



IFAD
INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT
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REPORT AND RECOMMENDATION OF THE PRESIDENT

TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO

THE REPUBLIC OF TUNISIA

FOR

THE INTEGRATED AGRICULTURAL DEVELOPMENT PROJECT
IN THE GOVERNORATE OF ZAGHOUAN



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CURRENCY EQUIVALENTS

Currency Unit	=	Tunisian Dinar (TND)
USD 1.00	=	TND 1.11
TND 1.00	=	USD 0.901

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 ²)	=	10.76 square feet (ft ²)
1 acre (ac)	=	0.405 ha
1 hectare (ha)	=	2.47 acres

ABBREVIATIONS AND ACRONYMS

AFESD	Arab Fund for Economic and Social Development
BNA	Banque nationale agricole (National Agricultural Bank)
BTS	Banque tunisienne de solidarité (National Solidarity Bank of Tunisia)
CRA	Cellule de rayonnement agricole (Agricultural extension centre)
CRDA	Commissariat régional pour le développement agricole (Regional Commission for Agricultural Development)
DGFE	Direction générale du financement et des encouragements (General Directorate for Financing and Encouragement)
M&E	Monitoring and evaluation
NGO	Non-governmental organization
MOA	Ministry of Agriculture
PMU	Project management unit
PRA	Participatory rural appraisal
SWC	Soil and water conservation

GOVERNMENT OF THE REPUBLIC OF TUNISIA

Fiscal Year

1 January - 31 December



MAP OF THE PROJECT AREA

TUNISIA
PROJET DE DEVELOPPEMENT AGRICOLE INTEGRE DANS LE GOUVERNORAT DE ZAGHOUAN
Carte de localisation de la zone du projet



Source: Government of Tunisia.

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.



REPUBLIC OF TUNISIA

**INTEGRATED AGRICULTURAL DEVELOPMENT PROJECT IN THE GOVERNORATE
OF ZAGHOUAN**

LOAN SUMMARY

INITIATING INSTITUTION:	IFAD
BORROWER:	Republic of Tunisia
EXECUTING AGENCY:	Ministry of Agriculture (MOA)
TOTAL PROJECT COST:	USD 33.6 million
AMOUNT OF IFAD LOAN:	SDR 11.4 million (equivalent to approximately USD 16.1 million)
TERMS OF IFAD LOAN:	18 years, including a grace period of three years, with an interest rate equal to the reference interest rate per annum as determined by the Fund annually
COFINANCIERS:	None
CONTRIBUTION OF BORROWER	USD 15.3 million
CONTRIBUTION OF BENEFICIARIES	USD 2.2 million
APPRAISING INSTITUTION:	IFAD
COOPERATING INSTITUTION:	Arab Fund for Economic and Social Development (AFESD)



PROJECT BRIEF

Who are the beneficiaries?

The project covers the four south-eastern districts of the Governorate of Zaghuan: Nadhour, Saouaf, Zaghuan and Zriba. The target group includes small farmers and landless people, with particular emphasis on women. Of the total rural population of 59 200 (or 11 600 households) in the project area, about 75%, or 44 500 persons, are expected to benefit from at least one of the project interventions. A socio-economic study will be carried out at the beginning of the project in order to define both the socio-territorial units to be targeted by investments under the different components and the corresponding group formation and management training needs.

Why are they poor?

Although agricultural potential exists and the region is close to a number of major urban centres, the project area is one of the poorest in the country. However, the soils and rangelands are degenerating rapidly due to soil erosion on the hillsides and uncontrolled grazing; irrigation investments are underdeveloped compared with the market potential of the area; and rural social infrastructure investment in the region has not been kept at a level comparable with other regions of Tunisia.

What will the proposed project do for them?

Project benefits will be in the form of: hardware, such as investments in soil and water conservation (SWC), tree planting, rangeland improvement, groundwater development for irrigation, and social infrastructure, including village water supply and rural tracks; and software, to include improving local capacity to manage such investments and the strengthening of support services that will benefit the target group. The project is particularly well placed to address the problems of poor women. Improved access to drinking water will directly benefit women and children in the form of improved health and sanitation and reduced drudgery as the time involved in fetching water will be reduced; and the informal credit approach is well adapted to the needs and capabilities of rural women. In addition, the strengthening of the agricultural extension service to address the needs of rural women, and their involvement in water and rangeland users' groups/associations, will speed up the integration of women in the mainstream of development and give them recognition commensurate with their contribution to family labour and income.

How will the beneficiaries participate in the project?

Emphasis will be placed on developing local-level capacity to plan, manage and maintain investments in SWC, rangeland rehabilitation and management, irrigation and drinking water supply. Periodic participatory surveys will be undertaken to seek feedback from beneficiaries on services received from the project and on ways to improve their involvement and participation in project implementation.



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I submit the following Report and Recommendation on a proposed loan to the Republic of Tunisia for SDR 11.4 million (equivalent to approximately USD 16.1 million) on ordinary terms to help finance the Integrated Agricultural Development Project in the Governorate of Zaghouan. The loan will have a term of 18 years, including a grace period of three years, with an interest rate equal to 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 STRATEGY¹

A. The Economy and Agricultural Sector

1. Tunisia is a middle-income country with a gross national product (GNP) of about USD 2 000 per capita. The structure of the Tunisian economy, once dominated by primary production in agriculture, oil and phosphate extraction, has evolved and diversified since Independence. Services contribute some 50% of the gross domestic product (GDP), industry 32% and agriculture 14%.
2. Tunisia has a population of about 9.4 million, with an annual average growth rate of 1.9%. About 60% of the population lives in urban or semi-urban areas. The rural population totals 3.5 million, with an average household size of 5.2 people. Rural population growth is stagnating, and national rural growth was about 0.4% per year between 1984 and 1994, while the urban areas around Tunis have grown by 4.2% per annum. Emigration is high and involves about 15% of the active population.
3. Since 1986, the Government has implemented economic reforms that have transformed the Tunisian economy from one that was highly regulated and protected to an open, market-oriented economy. The role of the State has focused on setting policies and creating conditions for competitive private sector development, and on privatizing activities that do not concern public goods. Efforts have been made to lower the budget deficit through fiscal policies, including simplifying and extending the tax system while lowering tax rates. Inflationary pressure has been contained and the allocation of credit has improved through monetary policy. An exchange-rate policy has been used to maintain exchange-rate stability, preserve foreign exchange reserves and make the dinar convertible to facilitate trade and investment. As a result, Tunisia has achieved an annual growth of about 5% over the last decade and 5.7% in 1997. The external debt is managed rigorously and, in 1995, total debt was 51.8% of GNP. Debt service represented a relatively moderate 17% of total exports in 1995.
4. Despite its declining importance in favour of services and manufacturing, agriculture remains one of Tunisia's major economic sectors. On average, the sector contributes 15% to GDP, with wide annual variations caused by unreliable rainfall, and 15% to export earnings. It employs one fifth of the national workforce and provides work and incomes to many household members who go uncounted in

¹ See Appendix I for additional information.



the official labour statistics. About one quarter of the land area of 16.5 million ha is pasture or forest and a further quarter is cultivated. Only 6% of the cultivated land is irrigated and, given that 80% of the exploitable water resources is already used, there is little scope for major expansion programmes in this subsector. The arable land is devoted mainly to cereals (34%), fruits (35%), and fodder, legumes, pulses and industrial crops (11%). Livestock contributes 30% to the gross domestic agricultural product. Sheep, raised on increasingly degraded rangeland and forest areas, are the predominant species.

B. Lessons Learned from Previous IFAD Experience in Tunisia

5. IFAD has so far supported seven projects in Tunisia with a total cost of USD 203 million, of which the Fund has financed some USD 79.9 million, or 40%. Cofinancing from the Islamic Development Bank and *Agence française de développement* has amounted to USD 41 million, while the Government contributed USD 81.5 million, or 40% of costs. Three loans have been closed with 100% disbursement and, of the four remaining loans, 71% had been disbursed by the end of September 1998. Six of the loans have been administered by AFESD, which did not, however, provide cofinancing. The other project, the Sidi Bouzid Irrigation Project (139-TN), was supervised by the World Bank. The Fund's first loan to Tunisia was provided on intermediate terms, while all the others have been on ordinary terms.

