



IFAD
INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT
Executive Board – Sixty-Sixth Session
Rome, 28-29 April 1999

REPORT AND RECOMMENDATION OF THE PRESIDENT

TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO THE

REPUBLIC OF THE SUDAN

FOR THE

NORTH KORDOFAN RURAL DEVELOPMENT PROJECT



TABLE OF CONTENTS

CURRENCY EQUIVALENTS	iii
WEIGHTS AND MEASURES	iii
ABBREVIATIONS AND ACRONYMS	iii
MAP OF THE PROJECT AREA	iv
LOAN SUMMARY	v
PROJECT BRIEF	vi
PART I THE ECONOMY, SECTORAL CONTEXT AND IFAD STRATEGY	1
A. The Economy and Agricultural Sector	1
B. Lessons Learned from Previous IFAD Experience	2
C. IFAD's Strategy for Collaboration with The Sudan	2
PART II THE PROJECT	3
A. Project Area and Target Group	3
B. Objectives and Scope	4
C. Components	5
D. Costs and Financing	6
E. Procurement, Disbursement, Accounts and Audit	8
F. Organization and Management	9
G. Economic Justification	10
H. Risks	10
I. Environmental Impact	11
J. Innovative Features	11
PART III LEGAL INSTRUMENTS AND AUTHORITY	11
PART IV RECOMMENDATION	12
ANNEX	
SUMMARY OF IMPORTANT SUPPLEMENTARY ASSURANCES INCLUDED IN THE NEGOTIATED LOAN AGREEMENT	13



APPENDIXES

I.	COUNTRY DATA	1
II.	PREVIOUS IFAD LOANS TO THE SUDAN	2
III.	IFAD PROJECT STRATEGIC FRAMEWORK AND LESSONS	3
IV.	LOGICAL FRAMEWORK	5
V.	QUANTITATIVE INPUTS, TARGETS AND KEY PROJECT FACTORS	6
VI.	COSTS AND FINANCING	7
VII.	ORGANIZATION AND MANAGEMENT	9
VIII.	FINANCIAL AND ECONOMIC ANALYSIS	12



CURRENCY EQUIVALENTS

Currency Unit	=	Sudanese Dinar (SDD)
USD 1.00	=	SDD 240
SDD 1.00	=	USD 0.004
ID 1.00	=	SDR 1.00

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 acre (ac)	=	0.405 ha
1 hectare (ha)	=	2.47 acres
1 makhama (mh)	=	0.74 ha

