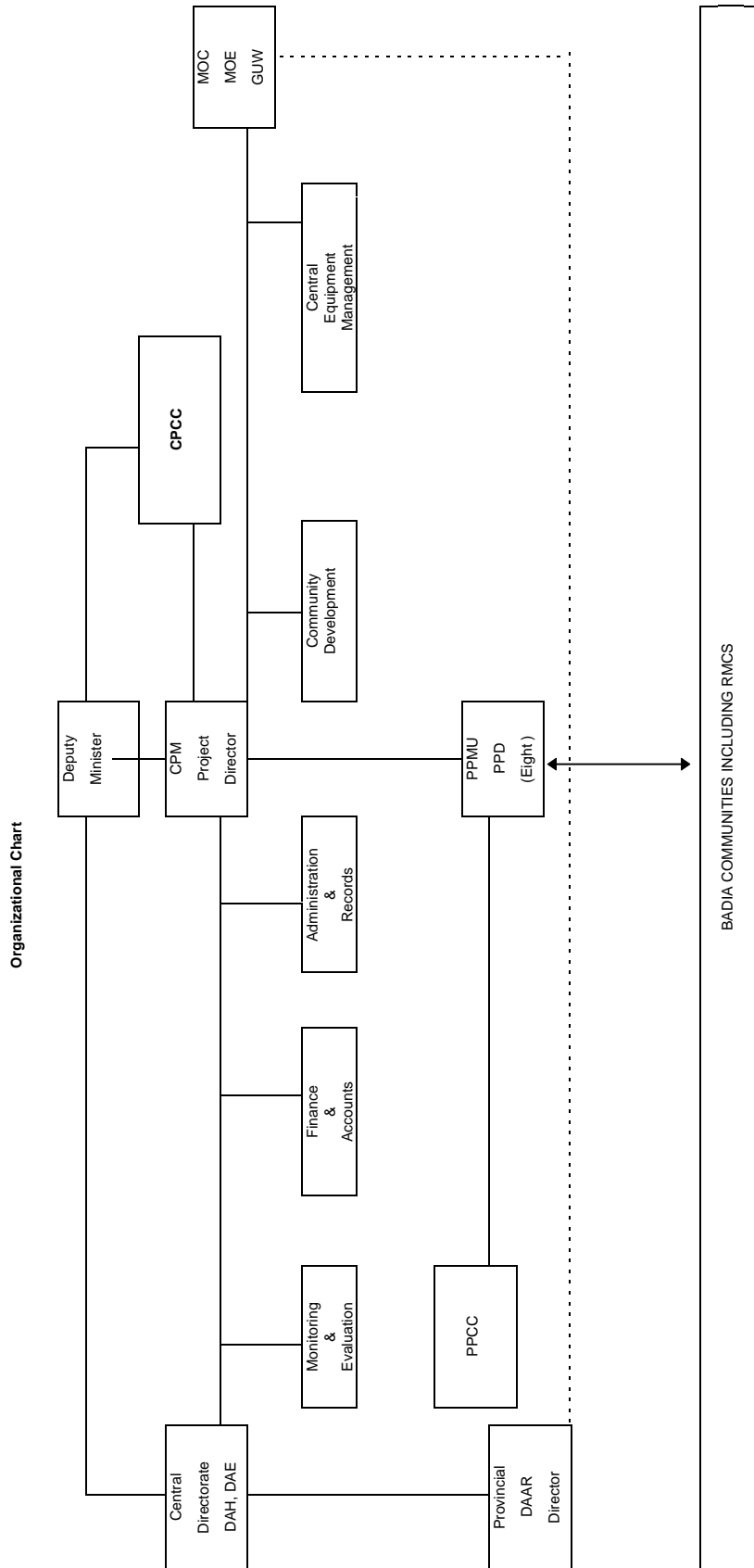
APPENDIX VI

5. The RMC will in liaison with the staff of the DSU establish the specific role that the community will play in relation to the participatory monitoring and evaluation activities which will provide the essential feed-back of information and reaction to the project.

**B. Functional Mangement**

6. Overall project management and coordination will be the responsibility of the MAAR. Implementation will be through a Central Project Management Unit (CPMU) headed by a Project Director (PD). At province level the project activities will be implemented/coordinated through a Provincial Project Management Unit (PPMU) established in each province. The project will be executed under the guidance of a Central Project Coordination Committee at national level with PPMUs under the guidance of Provincial Project Coordinating Committees (PPCC). These procedures parallel those in the on-going IFAD supported projects. Figure 1 shows organizational arrangements.