6. To date, all IFAD's projects in Tunisia have been integrated area development projects aimed at solving problems related to crop and livestock production, natural resource management through SWC measures, watershed management and reforestation, smallholder credit delivery and recovery, and social infrastructure, including rural roads and water supply. This approach is compatible with the Government's strategy and objectives.

7. **Technical results.** In general, the results obtained have been technically sound. However, there are still difficulties in reducing the sensitivity of some technical interventions to the recurrent disruptive effects of rainfall variation. In general, crop extension work has been modest, with limited improvements in farm productivity under rainfed conditions. However, productivity on small-scale irrigated perimeters has been satisfactory, often benefiting women engaged in vegetable production. Whenever feasible, support to extension for rainfed agriculture and the development of small-scale irrigated agriculture will be considered for future projects.

8. **Targeting.** Several projects have defined the target group in terms of farm size or farming systems. Experience has shown that: (i) integrated development projects logically address the constraints of an entire region and its rural population; (ii) natural resource management activities supported by the projects often need to be undertaken by an entire farming community, e.g., SWC work, sylvo-pastoral activities and watershed management; and (iii) a participatory approach cannot be applied only to a segment of the population, as larger farmers are often leaders in their own communities and play an important role as group managers. Under these conditions, targeting through the selection of the project area from the poorer regions of the country and, within these regions, working in the more disadvantaged zones, seems the best alternative. Further targeting through the design of activities that are mostly of interest to the smaller farmers, may help to focus benefits on the poorer population.

9. **Participation.** Project implementation has been often undertaken without the full involvement of beneficiaries. This has meant that investments have not been adequately maintained; and the impact on the individual farm has not been evaluated. IFAD's experience has been that, under the ongoing process of State disengagement, it is essential to create or strengthen local institutions and grass-roots organizations that will assume responsibility for operating and maintaining the investments promoted by projects. Working with local non-governmental organizations (NGOs) in an effort to strengthen local institutions and grass-roots organizations was a major innovation in IFAD projects as of 1992, but lack of clear definition of the role of the project management unit (PMU) and the NGOs created difficulties in implementation. IFAD will continue to refine the role of NGOs in project design.



10. **Credit.** Several projects include credit components for short and medium-term loans to smallholders. Implementation has been constrained by unclear institutional arrangements and lack of supervision follow-up, leading to low recovery rates. In recent projects, credit lines have been financed exclusively by the Government. Small, informal credit operations undertaken by NGOs have obtained higher recovery rates. However, although they are a considerable improvement on those of the formal credit sector, these operations are still unsustainable. There is a need to explore and test new mechanisms for rural financial services, including microfinance.

11. **Institutional results.** Recent projects have contracted implementation out to public and/or private institutions and firms and project management has tended to consider itself as a programming and financing unit. In cases where the PMU has maintained some degree of direct involvement in community development through the recruitment of contract staff for specific activities, the project manager's involvement in project results appeared to be greater and thus implementation seemed more effective.

C. IFAD's Strategy for Collaboration with Tunisia

12. **Tunisia's policy for poverty eradication.** For a long period of time, Tunisia has had a demonstrated commitment to social development and poverty alleviation. While embarking on structural adjustment programmes as of the mid-1980s, the Government cut back on overall spending but managed to increase per capita public social spending by 14% in real terms. Investments in potable water, electricity and health increased; and assistance programmes for the poor were better targeted as consumer subsidies were gradually reduced. In 1996, with the assistance of the United Nations Development Programme (UNDP), the Government drafted a "Poverty Elimination Strategy and Framework" aimed at: (i) enhancing knowledge of poverty parameters; (ii) finding ways and means of increasing the participation of, and empowering, vulnerable populations; (iii) helping vulnerable populations to improve their lot; and (iv) designing a grass-roots pilot initiative to operationalize sustainable human development. These objectives complement the Government's continued larger commitments to, *inter alia*, increasing rural income levels, generating employment, sustainable development of natural resources, and targeting of public investment to regions where poverty is more acute.

13. **The poverty eradication activities of other major donors.** The principal donors supporting rural development in Tunisia are the World Bank, European Union, African Development Bank, Islamic Development Bank, AFESD and France and Germany. IFAD works closely with a number of the above-mentioned organizations, through either formal relationships or frequent contacts/ exchanges of information. The World Bank is focusing on formal credit, development in the mountainous areas in the north-west of the country, forestry development, research and extension, and structural adjustment. The African Development Bank is committed to financing large infrastructure investments in water management, and formal credit. The European Union is engaged in financing small-scale water management infrastructure, in SWC programmes and rural development in the Governorate of Kef. German bilateral aid is supporting the *Office de développement sylvopastoral du Nord Ouest* in parallel with the World Bank, and is involved in rural drinking water supply. French bilateral aid, which emphasizes direct cooperation between operators in specific product lines, such as milk, fruit and vegetables, is financing rural development projects in Sidi Bouzid and Kef Governorates and cofinancing another project with IFAD in the Governorate of Siliana. Japan is providing considerable assistance to the irrigation sector and is currently supporting the preparation of a World Bank project on national research, extension and support to farmers' organizations.

14. **IFAD's strategy in Tunisia.** Based on previous experience and an analysis of opportunities/ constraints both in the agricultural sector and in the context of rural poverty, IFAD's country strategy for Tunisia has been formulated with four main thrusts: (i) to ensure higher levels of beneficiary participation; (ii) gender balance; (iii) creation and strengthening of rural financial services; and (iv) sustainable management of natural resources. Three are directly linked to IFAD's corporate



strategy and one to its regional strategy. Together, the four thrusts shape the objectives of the strategy as well as the proposed target group, activities and implementation modalities that it covers.

15. In conformity with the Fund's mandate and corporate strategy, and in line with the Government's strategy set out in the IXth Social and Economic Development Plan (1997-2001) (IXth Plan) for achieving a 5% growth rate, the objective of IFAD's support is to increase productivity and incomes from sustainable activities undertaken by the target group, including women. To this end, priority activities in different subsectors will be supported. However, the main focus of the strategy will be the development of local institutions representing the interests of the poor and that will constitute the building blocks for the development of the agricultural profession. In the present and future context of increased competition, continued structural reform and disengagement of the State, the establishment of farmers' and women's organizations will be pursued in order to: (i) facilitate access to the financial and support services needed to improve productivity and self-dependence for both on- and off-farm income-generating activities; (ii) constitute the framework for the application of a participatory approach that is not only an IFAD strategy but is promoted in the Government's IXth Plan and implementation strategies; and (iii) allow for the progressive disengagement of the State from production and commercial activities/responsibilities, with a simultaneous transfer of such activities to farmers' organizations, thus enabling it to focus on research, extension and other support services, especially those relating to products in which the country has a potential comparative advantage.

16. IFAD support will be focused on the needs of, and the constraints faced by, the poor rural population. In line with national policy orientation and the social reality of the rural areas, projects and programmes will focus on gender issues. In identifying the target group and taking account of experience in previous IFAD projects, it has been recognized that the poorer populations form an integral part of the social network of communities, and that isolating them for – temporary – project interventions is not always feasible or even desired by the poor themselves. IFAD support will therefore focus on the poorer communities as a whole while the type of assistance to be provided will be designed in accordance with the communities' priority needs and constraints with regard to both on- and off-farm income-generating activities. Community-level priorities and needs will be identified in a participatory manner (socio-economic surveys, participatory rural appraisals (PRAs), local-level participatory workshops, etc.), and conditions will be created to strengthen local institutions and grass-roots organizations.

17. As IFAD support will be complementary to that of other donors and the Government, it will not need to embrace all subsectors or activities. An analysis of the constraints common to most poor farmers and women shows a need for IFAD to focus on the following thrusts: (i) the development of rural financial services accessible to persons that are not eligible for formal credit and based on mutually-mobilized resources; and (ii) sustainable management of natural resources, including SWC measures, watershed management, flood control and range rehabilitation and management, with special focus on profitable production opportunities for smallholders. The first thrust will help IFAD's target groups gain access to production means, namely, capital; while the second will provide the technical and support services needed for sustainable management of the natural resource base which constitutes the backbone of the beneficiaries' livelihoods.