ABBREVIATIONS AND ACRONYMS

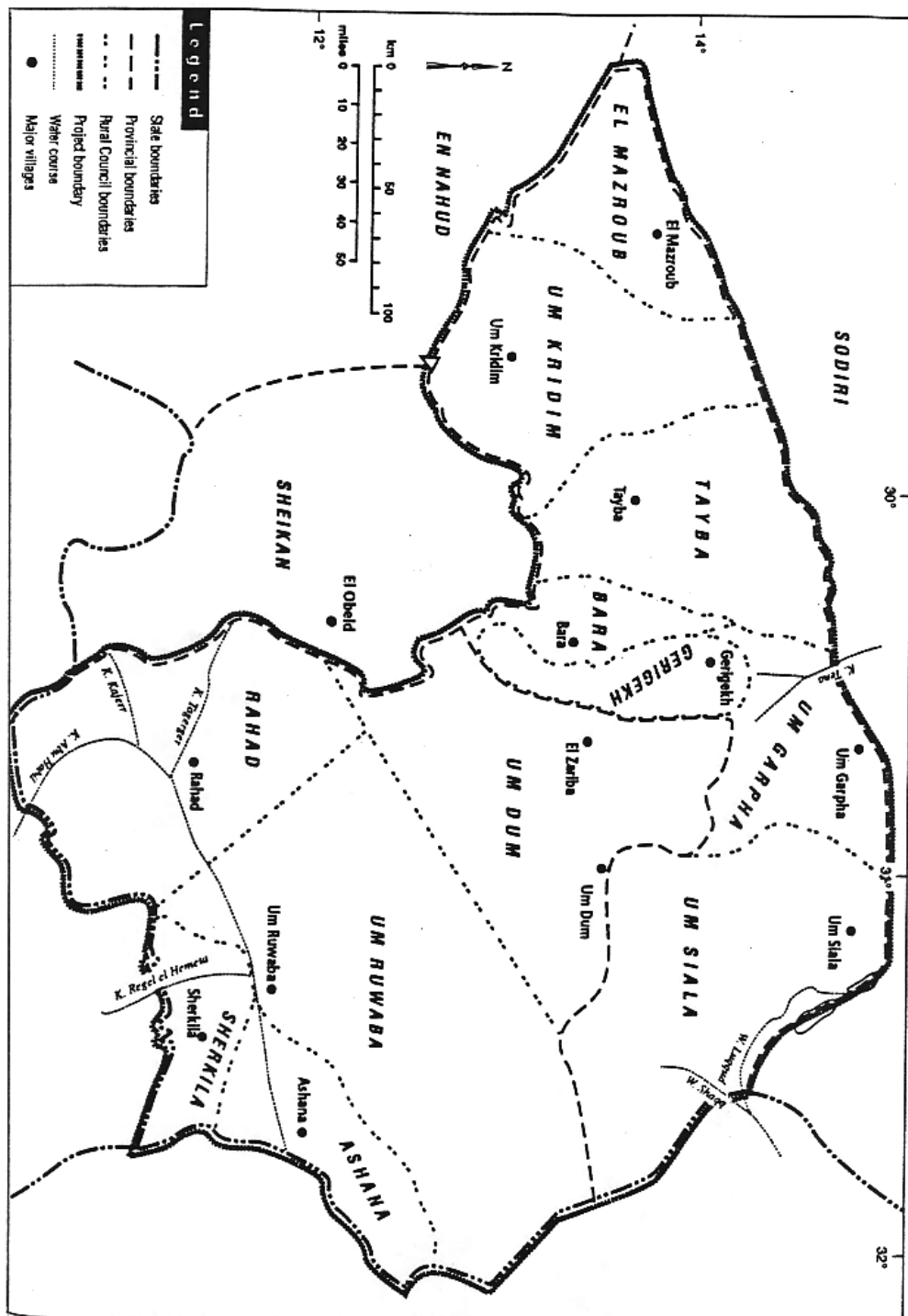
ABS	Agricultural Bank of The Sudan
CARE	Co-operative for Assistance and Relief Everywhere
IsDB	Islamic Development Bank
M&E	Monitoring and evaluation
NGO	Non-governmental organization
PMU	Project management unit
PY	Project year
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
VEW	Village extension worker

GOVERNMENT OF THE REPUBLIC OF THE SUDAN

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.



REPUBLIC OF THE SUDAN

NORTH KORDOFAN RURAL DEVELOPMENT PROJECT

LOAN SUMMARY

INITIATING INSTITUTION:	IFAD
BORROWER:	The Republic of The Sudan
EXECUTING AGENCY:	North Kordofan State Government
TOTAL PROJECT COST:	USD 23.7 million
AMOUNT OF IFAD LOAN:	SDR 7.75 million (equivalent to approximately USD 10.5 million)
TERMS OF IFAD LOAN:	40 years, including a grace period of ten years, with a service charge of three fourths of one per cent (0.75%) per annum
COFINANCIER:	Islamic Development Bank (IsDB)
AMOUNT OF COFINANCING:	Islamic Dinar (ID) 6.74 million (equivalent to approximately USD 9.1 million)
TERMS OF COFINANCING:	Loan for a period of 25 years, including five years of grace with a lump sum service fee to cover the actual expenses of administering the loan, provided that the amount of service fee charged to the borrower shall not exceed 2.5% of the loan amount, if calculated on an annual basis
CONTRIBUTION OF THE BORROWER	USD 2.9 million
CONTRIBUTION OF THE BENEFICIARIES:	USD 1.2 million
APPRAISING INSTITUTION:	IFAD
SUPERVISING INSTITUTION:	IFAD



PROJECT BRIEF

Beneficiaries and target group. The project will be located in Um Ruwaba and Bara, two of the four provinces that make up the semi-arid state of North Kordofan in western Sudan. Project interventions will cover the 1 250 villages and hamlets and 500 village councils of the area, partly in relation to greatest need but mainly in response to the desire of communities to participate in the project. Beneficiaries will be the small farmers, livestock keepers, labourers and artisans who make up about 90% of the rural population and comprise a universe of 118 000 households or 696 000 people, with annual income in the range of USD 100-150 per capita, compared with the gross national product (GNP) per capita of USD 220. About 25% of households in 320 villages – namely 17 600 families or 105 600 people – will benefit from more or less full adoption of project techniques, increasing family incomes by 10 to 20%. A significant number of others will gain from community, social and infrastructure investments and credit availability for income-generation and enterprises.