7. The **Central Project Coordination Committee (CPCC)** will be established before the project becomes effective under the chairmanship of the Deputy Minister with a membership which will include all department heads of MAAR involved in project activities as well as senior representatives of other bodies, including Ministry of Irrigation (MOI), Ministry of Environment (MOE) as national focus for CCD, the State Planning Commission, and the CAB, the Ministry of Culture (MOC) and MOE. The PD will be the Secretary to the CPCC. The CPCC will be responsible for: (i) defining the general policy framework of project implementation; (ii) approving the annual work plans in the light of the set policy framework and in accordance with MAAR planning and budgeting procedures; (iii) approving and subsequently supervising the allocation of the corresponding annual budgets; (iv) monitoring project progress principally through the analysis of six-monthly activity reports and the papers drafted at the end of each review or programming workshop; and (v) solving problems and potential conflicts of interest between participating departments. The CPCC will meet not less than twice yearly to discuss project implementation and to consider proposed solutions for problems arising.



DAH - Department of Animal Health  
DAAR - Department of Agricultural and Agrarian Reform  
MOC - Ministry of Culture  
MOE - Ministry of Education



APPENDIX VII

**ECONOMIC AND FINANCIAL ANALYSIS**

1. Directly productive benefits will consist exclusively of incremental fodder outputs from the rehabilitated rangelands. Other benefits, which cannot easily be quantified, will include improved health following upon the provision of more safe water for human consumption; improved social cohesion as a result from the various awareness-building efforts aiming at groups of beneficiaries; much increased social status of Badia inhabitants through literacy and miscellaneous skills training, improved transportation conditions, leading to lower costs of supply and marketing. Whilst the reality of these benefits is recognized, they are not considered in the economic analysis presented below.
2. An economic analysis has been carried out over a 20-year period. The analysis uses constant economic values, including an adjustment of local values (both costs and benefits) by the application of a standard conversion factor of 0.8. Benefits have been expressed in terms of barley equivalent valued at world market prices.
3. Including only those costs directly related to the production of incremental fodder the resulting EIRR is estimated at 20.7%. In order to test the sensitivity of this EIRR cost and benefit streams were subjected to variations which represent unforeseen elements. The EIRR is generally robust: even quite important shocks applied to costs and/or benefits do not appear to reduce the EIRR to levels below the opportunity cost of capital which for Syria is estimated at 12%. If all project costs are included the estimated EIRR is 15.7%.
4. Indicative activity budgets, presenting situations with and without project, singly and combined into representative farm models, have been used to derive the incremental changes in the value of production and the resulting cash flow per ovine unit.
5. Activity budgets were prepared for small, medium and large flocks on the basis of 1 ovine unit. Incremental yields have been phased over 5 cropping years (project maturity).
6. **Large extensive flocks**, ranging between 200 and 3000 productive ewes per household, are mainly owned by nomads and correspond to 30% of sheep population but only to 20% of stock owners.
7. With the project, the gross value of production will increase by SYP 370 000, from SYP 606 300 for the without project, to SYP 977 300 at full development by PY 5. Total production costs, excluding financing costs, will decrease by SYP 215 500. The farm family benefit will increase by SYP 585 500 from SYP (84 300) for the without project situation to SYP 501 200 at full development.
8. **Medium Semi-Sedentary Flocks.** The average flock size is 120 ovine units (ranging between 100 and 200). This model counts for about 50% of sheep population and 40% of stock owners.
9. With the project, the gross value of production will increase by SYP 249 600, from SYP 361 104 for the without project situation to SYP 610 704 at full development by PY 5. Total production costs, excluding financing costs, will decrease by SYP 104 040. The farm family benefit will increase by SYP 353 640, from SYP (41 856) for the without project situation, to SYP 311 784 at full development.



**APPENDIX VII**

10. **Small Sedentary Flocks.** They correspond to about 20% of total sheep population and to 30% of stock owners. Average size is considered to be 50 ovine units.

11. With the project, the gross value of production will increase by SYP 129 000 from SYP 169 460 for the without project situation to SYP 298 460 at full development by PY 5. Total production costs, excluding financing costs, will decrease by SYP 38 850. The farm family benefit will increase by SYP 163 890, from SYP 16 340 for the without project situation, to SYP 151 510 at full development.