18. **Project rationale and strategy.** The proposed project was designed on the basis of lessons learned from previous experience in Tunisia and the main thrusts of IFAD's strategy for the country. As such, it incorporates experience acquired in community development and the participatory approach, and from the national policy adopted by the Government of Tunisia in the IXth Plan. Therefore, all project activities will be designed with the active participation of the population with a view to involving them throughout the project cycle, thus ensuring the sustainability of project interventions. For this reason, a PRA workshop held in the project area during formulation was attended by some 40 beneficiaries, including women, as a representative sample of the project area. The objective was to identify, during project design, the beneficiaries' needs and priorities.



19. The proposed project is part of the Government's priority programme to eradicate poverty and achieve balanced regional development. Although located at the limit of the relatively more developed administrative region of the Northeast, the project area has been left out of the general economic development process due to its isolation, marginal agroecological and socio-economic conditions, and the alarming degradation of its natural resource base through erosion, overgrazing, etc. In spite of existing ecological limitations, agriculture remains a priority for the population in the project area and there exists considerable potential for development through the protection and improved management of the natural resource base, including implementation of corrective SWC measures, rangeland improvement, rational use of limited irrigation water resources, improvement of local infrastructure, etc., which can be tapped to improve the income and living conditions of the target population.

PART II - THE PROJECT

A. Project Area and Target Group

20. The project area covers the four south-eastern districts of the Governorate of Zaghouan. It has a population of about 79 600, of which 59 200 are rural, living in 11 600 households with an average household size of 5.2 persons. Unemployment is very high and reached 25% in 1994. Farms are small and 93% of all farms cover less than 20 ha, which is considered the minimum size under rainfed conditions to provide an income for the sustained survival of the family. About 25% of the rural population is landless, but most own some animals — mainly sheep and goats — which graze on community rangelands. About 45% of the average family income is estimated to come from non-farm sources such as low-wage government jobs, construction, foreign remittances, etc.

21. The project area is located in the semi-arid zone of the country, with average yearly rainfalls of about 300-450 mm and large annual and inter-annual variations. The area is mountainous, and the large majority of the small farms are located on shallow soils on the slopes which are prone to erosion. Rangelands are mainly part of the forest areas and are degraded through overgrazing and lack of proper management. Groundwater resources are limited but there exists some potential to tap water for drinking and small-scale irrigation purposes from deep aquifers and shallow wells.

22. Of the 11 600 rural households in the project area, some 9 050 constitute the target group as their family income is close to the poverty line². These include small farm households with holdings of up to 20 ha, and all landless families. About 75% of these families are expected to benefit from at least one of the project interventions. Women are increasingly involved in agricultural production due to male emigration, and they will be specifically targeted by various project activities.

B. Objectives and Scope

23. The overall objective of the project is to alleviate poverty through more sustainable management of the resource base in the project area³. Specific development objectives are to: (i) bring about increased and more stable and diversified income through intensification of agricultural production based on investments in SWC, livestock and rangeland improvement and small-scale irrigation; (ii) limit or halt degradation of the agricultural and pastureland and forests and reduce siltation at downstream dams; (iii) improve the efficiency of on-farm irrigation; (iv) reduce the isolation of villages, thus contributing to improved conditions for agricultural marketing and

² Based on TND 184 per year in 1990 (World Bank, 1995) updated for 1997 based on a 5.7% rate of growth of household consumption established by the 1995 National Survey on Household Budget, Consumption and Standard of Living.

³ Project objectives, inputs and associated critical conditions are summarized in the Logical Framework (Appendix III).



stimulation of economic activity in the project zone; and (v) improve the status of women through the provision of services and access to small-scale credit for income-generating activities.

C. Project Components

24. The project components will be implemented over a period of six years, as described below.

25. **Community development and promotion of rural women.** With backstopping assistance from private operators/partner organizations and one or more NGOs, the project will assist in: (i) undertaking participatory appraisals and planning for the identification of homogeneous socio-territorial units as a function of the priorities and needs both of the population and of common interest groups; (ii) mobilizing and sensitizing the target group, leading to the establishment of about 50 formal farmers' associations (20 for the improvement and use of forest rangelands; 12 for the implementation of soil conservation works; and 18 water users' associations, of which seven will be for drinking water supply and use and 11 for irrigation purposes); (iii) providing training to group members and public officials in group management and communication skills; (iv) helping women to participate actively in the above associations; and (v) identifying women's individual needs and providing training and informal credit through one or more NGOs in order to satisfy such needs.

26. **Soil and water conservation,** including the following: (i) construction and biological fixation of contour bunds on 5 300 ha of land suitable for fruit trees and cereals. Those needing major works (3 800 ha) will be contracted to the private sector and 1 500 ha will be built by the farmers themselves; (ii) construction of stone walls along contour lines on 1 100 ha; (iii) construction of stone check-dams on 900 ha planted with dense acacia trees for biological fixation; and (iv) 800 ha of contour bunding, supported by the planting of perennial grasses in fields with slopes not exceeding 3-8%.

27. **Rangelands and livestock development.** This component will include: (i) regeneration of 12 000 ha of degraded pastureland through the rotational closing of parcels for a period of two years and compensating the users so that they can maintain their herds; (ii) planting of 3 000 ha of degraded forest and pasture areas with fodder shrubs, and the reseedling of another 3 000 ha; (iii) introduction of urea straw treatment to increase fodder value; (iv) improvement of the performance parameters of animals — mainly sheep and goats — through the introduction of high-value breeding stock; and (v) promotion of sheep-fattening and bee-keeping as financially promising income-generating activities.

28. **Irrigation development.** The tapping of new water resources for irrigation purposes will be supported only in the event that area-specific groundwater studies demonstrate that the proposed water extraction does not exceed the recharge. The project will finance: (i) groundwater testing and monitoring studies; (ii) drilling, equipment and electrification for four new tubewells and the replacement of existing tubewells; (iii) equipment for four existing test tubewells with a proven water potential and replacement of the equipment of two others; (iv) development of the tubewell in connection with irrigated areas of about 480 ha; (v) creation of 20, deepening of 60 and equipment for 120 dug-wells; and (vi) improved on-farm irrigation equipment — drip and sprinkler and improved gravity systems — over 1 280 ha to improve water-use efficiency.

29. **Agricultural development.** Activities under this component will aim at consolidating the investments in SWC, livestock and rangeland improvement, and irrigation components. This will include: (i) fruit tree plantations in areas improved by SWC works — 1 900 ha of mainly olive and almond trees — and in newly irrigated areas — 300 ha of grapes and olives, mainly the table varieties; and (ii) strengthening of the agricultural extension service through filling vacant extension agent positions (four men and three women) and the supply of transport and audio-visual equipment. Two lines of credit, formal and informal, will be provided under this component. Formal credit will



be financed exclusively by the Government with National Agricultural Bank (BNA) resources and through ongoing special public investment incentives programmes to finance short and medium-term credit for rainfed and irrigated agriculture, including purchase of improved rams, irrigation equipment, shallow-well development, tree planting, etc. Informal credit will be financed through IFAD's loan and managed by an NGO. Loan sizes are small, and cover activities in dispersed areas. The total credit to be provided amounts about USD 190 000 and will be used to encourage women to undertake income-generating activities such as honey-making, fruit-drying, handicrafts and collective community development activities. Microcredit will be provided by the National Solidarity Bank of Tunisia (BTS) at the request of the beneficiaries, with technical assistance provided by the project.

30. **Development of social infrastructure.** Despite its proximity to the national road and water supply networks, the project area is still characterized by isolated localities in the internal rural zones. To desenclave these localities, the project will finance (i) the construction of 54 km of rural tracks serving about 1 400 dispersed households and the opening-up of irrigated areas with intensive vegetable production on about 860 ha; and (ii) the rehabilitation of seven, and the establishment of five new community water supply schemes serving some 11 000 people.

31. **Project management unit.** The project will include a small PMU to be established within the Regional Commission for Agricultural Development (CRDA) for the financial management of the project, while the technical components will be executed by the relevant services of CRDA. The project will finance staff costs (some 11 professional and support staff), transport and office equipment, and funds will be allocated for adaptive research in the fields of SWC and rangeland improvement and for project-specific studies (baseline, mid-term and project completion surveys, underground water monitoring, etc.). Project staff will include one credit advisor per district to help target group farmers update their land possession certificates, thus facilitating their access to formal credit; and one microenterprise consultant to support the newly-established bank for microcredit, BTS, through the identification of promising microenterprises, support to clients to design projects and complete the documentation required to access microfinance, and development of suitable microenterprise management systems.