Reasons for deprivation. The major productive occupations – rainfed cropping, livestock rearing and utilization of rangeland and forest products – are entirely dependent on rainfall, which is low and unreliable; soil fertility, which is generally poor; and the state of rangeland vegetation and forest cover. Irrigated farming is only possible in a limited area in the south of Um Ruwaba and on a small scale using wells in Bara. A succession of droughts in the 1980s and early 1990s devastated livelihood systems and the effect was exacerbated by in-migration from areas to the south affected by civil strife. Recovery is under way following a succession of favourable seasons, but further assistance in assuring input supply, services and financial support – and in community mobilization and organization – is required to improve the resilience of the rural way of life.

Project effects. The project will provide individual farm families, including woman-headed households, with targeted technical, logistical and commercialized extension support for productive enterprises; through training, on-the-job experience and professional assistance, will increase the capacity of village communities to plan and manage their own development; will evolve improved informal savings and credit systems based on *sandugs* (village saving and credit schemes); will improve infrastructure and social facilities; and will establish effective institutions at local, provincial and state level to maintain the advancement and social emancipation of the target group.

Mode of participation. Project implementation will involve strong beneficiary participation. Following publicity and promotion of the project, community animation and mobilization will be based on intensive dialogue and participatory rural appraisal undertaken by task forces and project and local staff. The project will adopt a reactive and responsive stance to requests for assistance from villages and localities through their councils. Once beneficiary response is assured, the project will muster the necessary expertise and facilitate the carrying forward of schemes or programmes to the stage where project technical and financial assistance can be deployed and feasible plans financed and implemented.

Projects costs and financing. The estimated total cost of the seven-year project is USD 23.7 million, financed by an IFAD loan of USD 10.5 million; an Islamic Development Bank (IsDB) loan of USD 9.1 million; and borrower and beneficiary contributions of USD 2.9 million and 1.2 million, respectively.



**REPORT AND RECOMMENDATION OF THE PRESIDENT OF IFAD
TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO THE
REPUBLIC OF THE SUDAN
FOR THE
NORTH KORDOFAN RURAL DEVELOPMENT PROJECT**

I submit the following Report and Recommendation on a proposed loan to the Republic of The Sudan for SDR 7.75 million (equivalent to approximately USD 10.5 million) on highly concessional terms to help finance the North Kordofan Rural Development Project. The loan will have a term of 40 years, including a grace period of ten years, with a service charge of three fourths of one per cent (0.75%) per annum. It is proposed that this IFAD-initiated project be directly supervised by IFAD as its innovative basic elements of decentralized decision-making and participatory natural resource management are based on the lessons learned in the En Nahud Cooperative Credit Project and will also serve as a crucial foundation for the South Kordofan Rural Development Project currently under design in an adjacent region.

PART I - THE ECONOMY, SECTORAL CONTEXT AND IFAD STRATEGY¹

A. The Economy and Agricultural Sector

1. The Republic of The Sudan is the largest country in Africa with a surface area of almost 2.4 million km², of which the cultivated area is 78 000 km². Seventy per cent of its population of about 27 million is rural or nomadic. The economy is based mostly on agriculture. The manufacturing sector is relatively small. The export base is highly dependent on primary commodities and is not well-diversified. Infrastructure, especially of transportation routes, is relatively underdeveloped and is steadily deteriorating. The conflict in the south has drained the economy and prolonged declines in output. The gross national product (GNP) per capita was estimated at about USD 250 in 1994, and USD 220 today.

2. In recent years, a self-imposed structural adjustment and reform programme has been carried out without external support. This stop-and-start reform process has resulted in major imbalances in the economy. An inadequate revenue base, coupled with weak expenditure controls, has resulted in large fiscal deficits, financed by credit from the banking system. Inflation peaked in 1994 at about 116% and is estimated to have fallen to less than 17% in 1998. The inflow of external resources has fallen sharply. This situation, along with poor export performance and increased demand for imports, has resulted in the widening of the external current account deficit to over 30% of the gross domestic product (GDP) in recent years. External debt grew to over USD 21 billion in 1998, a substantial part of which was due to arrears.