D. Costs and Financing

32. **Project costs.** Total project costs over the six-year implementation period are estimated at USD 33.6 million, including physical and price contingencies. Foreign exchange represents about 48% of total costs. Investment costs are estimated at USD 31.7 million, or 94% of the total. Project costs by component are summarized in Table 1.

33. **Project financing.** The project will be financed by an IFAD loan of approximately USD 16.1 million, which will cover about 48% of total project costs. The Government's contribution, including taxes, the credit line with BNA and the investment incentives to beneficiaries that accompany the credit, will be equivalent to USD 15.3 million, or about 46% of total project costs. The beneficiaries are expected to contribute about USD 2.2 million, or 6%. IFAD financing will cover all components except the rural tracks component which will be entirely financed by the Government. The financing plan is presented in Table 2.

TABLE 1: SUMMARY OF PROJECT COSTS^a
(USD '000)

Components	Local	Foreign	Total	% Foreign Exchange	% Total Base Costs
Community development and promotion of rural women	1 290	125	1 416	9	5
Soil and water conservation	3 163	755	3 918	19	13
Rangelands and livestock development	3 098	2 660	5 757	46	20
Irrigation development	2 847	6 641	9 489	70	33
Agricultural development	2 150	1 140	3 291	35	11
Social infrastructure: drinking water supply	423	423	845	50	3
Social infrastructure: rural tracks	694	2 082	2 776	75	10
Project management unit	1 553	143	1 696	8	6
Total base costs	15 218	13 969	29 187	48	100
Physical contingencies	1 160	988	2 148	46	7
Price contingencies	1 151	1 122	2 273	49	8
Total project costs	17 529	16 079	33 608	48	115

^a Discrepancies in totals are due to rounding up of figures.

TABLE 2: FINANCING PLAN^a
(USD '000)

Components	IFAD		Beneficiaries		Government						Total		Foreign Exchange	Local (Excl. Taxes)	Duties and Taxes
	Amount	%	Amount	%	Budget		Banks		Investment Incentives		Amount	%			
					Amount	%	Amount	%	Amount	%					
Community development and promotion of rural women	1 454	91	-	-	136	9	-	-	-	-	1 590	5	137	1 317	136
Soil and water conservation	3 415	76	424	9	682	15	-	-	-	-	4 521	14	867	3 271	384
Rangelands and livestock development	3 179	47	195	3	1 691	25	977	14	782	12	6 824	20	3 157	2 533	1 134
Irrigation development	5 999	55	328	3	1 696	16	1 641	15	1 313	12	10 978	33	7 697	1 348	1 933
Agricultural development	60	2	1 277	33	495	13	1 121	29	897	23	3 851	12	1 346	2 068	437
Social infrastructure: drinking water supply	746	82	-	-	164	18	-	-	-	-	910	3	455	291	164
Social infrastructure: rural tracks	-	-	-	-	3 018	100	-	-	-	-	3 018	9	2 264	211	543
Project management unit	1 203	63	-	-	713	37	-	-	-	-	1 916	6	156	1 499	260
Total disbursement	16 056	48	2 225	7	8 595	26	3 740	11	2 992	9	33 608	100	16 079	12 538	4 991

^a Discrepancies in total are due to rounding up of figures.





E. Procurement, Disbursement, Accounts and Audit

34. **Procurement.** For all IFAD-financed expenditures, procurement will be undertaken in accordance with IFAD's guidelines. To the extent possible, vehicles, material and equipment, and rural works contracts for infrastructure, will be bulked into sizeable bid packages. Contracts equal to or costing more than the equivalent of USD 300 000 for vehicles, material and equipment and equal to or more than USD 1 000 000 for civil works will be subject to international competitive bidding. Contracts costing less than USD 300 000 for vehicles, material and equipment or less than USD 1 000 000 for civil works but more than USD 30 000 will be awarded through local competitive bidding (LCB) according to procedures considered satisfactory to IFAD. For contracts valued at USD 30 000 or less, prudent shopping procedures, on the basis of three quotations, will apply. Contracts with the PMU, such as for planting fodder shrubs and soil conservation works carried out on force account, will be based on appraised unit costs and approved by the cooperating institution. Contracts with NGOs will be subject to LCB, satisfactory to IFAD.

35. **Disbursement.** The IFAD loan will be disbursed over a period of six years in accordance with the disbursement categories appearing in Schedule 2 of the loan agreement. Withdrawals from the loan account with respect to SWC works, planting of fodder shrubs, credit and operating costs will be made against statements of expenditure (SOEs). The relevant documentation justifying such expenditures will be retained by the project and made available for inspection by supervision missions and external auditors. All other withdrawals from the loan account will be made on the basis of full supporting documentation. The closing date of the loan is 31 December 2005.

36. The Government will open a Special Account in United States dollars with the Central Bank of Tunisia in the name of the project. Upon loan effectiveness, IFAD will make an initial deposit of USD 1 200 000, corresponding to six months' project expenditures. The Special Account will be used to finance IFAD's share of eligible expenditures and replenished in accordance with established IFAD procedures.

37. **Accounts and audit.** Separate project accounts and financial records relating to project activities will be maintained with the different implementing agencies. The PMU will ensure that such accounts and records are maintained in accordance with government practices and procedures acceptable to IFAD. Consolidated project accounts, to be prepared by the PMU, will be submitted to the Ministry of Agriculture (MOA). Project accounts will be audited on an annual basis by an independent auditor acceptable to IFAD, and certified audit reports will be transmitted to IFAD no later than six months after the end of the fiscal year. The auditor's report will include a statement as to the adequacy of executing agency accounting systems and internal controls, including a separate opinion in respect of the SOEs and the Special Account.

F. Organization and Management

38. Overall responsibility for the project will be with the General Directorate for Financing and Encouragement (DGFE) of MOA. The director-general, DGFE, will head a central coordination committee that will approve annual workplans and ensure that recommendations emanating from supervision missions receive proper follow-up. The project will be managed by a small semi-autonomous PMU⁴ that will be established within CRDA and act as a programming and financing unit. Physical activities under the different project components will be managed by the relevant CRDA services and contracted out to public and private institutions and firms. The community development and promotion of rural women component will be managed by the PMU with the support of private operators/partner organizations and NGOs.

⁴ See Organigramme in Appendix V.



39. **Monitoring and evaluation (M&E).** The M&E system has been designed to assess project performance on a regular basis and to evaluate its impact on the beneficiaries and the environment. The logical framework will serve as the terms of reference for the M&E system and the PMU will be responsible for updating it within the context of the annual workplan and budget exercise. The M&E unit will make extensive use of baseline surveys to track field-level impact. The mid-term socio-economic survey will serve as a basis for a mid-term evaluation (MTE) of the project at the end of the third year. The system will be operated by a small team within the PMU, under the responsibility of the project manager. The PMU will collaborate closely with CRDA and its agricultural extension centres (CRAs), and will contract local research institutes to assist in the M&E of technical and environmental aspects.

G. Economic Justification

40. Benefits are based on incremental production arising from the direct and indirect effects of the project. Indirect effects include valuation of gains in production resulting from SWC works (including moisture and desilting of dams). Water-saving technology was valued by the additional area cultivated as a result of increased water availability. Gains from the sylvo-pastoral component were calculated by converted gains in forage units valued at the barley equivalent. Social benefits resulting from rural track construction and village water supply have not been quantified. However, drinking water supply at the village level will mainly benefit women and young children by reducing the time spent on fetching water every day. Furthermore, the rural tracks will desenclave isolated production areas and connect them to the rural roads network. Crop yields have been estimated conservatively and adjusted to reflect drought occurrence. The internal economic rate of return (IERR) for the project, calculated under both pessimistic and optimistic scenarios, averages about 9.2% if all costs are included and about 10.5% if the costs of village water supply are excluded. Sensitivity analysis shows that the results are robust: a 10% increase in project costs reduces the IERR to 8% and an additional 10% decrease of project benefits entails a further reduction of 6.7%.

H. Risks

41. The principal project risks relate to the introduction of new approaches where institutional capacity is limited, particularly with respect to beneficiary participation. This approach, which will form the basis for all major project investments, is fairly new in Tunisia. The project will provide the necessary training and backstopping to local administrative staff in this field. Contracted private operators/partner organizations and NGOs will support and train the beneficiaries and act as an interface between the administration and the population for the purpose of building local capacities.

42. A second risk lies in the difficulty of small farmers gaining access to formal credit, mainly because certificates of land possession are not updated. This risk will be mitigated through project support to target group farmers with a view to updating their certificates.

43. Finally, as in all semi-arid areas, there is a considerable risk of crop failure due to prolonged drought. Such risk, however, will be real for only two classes of beneficiaries – those who rely solely on cereal production and those involved in rearing small ruminants. Both groups will need to benefit from a national calamity fund. Whenever possible, the project will also promote diversification in farming systems.

I. Environmental Impact

44. The proposed project has been classified as Category “B” because potential identified environmental impacts can be addressed through ensuring environmentally-sensitive design. Soil conservation and rangeland development works are expected to have a positive impact through erosion control, long-term maintenance of soil fertility and protection of downstream water reservoirs. With regard to groundwater use, detailed water resource and feasibility studies will be undertaken as part of the site selection process to ensure that extraction rates are balanced with recharge.



J. Innovative Features

45. The project's design is innovative in two ways: (i) for the first time in Tunisia, all project activities are based on active beneficiary participation. Group formation or users' associations will be a prerequisite for most investment activities to be financed by the project; and (ii) the project includes a backstopping activity in the field of microenterprise development through support from BTS, the newly-established bank specialized in microcredit. A microenterprise consultant will help potential clients of BTS to identify promising microenterprise activities, prepare the documentation required and provide advice on the management of the enterprises.

PART III - LEGAL INSTRUMENTS AND AUTHORITY

46. A loan agreement between the Republic of Tunisia 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.

47. The Republic of Tunisia is empowered under its laws to borrow from IFAD.

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

PART IV - RECOMMENDATION

49. 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 Republic of Tunisia in various currencies in an amount equivalent to eleven million four hundred thousand Special Drawing Rights (SDR 11 400 000) to mature on and prior to 15 October 2016 and to bear an interest rate equal to the reference interest rate per annum as determined by the Fund annually and to be upon such 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 27 November 1998)

1. The Government of the Republic of Tunisia (the Government) undertakes to make provision annually in the State Budget for amounts corresponding to the national counterpart funds of the project in order that such amounts may be available in good time for the start-up and execution of the project. Such counterpart funds are to cover duties and taxes, investment incentives for short, medium and long-term credit under current Tunisian law, and operating and staff costs.

2. The Government undertakes to ensure that the NGOs responsible for executing the promotion of rural women sub-component will set up and management a revolving fund for the project into which will be paid the principal and interest, after deduction of operating and other costs, collected on the credit granted to the beneficiaries from the proceeds of the loan, as indicated in Category VII of the financing table in paragraph 1, Schedule 2, of the loan agreement. The amounts available in the revolving fund will be used by the NGOs to provide credit facilities to the beneficiaries, consistent with the loan agreement, until such time as the payment of loan principle comes to an end.

3. The following is specified as an additional condition precedent to the effectiveness of the loan agreement, in accordance with Section 10.01(g) of the General Conditions:

the PMU will have been established with the necessary office premises at Zaghouan, and the Project Manager will have been recruited/redeployed by the Government, to the satisfaction of IFAD.

4. No withdrawals from the loan account will be made in respect of payments for expenses for activities included in the table in paragraph 1, Schedule 2, of the loan agreement, until such time as:

- (a) the Zaghouan CRDA will have nominated, from the staff of the districts, a project coordinator for each of the four project districts, that is, Zaghouan, Zriba, Saouaf and Nadhour;
- (b) the Government will have recruited or redeployed, as the case may be, key staff for the PMU; and
- (c) the Government will have submitted for the approval of IFAD a schedule of procurement/recruitment, within six months of the effectiveness of the loan agreement, for the additional staff required for Zaghouan CRDA.

5. No withdrawals from the loan account will be made in respect of expenses relating to new collective irrigation schemes foreseen under the irrigation development component, until such time as:

- (a) the study on deep groundwater resources, to be undertaken during the first year of the project, will have confirmed the availability of constant water supplies; and
- (b) CRDA will have established a system for monitoring deep and shallow groundwater resources.



ANNEX

6. Project implementation will be under the overall responsibility of DGFE/MOA. The executing agencies will include the Zaghouan CRDA, working through its districts; partner institutions and one or more NGOs recruited by the PMU to implement the community development and promotion of rural women component or by CRDA to undertake specific project activities under subsidiary agreements; BNA for the granting and recovery of credit; and BTS for activities relating to rural microfinance.

In ensuring the satisfactory execution of the following components, the Government also undertakes to:

7. For the community development and promotion of rural women component:

submit to IFAD, within six months of the effectiveness of the loan agreement, a document setting out the modalities to be adopted by PMU to ensure sound execution of the component.

8. For the irrigation development component:

make a rapid examination of the component's environmental impact at the time of the feasibility study on each irrigation scheme, in conformity with current Tunisian law.

9. For the rangelands and livestock development component:

release the resources foreseen as compensation to users for the closing of collective pastureland parcels, once the said parcels have been selected and the beneficiaries have been identified and organized into associations (AFIC).

10. For the execution of the component relating to the organization and management of the project, the Government undertakes to ensure that:

- (a) CRDA selects, from among its staff, a project coordinator for each project district. The selected coordinators should have experience of the participative approach and possess good organizational ability;
- (b) key project staff, particularly the Project Manager, the planning and training officer and the monitoring and evaluation officer, avail themselves of the NAMTA-I training programme foreseen under Category IV (Training) of the table appearing in Schedule 2 of the loan agreement, once the training programme has become operational; and
- (c) CRDA takes the necessary steps to ensure the coordination of activities in the project area with a view to avoiding any duplication of action between the different components.



COUNTRY DATA

TUNISIA

Land area (km² thousand) 1995 1/	155	GNP per capita (USD) 1996 2/	1 930
Total population (million) 1996 1/	9	Average annual real rate of growth of GNP per capita, 1990-96 2/	1.3
Population density (people per km²) 1996 1/	60	Average annual rate of inflation, 1990-96 2/	5.1
Local currency	Tunisian Dinar (TND)	Exchange rate: USD 1 =	TND 1.11
Social Indicators		Economic Indicators	
Population (average annual population growth rate) 1980-96 1/	2.2	GDP (USD million) 1996 1/	19 516
Crude birth rate (per thousand people) 1996 1/	23	Average annual rate of growth of GDP 1/ 1980-90	3.3
Crude death rate (per thousand people) 1996 1/	6	1990-96	4.1
Infant mortality rate (per thousand live births) 1996 1/	30	Sectoral distribution of GDP, 1996 1/	
Life expectancy at birth (years) 1996 1/	70	% agriculture	13.7
Number of rural poor (million) 1/	1	% industry	28.5
Poor as % of total rural population 1/	21.6	% manufacturing	18.2
Total labour force (million) 1996 1/	3	% services	57.8
Female labour force as % of total, 1996 1/	30.7	Consumption, 1996 1/	
Education		General government consumption (as % of GDP)	16.3
Primary school gross enrolment (% of relevant age group) 1995 1/	116.0	Private consumption (as % of GDP)	61.1
Adult literacy rate (% of total population) 1995 3/	66.7	Gross domestic savings (as % of GDP)	22.6
Nutrition		Balance of Payments (USD million)	
Daily calorie supply per capita, 1995 3/	3 173	Merchandise exports, 1996 1/	5 517
Index of daily calorie supply per capita (industrial countries=100) 1995 3/	101	Merchandise imports, 1996 1/	7 681
Prevalence of child malnutrition (% of children under 5) 1990-96 1/	9.0	Balance of merchandise trade	-2 163
Health		Current account balances (USD million)	
Health expenditure, total (as % of GDP) 1990-95 1/	5.9	before official transfers, 1996 1/	-1 396
Physicians (per thousand people) 1994 1/	0.6	after official transfers, 1996 1/	- 536
Percentage population without access to safe water 1990-96 3/	2	Foreign direct investment, 1996 1/	320
Percentage population without access to health services 1990-95 3/	10	Government Finance	
Percentage population without access to sanitation 1990-96 3/	20	Overall budget surplus/deficit (including grants) (as % of GDP) 1995 1/	-3.2
Agriculture and Food		Total expenditure (% of GDP) 1995 1/	32.8
Food imports as percentage of total merchandise imports 1996 1/	9.7	Total external debt (USD million) 1996 1/	9 887
Fertilizer consumption (hundreds of grams per ha of arable land) 1994-96 1/	296	Present value of debt (as % of GNP) 1996 1/	53.5
Food production index (1989-91=100) 1994-96 1/	99	Total debt service (% of exports of goods and services) 1996 1/	16.5
Land Use		Nominal lending rate of banks, 1996 1/	n.a.
Agricultural land as % of total land area, 1994 4/	51.0	Nominal deposit rate of banks, 1996 1/	n.a.
Forest area (km ² thousand) 1995 1/	6		
Forest area as % of total land area, 1995 1/	3.6		
Irrigated land as % of cropland, 1994-96 1/	7.4		