3. The agricultural sector accounts for 48% of GDP, over 90% of foreign exchange earnings and 70% of employment. Within the sector, crop production accounts for 48% of total output, livestock 44%, and forestry and fisheries nearly 8%. Some 62% of crop production is irrigated, 10% is from mechanized cropping and 28% from the traditional rainfed sector. Cotton has declined in importance and is now second in export value, after sesame, followed by livestock and by-products, groundnuts,

¹ See Appendix I for additional information.



sugar and gum arabic. Overall, performance of the sector has been steadily increasing over the last five years, with livestock production and traditional rainfed cropping having shown a particularly strong performance, thanks to favourable rains and improved policies.

4. Most of the rural population in The Sudan is demonstrably poor, with a per capita income between USD 100 and 150. Socio-economic indicators, such as per capita daily supply of calories, life expectancy, infant mortality, and access to safe water and health facilities, place The Sudan well below the average of countries in sub-Saharan Africa. In most of the central regions, where semi-arid conditions prevail, rural families face a precarious balance of food security, even in years of favourable weather conditions. This situation is further exacerbated by poor infrastructure and public services. The situation of the rural population in the southern and central regions is especially serious since most have been displaced by the ongoing civil war. A United Nations Development Programme (UNDP) Development Report estimated the rural population living in absolute poverty in 1991 at 17 million. Given economic decline, deterioration of social services in rural areas and a population increase, the present level of absolute poverty is likely to be over 25 million, or about half of the total in the Near East and North Africa region.

B. Lessons Learned from Previous IFAD Experience²

5. The economic and institutional constraints on project implementation in The Sudan are formidable, and the larger and more complex the project, the greater their effect. The principal obstacles to smooth and effective execution of IFAD projects in the past have included: (a) poor remuneration and high turnover of staff; (b) inadequate counterpart funding; (c) poor line agency performance; (d) procurement problems; (e) uncertainty of land tenure and use; and (f) lack of support for beneficiary participation.

6. An IFAD Country Portfolio Evaluation in 1992 highlighted and emphasized a number of the lessons learned, which were found to have remained largely valid in the Country Portfolio Review undertaken in 1998. Those of particular relevance to North Kordofan include: (a) the need for beneficiary participation; (b) the marked advantage of small, private irrigation system development; (c) the overwhelming importance of proper dialogue and analysis of the real needs and aspirations of farmers; and (d) the greater effectiveness of community-selected and well-developed village-based extension agents. These lessons are fully incorporated in the revised project design.

C. IFAD's Strategy for Collaboration with The Sudan

7. **The Sudan's policy for poverty eradication.** Government policies for poverty alleviation focus on food security and include: (a) utilization of *zakat* (religious tax) for relief on a local basis; (b) minimum wage legislation; (c) provision of emergency minimum food supplies and subsidized staples; and (d) grant and credit schemes for productive and poor families. The impact of these policies tends to be concentrated in urban areas where the consequences of migration are most marked. Rural outreach is acknowledged to be limited, mainly because efforts are severely circumscribed by financial stringency.

8. **The poverty eradication activities of other major donors.** IFAD and other United Nations agencies are among the few international donors still operating in The Sudan. The Islamic Development Bank (IsDB), which is cofinancing the road component of the project, is another. The activities of the World Food Programme (WFP), the United Nations Children's Fund (UNICEF), the United Nations High Commissioner for Refugees (UNHCR) and the main non governmental organizations (NGOs) present, the Co-operative for Assistance and Relief Everywhere (CARE) and Save the Children, are essentially geared to emergency relief and/or the welfare aspects of displacement and resettlement; and to the poverty aftermath of drought or other disasters in less-

² See Appendix II for additional information.



favoured areas. All these activities are constrained in coverage by fund availability and, although providing useful lessons on project conduct, have had only limited impact on improving the national poverty picture.

9. **IFAD's strategy in The Sudan.** In 1995, the Government of The Sudan and IFAD agreed that future rural development efforts financed by the Fund would focus on the central semi-arid and savannah zones, as well as southern Sudan once the civil strife had ended. IFAD interventions are guided by a strategy of: (a) vertical expansion of the rainfed sector, through provision of technical packages, farmer services, credit, research and environmental protection; (b) improved livestock health and marketing; and (c) small-scale irrigation rehabilitation and development. In credit and financial services, the IFAD approach has been to work closely with the Agricultural Bank of The Sudan (ABS) to develop practical lending systems to meet small farmer and rural community needs. IFAD projects have a reasonable geographic spread and are intended to cover both high potential and marginal areas, but with emphasis on the latter where the target group is concentrated. The North Kordofan Rural Development Project is a second IFAD intervention in the central zone of The Sudan. The En Nahud Cooperative Credit Project, closed on 31 December 1998, was the region's first investment project. The South Kordofan Rural Development Project under formulation will be the next phase of IFAD's contribution to setting up sustainable rural poverty reduction and natural resource-use activities in rainfed regions.