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*, 19982/ World Bank, *Atlas*, 19983/ UNDP, *Human Development Report*, 19984/ World Bank, *The World Development Indicators CD-ROM*, 1998

PREVIOUS IFAD LOANS TO TUNISIA

Loan No.	Initiating Institution	Cooperating Institution	Terms of Loan	Approval Date	Effectiveness Date	Actual Closing Date	Loan Amount 1/ SDR	Disbursements as at 15.10.98		
								SDR	%	
ONGOING PROJECTS										
227-TN	Pilot Project in Algeria and Tunisia for the Integrated Rural Development of the Mellegue Watershed	IFAD	AFESD	o	14.09.88	1.06.89	31.12.1998	9 300 000	6 603 000	71
298-TN	Sidi M'Hadheb Agricultural and Fisheries Development Project	IFAD	AFESD	o	12.12.91	7.08.92	30.06.1999	8 700 000	6 525 000	75
398-TN	Integrated Agricultural Development Project in the Governorate of Kairouan	IFAD	AFESD	o	2.12.93	7.08.95	30.06.2001	9 000 000	2 880 000	32
394-TN	Integrated Agricultural Development Project in the Governorate of Siliana	IFAD	AFESD	o	6.12.95	17.06.96	31.12.2003	7 550 000	830 500	11
Sub-Total								34 550 000	16 838 500	
CLOSED LOANS										
059-TN	Development Project of Small and Medium-size Farms in the Governorates of Kef and Siliana	IFAD	AFESD	i	05.12.80	2.10.81	31.12.1988	14 700 000	14 700 000	100
139-TN	Sidi Bouzid Irrigation Project	IFAD	World Bank	o	31.12.83	5.07.84	30.06.1993	6 900 000	6 900 000	100
175-TN	Sidi Bouzid Rainfed Agriculture Development Project	IFAD	AFESD	o	5.09.85	27.03.86	30.06.1994	6 050 000	6 050 000	100
Sub-Total								27 650 000	27 650 000	
TOTAL								62 200 000	44 488 500	

Note: i = intermediate
o = ordinary



LOGICAL FRAMEWORK

Goal	Goal- Level Targets	Goal- Level Monitoring	Goal- Level Assumptions
1.1.1 Poverty reduced	1.2.1 Farm and off-farm income increased	1.3.1 Project completion report	1.4.1 Stable political environment
1.1.2 Beneficiary participation achieved	1.2.2 Associations for water use, range management and SWC sustainable		1.4.2 Stable overall economic environment 1.4.3 Stable and attractive commodity price structure
Purpose	Purpose-Level Targets	Purpose-Level Monitoring	Purpose-Level Assumptions
2.1.1 Agricultural production increased	2.2.1 Production systems adjusted to potential 2.2.2 Food grain production increased (1 000 t) 2.2.3 Vegetable/ fruit production increased (13 000t) 2.2.4 Olive production increased (1 250 t)	2.3.1 Project completion report 2.3.2 Benefit monitoring 2.3.3 Environmental impact monitoring 2.3.4 Progress reports	2.4.1 Project well managed and coordinated 2.4.2 Farmers adopt improved crop and livestock practices 2.4.3 Associated and/or individual farmers maintain and operate infrastructure 2.4.4 Common interest groups (CIGs)/Common range interest groups (CRIGs) ensure efficient management 2.4.6 Women's groups become self-sustained
	2.2.4 Livestock production improved	2.3.5 Mid-term Evaluation/Review (MTE/MTR)	
2.1.2 Employment increased	2.2.5 Rangeland improved by 44%		
2.1.3 Status of women improved	2.2.5 Additional jobs created 2.2.6 Women's income increased		
Output	Output-Level Targets	Output-Level Monitoring	Output-Level Assumptions
3.1.1 Associations formed or strengthened are functional	3.2.1 six CIG/AP, 11 CIG/PI, 12 CIG/SWC and 20 CRIG established	3.3.1 Completion report	3.4.1 NGO staff competent and dedicated
3.1.2 Irrigated area and cropping intensity increased	3.2.2 Irrigated areas increased (890 ha) and improved (420 ha)	3.3.2 Progress reports	3.4.2 Communities participate actively
3.1.3 Erosion controlled	3.2.3 Micro-watersheds improved and erosion controlled	3.3.3 Review mission	3.4.3 Associations ready for operation and maintenance (O&M) of project works
3.1.4 crops improved	3.2.4 SWC technologies achieved on 8 100 ha	3.3.4 MTE/MTR	3.4.4 Groundwater resources available
3.1.5 Rainfed and irrigated tree crops planted	3.2.5 1900 rainfed tree crops and 300 ha irrigated tree crops planted	3.3.5 Management information system	3.4.5 Design and construction of civil works of good quality
3.1.6 Livestock improved	3.2.6 Rangeland packages developed and acceptable to communities	3.3.6 Monitoring records	3.4.6 Crops, rangeland and livestock packages accepted by farmers
3.1.7 Village water supply improved	3.2.7 Livestock productivity increased		3.4.7 Herdsmen's income enhanced
3.1.8 Rural roads improved	2.3.8 Bee-keeping subsector modernized		
3.1.9 Opportunities for self-employment	3.2.9 five new water supply schemes established and seven schemes rehabilitated 3.2.10 54 km of rural roads built		





LOGICAL FRAMEWORK (cont.)

Activities	Activity-Level Targets	Activity-Level Monitoring	Activity-Level Assumptions
Community Development			
4.1.1 NGOs selected and contracted	4.2.1 Project year (PY)1	4.3.1 Executing agency records	4.4.1 NGO staff recruited and trained 4.4.2 Farmers and Livestock owners accept being organized in CIG/CRIG
4.1.2 NGO field units formed	4.2.2 PY1	4.3.2 PMU records	
4.1.3 Associations formed	4.2.3 PY1:7; PY2: 11; PY3:18; PY4:13	4.3.3 Progress reports	
4.1.4 Beneficiary members trained	4.2.4 PY2: 1300; PY3: 1300; PY4: 1300		
4.1.5 Technical staff trained	4.2.5 PY1: 72		
4.1.6 Village development plans completed	4.2.6 PY1: 4; PY2 10		
4.1.7 Women's health and technical training	4.2.7 PY2:250; PY3: 530; PY4: 670; PY5:620; PY6: 70		
4.1.8 Household infrastructure improved	4.2.8 PY2: 240; PY3: 360; PY 4: 370; PY%: 270; PY6:60		
4.1.9 Informal credit for IGAs	4.2.9 PY2: 82; PT3: 108; PY4: 138; PY5: 132; PY6: 30		
Soil and Water Conservation			
4.1.10 Preparatory meetings with population	4.1.10 PY1:6; PY2: 4; PY3: 2;	4.3.4 Executing agency records	4.4.3 ASWC works actively with CIGs
4.1.11 CIG/SWC established	4.2.11 PY2: 6; PY3: 4; PY4: 2	4.3.5 PMU records	4.4.4 CIGs agree on cost-sharing arrangements
4.1.12 Feasibility studies	4.2.12 PY1:3; PY2: 4; PY3: 3; PY4: 2	4.3.6 Progress reports	4.4.5 CIGs take over O&M
4.1.13 Mechanical erosion control works	4.2.13 PY2: 800 ha; PY3: 900 ha;PY4: 1200 ha; PY5:900		
4.1.14 Manual erosion control works	4.2.14 PY2: 600 ha; PY3: 600 ha; PY4: 300 ha		
4.1.15 Improvement of badlands	4.2.15 PY2: 200 ha; PY3: 300 ha; PY4: 300 ha; PY5: 200 ha		
4.1.16 Other erosion control works	4.2.16PY2: 350 ha; PY2: 500 ha; PY4: 700 ha; PY5: 350 ha		
4.1.17 Consolidation works	4.2.17 PY2: 1 600; PY2 :2 200 ha; PY4: 2 200ha; PY5: 1 300ha		
Rangelands Improvement and Livestock Development			
4.1.18 CRIGs established	4.2.18 PY1:4; PY2: 8; PY3: 8	4.3.7 Executing agency records	4.4.6 CRIGs are sustainable groups
4.1.19 Natural rangelands rested	4.2.19 PY2-4: 2 000ha each; PY5-6: 3 000ha each	4.3.8 PMU records	4.4.7 CRIG members agree on cost-sharing arrangements
4.1.20 Fodder shrubs planted on common rangelands	5.2.20 PY2: 300 ha; PY3: 600 ha; PY4-6: 700 ha each	4.3.9 Progress reports	4.4.8 CRIGs maintain and operate the established improved pastures
4.1.21 Fallow replaced by fodder crops	4.2.21 PY2-4: 200 ha each		4.4.9 Short-term credit for straw treatment and fattening available
4.1.22 Straw forage value enhanced	4.2.22 PY2: 500t; PY3: 1 000 t; PY4: 2 500 t; PY5-6: 3 000 t each		
4.1.23 Sheep-fattening introduced	5.2.23 PY2: 400 head; PY3-5 1 200 head each		

LOGICAL FRAMEWORK
(cont.)

Activities	Activity-Level Targets	Activity-Level Monitoring	Activity-Level Assumptions
Irrigation Development			
4.1.24 CIGs established	4.2.24 PY1: 2; PY2: 7; PY3: 2	4.3.10 Executing agency records	4.4.10 CIGs are sustainable
4.1.25 Groundwater resources studies executed	4.2.25 PY1	4.3.11 PMU records	4.4.11 CIGs maintain and operate the collective irrigated areas
4.1.26 Feasibility studies executed	4.2.26 PY1: 3; PY2: 7; PY3: 1	4.3.12 Progress reports	4.4.12 Credit for shallow wells improvement and irrigation equipment is available
4.1.27 Drilling and equipment of boreholes	4.2.27 PY2: 2; PY3: 3; PY4: 4		
4.1.28 Establishment of irrigated areas	4.2.28 PY2: 215 ha; PY3: 245 ha; PY4: 110 ha; PY5 170 ha		
4.1.29 Shallow-wells establishment	4.2.29 PY 3: 10; PY4: 10		
4.1.30 Deepening of shallow-wells	4.2.30 PY3-5: 100 each		
4.1.31 Purchase of motor pumps	4.2.31 PY3: 20; PY4: 40; PY5: 40; PY6:20		
4.1.32 Purchase of modern irrigation equipment	4.2.32 PY1: 80 ha; PY2: 430 ha; PY3:420 ha; PY4:350 ha		
Crop Development			
4.1.33 Rainfed orchards planted	4.2.33 PY2:200 ha; PY3-5: 500 ha each; PY6:200 ha	4.3.13 Executing agency records	4.4.13 Farmers accept proposed tree planting
4.1.34 Irrigated orchards planted	4.2.34 PY3-5: 100 ha each	4.3.14 PMU records	4.4.14 Credit for tree planting is available by BNA
4.1.35 Mechanical weed treatment in olive groves	4.2.35 PY1: 100 ha; PY2-6:400 ha each	4.3.15 Progress reports	
Social Infrastructure Development			
4.2.36 Five CIG established and seven strengthened	4.2.36 PY2:4; PY3: 8	4.3.16 Executing agency records	
4.1.37 Preparation of tender documents: water supply	4.2.37 PY1: 2; PY2:3; PY3: 3; PY4: 4	4.3.17 PMU records	4.4.15 Households join CIGs for drinking water supply
4.1.38 Execution of works	4.2.38 PY2: 2; PY3: 3; PY4: 3; PY5: 4	4.3.18 Progress reports	4.4.16 CIGs take over O&M of schemes
4.1.39 Preparation of tender documents: 10 rural roads	4.2.39 PY2: 3; PY3: 2; PY4: 2;PY 5: 3		4.4.17 Rural roads are maintained by the <i>Direction des ressources en eau et hydrologies</i> (DREH)
4.1.40 Construction or rural roads	4.2.40 PY3: 16 km; PY4:13 km;PY5: 12 km; PY6: 13 km		
Project Management Unit			
4.1.41 PMU established and operational	4.2.41 17 persons in PY1		4.4.18 Project management and staff capable and retained
4.1.42 Vehicles and equipment purchased	4.2.42 PY1		4.4.19 Good working relations with all partners
4.1.43 Baseline study executed	4.2.43 PY1		4.4.20 Support from Governor/ CRDA/MOA

COST AND FINANCING

Disbursement Accounts by Financiers (USD '000)

	Government												Local (Excl. Taxes)	Duties and Taxes	
	IFAD		Beneficiaries		Budget		Banks		Investment Incentives		Total				For. Exch.
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
A. Equipment, vehicles and material	1 555	81	-	-	359	19	-	-			1 914	6	1 402	153	359
B. Contract	1 803	88	-	-	257	13	-	-			2 060	6	137	1 666	257
C. Civil works	10 840	66	-	-	5 678	34	-	-			16 518	49	9 927	3 838	2 753
D. Beneficiary works	-	-	1 477	100	2	0	-	-			1 479	4	-	1 479	-
E. Training	328	95	-	-	18	5	-	-			346	1	51	277	18
F. Studies	570	82	-	-	125	18	-	-			695	2	-	570	125
G. Compensation for resting period	-	-	-	-	396	100	-	-			396	1	-	396	-
H. Seedlings	567	94	-	-	36	6	-	-			603	2	-	567	36
I. Credit															
1. Informal credit	172	100	-	-	-	-	-	-			172	1	-	172	-
2. Formal credit	-	-	748	10	0	-	3 740	50	2 992	40	7 480	22	4 490	1 643	1 346
Subtotal Credit	172	2	748	10	0	-	3 740	49	2 992	39	7 652	23	4 490	1 816	1 346
J. Staff	-	-	-	-	1 402	100	-	-			1 402	4	-	1 402	-
K. Operating costs	221	41	-	-	323	59	-	-			544	2	71	375	98
Total disbursement	16 056	48	2 225	7	8 595	26	3 740	11	2 992	9	33 608	100	16 079	12 538	4 991

**Expenditure Accounts by Components - Base Costs
(USD '000)**

	Community Development and Promotion of Rural Women	Soil and Water Conservation	Rangelands and Livestock Development	Irrigation Development	Agricultural Development	Social Infrastructure: Drinking Water Supply	Social Infrastructure Rural Tracks	Project Management Unit	Total	%	Physical Contingencies Amount
I. Investment Costs											
A. Equipment, vehicles and material	-	286	123	1 079	75	-	-	169	1 732	5	87
B. Contracts	1 233	-	-	-	-	-	-	583	1 817	7	121
C. Seedlings	-	514	-	-	-	-	-	-	514	10	51
D. Compensation for resting period	-	-	336	-	-	-	-	-	336	10	34
E. Civil works	-	1 363	3 414	4 880	-	845	2 776	-	13 278	7	966
F. Community contracted works	-	1 007	-	-	-	-	-	-	1 007	10	101
G. Beneficiary works	-	362	2	-	887	-	-	-	1 251	10	125
H. Credit											
1. Informal credit	148	-	-	-	-	-	-	-	148	10	15
2. Formal credit	-	-	1 644	2 877	1 890	-	-	-	6 412	8	521
Subtotal credit	148	-	1 644	2 877	1 890	-	-	-	6 560	8	536
I. Studies	-	-	-	327	-	-	-	284	611	10	61
J. Training	35	-	47	112	-	-	-	105	299	10	30
Total investment costs	1 416	3 532	5 566	9 275	2 852	845	2 776	1 142	27 404	8	2 111
II. Recurrent Costs											
A. Staff	-	279	101	131	377	-	-	423	1 311	-	-
B. Office O&M	-	107	90	-	6	-	-	28	230	5	12
C. Vehicles O&M	-	-	-	82	56	-	-	104	242	10	24
Total Recurrent Costs	-	386	191	213	439	-	-	555	1 783	2	37
Total Base Costs	1 416	3 918	5 757	9 489	3 291	845	2 776	1 696	29 187	7	2 148
Physical Contingencies	81	339	559	762	288	-	-	119	2 148	-	-
Inflation											
Local	127	309	365	246	245	43	69	138	1 542	-	-
Foreign	4	47	236	522	94	32	182	4	1 122	-	-
Subtotal Inflation	131	356	601	768	339	75	251	142	2 664	-	-
Devaluation	-38	-92	-93	-40	-67	-11	-9	-42	-391	-	-
Subtotal Price Contingencies	93	265	508	728	272	64	243	101	2 273	7	154
Total Project Costs	1 590	4 521	6 824	10 978	3 851	910	3 018	1 916	33 608	7	2 302
Taxes	136	384	1 134	1 933	437	164	543	260	4 991	7	349
Foreign Exchange	137	867	3 157	7 697	1 346	455	2 264	156	16 079	7	1 061

**Expenditure Accounts by Financiers
(USD '000)**

	Government										For. Exch.	Local (Excl. Taxes)	Duties and Taxes		
	FIDA		Beneficiaries		Budget		Banks		Inv. Incentives					Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%				Amount	%
I. Investment Costs															
A. Equipment, vehicles and material	1 555	81	-	-	359	19	-	-	-	-	1 914	6	1 402	153	359
B. Contracts	1 803	88	-	-	257	13	-	-	-	-	2 060	6	137	1 666	257
C. Seedlings	567	94	-	-	36	6	-	-	-	-	603	2	-	567	36
D. Compensation for resting period	-	-	-	-	396	100	-	-	-	-	396	1	-	396	-
E. Civil works	9 665	63	-	-	5 678	37	-	-	-	-	15 343	46	9 927	2 663	2 753
F. Community contracted works	1 175	100	-	-	-	-	-	-	-	-	1 175	4	-	1 175	-
G. Beneficiary works	-	-	1 477	100	2	0	-	-	-	-	1 479	4	-	1 479	-
H. Credit															
1. Informal credit	172	100	-	-	-	-	-	-	-	-	172	1	-	172	-
2. Formal credit	-	-	748	10	0	-	3 740	50	2 992	40	7 480	22	4 490	1 643	1 346
Subtotal Credit	172	2	748	10	0	-	3 740	49	2 292	39	7 652	23	4 490	1 816	1 346
I. Studies	570	82	-	-	125	18	-	-	-	-	695	2	-	570	125
J. Training	328	95	-	-	18	5	-	-	-	-	346	1	51	277	18
Total Investment Costs	15 836	50	2 225	7	6 870	22	3 740	12	2 992	9	31 662	94	16 008	10 761	4 894
II. Recurrent Costs															
A. Staff	-	-	-	-	1 402	100	-	-	-	-	1 402	4	-	1 402	-
B. Office O&M	120	47	-	-	138	53	-	-	-	-	259	1	-	212	46
C. Vehicles O&M	100	35	-	-	185	65	-	-	-	-	285	1	71	163	51
Total Recurrent Costs	221	11	-	-	1 725	89	-	-	-	-	1 946	6	71	1 777	98
Total Disbursement	16 056	48	2 225	7	8 595	26	3 740	11	2 992	9	33 608	100	16 079	12 538	4 991





ORGANIZATION AND MANAGEMENT

A. Project Management Unit

1. Overall responsibility for project implementation will be with DGFE/MOA. The Director-General, DGFE, will head a central coordination committee (CCC), including representatives of BNA and of the Ministries of Planning and Regional Development, International Cooperation, and Finance. The committee will approve annual workplans and ensure that the recommendations of supervision missions are properly followed up. The project will be managed by a semi-autonomous PMU, to be established within the Zaghouan CRDA, that will be responsible for the coordination of project activities and the monitoring of all financial, technical and economic aspects. The project manager (PM) will have director rank, with the grade of principal engineer. The funds allocated to the project will be placed in a separate account and audited separately. The PM will co-sign all project expenditures with the Commissioner, CRDA.
2. The PMU will be composed of four units: (i) the M&E Unit, including an agro-economist specialized in M&E, will be in charge of the management information system for the project. The afore-mentioned specialist will work closely with the studies and statistics service of CRDA, supported by a computer data analyst for information management and analysis of data; (ii) the community development unit, including a sociologist, will be responsible for community development activities and liaison and follow-up with the NGOs. The sociologist's main task will be to promote the participatory approach among project and CRDA staff through suitable training programmes; (iii) the administrative unit, including a financial controller who will be responsible for the monitoring and follow-up of all financial matters relating to the project and the PMU. This unit will also include an accountant and support staff; and (iv) the credit monitoring unit, including a technical adviser responsible for the development of microenterprises through identification of beneficiaries who will be assisted in preparing and appraising project proposals to be submitted for BTS financing. The technical adviser will be backstopped by four specialized agricultural credit agents to assist the target group in updating their certificates of land possession and negotiating the rescheduling of their debts with BNA.
3. Based on the data collected by the M&E unit, the PM will ensure that work is compatible with project objectives. He will be responsible for any reorientation based on the MTE, if required. The PMU will ensure that the beneficiary selection criteria are respected and be responsible for ensuring that the various project activities are implemented according to plan. The PM will participate in the credit committee, which will decide on credit and incentives allocations.
4. At district level, the PM will be represented by four managers, each with the rank of engineer. They will be responsible for coordinating project activities in the four districts covered by the project, including the preparation of annual workplans, in close collaboration with the concerned technical services of CRDA.
5. PMU staff will be recruited on the open market or redeployed from MOA for the duration of the project. PMU offices will be provided by the Administration or, if necessary, rented. Project vehicles and materials will be managed by the PMU. Some will be used by the PMU staff and others will be placed at the disposal of the various services of CRDA.



B. Organization of Activities

6. The main activities of the PMU will be: (i) management, programming and monitoring; and (ii) implementation. Project activities, excluding community development, promotion of rural women, participation, and monitoring of rural credit (formal and microfinance), will be implemented by the various services and units of CRDA that have the necessary technical skills, know-how and experience.

7. Following a training phase, which will target beneficiary/users' associations and administrative staff, all project interventions will be programmed on an annual basis in consultation with the beneficiaries. The results of these consultations will be consolidated by the M&E unit, in strict collaboration with the concerned services and technical units of CRDA. The community development unit will be backstopped by the NGOs to mobilize the beneficiaries and coordinate programming of their proposals. Once adopted, the implementation of annual workplans will be ensured by PMU and CRDA. Activities such as community development, promotion of rural women, and the monitoring of credit, will be implemented by PMU and the contracted private operators/partner organizations/NGOs with backstopping from the technical units and subdivisions of CRDA (agricultural extension centres (CRAs) and territorial extension centres (CTVs)) when needed.

C. Relationship with NGOs

8. One or more NGOs will be recruited for the implementation of project activities targeting women, promotion of the participatory approach, and community development. It is estimated that two NGOs will be required to provide good coverage of the project area. This will also allow for a variety of approaches, thus enriching the methods of intervention. The bidding documents will clearly define the role and responsibilities of the NGOs and the phasing of activities. The contracts will cover an initial period of two years, renewable for the duration of the project in the event of satisfactory performance. At the signature of the contracts, each NGO will receive an advance payment to finance the recruitment of staff and transport costs. During the implementation of interventions, each NGO will be reimbursed on the basis of a quarterly workplan and the progress achieved. Relationships between the NGOs and PMU will be clearly defined so as to avoid overlapping and ensure adequate coordination between the various parties involved. At PMU level, the NGO interventions will be monitored by the M&E unit, namely, the sociologist, who will prepare six-monthly reports on their activities and performance. On the basis of these reports, meetings will be held with the NGOs to discuss pending issues and progress achieved.

D. Management Information System

9. The project will establish a geographical information system with the objective of collecting, analysing and disseminating technical and socio-economic information emanating from CRDA and the project. The system will establish a network connecting the various technical services of CRDA. This system will be under the responsibility of the head of the M&E unit, who will collaborate closely with the head of the statistics and economic studies service of CRDA. The project will finance the establishment of the network, procurement of the necessary hardware and software, and the technical assistance required to make it operational.

10. The main objective of the system will be to create a data bank for M&E and computerization of the project's financial and administrative management. In addition, the system will allow for the geographic localization of project actions by *douar* and district in relationship with the programme of work established at this level.

ORGANIGRAMME DU COMMISSARIAT RÉGIONAL POUR LE DÉVELOPPEMENT AGRICOLE (CRDA)