10. **Project rationale.** The rural communities of the project area are demonstrably and chronically poor, with low family incomes and a precarious balance of food security, frequently aggravated by the incidence of drought or disease, sometimes to the point of threatening survival. Production systems are delicately linked to natural resource conditions and any major or rapid change is as likely to end in detriment as in advantage. Given the risk of failure due to external factors, care is needed in the gradual promotion of new techniques, increased input use or credit uptake. Interventions must be simple, proven, low-cost and carry minimal risk.

11. In order to address elements of underdevelopment, however, suitable measures can be advocated and applied to both production systems and the social situation. Proven techniques can be used to strengthen traditional cropping, livestock and rangeland management systems, with subsequent improvements in productivity and drought resilience. Solutions applicable to social issues depend on participation, self-reliance, communal action and management, all of which have been proven in the project and adjoining areas through previous and ongoing projects.

12. In this scenario, effective development requires a properly-informed, village-based multi-sectoral approach, consistent with the ongoing implementation of federalization, decentralization and commercialization. However, present capacity at provincial, local and village level for the necessary planning and implementation of sub-projects and wider programmes is minimal. A major thrust in building credible, but cost-effective, local capability is needed. IFAD is in a strong position to cooperate with other experienced agencies in backing local government efforts to expand the coverage and increase the impact of this holistic development approach.

PART II - THE PROJECT

A. Project Area and Target Group

13. The project area extends over some 40 000 km², situated on a flat or undulating sandy plain at 400-540 m, punctuated by rocky hills or mountains (*jebels*) and extensive sand dunes. It covers two of the four provinces of North Kordofan state: Um Ruwaba which has two town councils and five (rural) local councils; and Bara, with one town council and seven local councils. Soil in the area is of three



main types: (a) *qoz*, or sandy soils of very limited fertility which cover the majority of the area; (b) *gardoud* or clay loams; and (c) *vertisols* or clays which characterize the productive southern part of the area. Land degradation occurs where range and agricultural land has been denuded, around waterholes and camps. Vegetation is predominantly dry acacia savannah.

14. The project area is characterized by high temperatures and strong dry winds. Rainfall is low and erratic, from an average of about 400 mm per annum in the south to 200 mm in the north. Drought is frequent, averaging between one to three years out of ten, depending on the locality. There are no permanent, natural surface water resources in the area, and only a few ephemeral streams. Groundwater resources are significant: a shallow aquifer complex of good quality lies under most of the area and is already being used for limited irrigation. Most of the project area lies in the gum arabic belt of Kordofan, which is the world's major source of gum arabic production.

15. Rainfed cropping, livestock rearing and rangeland product utilization are the main activities. Most rainfed farming is carried out on *qoz* soils using manual methods. The principal crops are sorghum and pearl millet but in smaller areas, watermelon, sesame, kerkade, groundnut and cowpea are also grown. Most families keep up to four adult goats for production of milk, meat and hides, and a few families have larger herds. Productivity is low. Some farmers in the south also raise sheep, principally the local desert type which is well adapted to the harsh environment and in demand for live export at high values. There are significant numbers of cattle but they are largely confined to the better-endowed southern area, or, like camels, to the herds of nomadic pastoralists who use the area.

16. The population of the project area is estimated at 820 000 in about 139 000 households, two thirds of which are in Um Ruwaba and one third in Bara. There are about 1 250 hamlets or villages, which range in size from less than 100 to over 500 households and are grouped in about 500 village councils. Approximately 91% of the population, belonging to some 118 000 households of an average size of six persons, is rural. To determine the primary target group, the project management will establish priorities amongst the villages on the basis of need, interest and the predicted rate of coverage by project activities. Some 320 villages will eventually participate in a major way; approximately half of these will be in the drier northern zone. With an average size of 220 households in the main villages, the primary target group will consist of 70 400 families, or about 422 000 people. Of this total, some 25% — or 17 600 households — are expected to take up a more or less complete package of project technical interventions and reap project benefits in full.

17. Women already participate fully in a wide range of farming and other income-earning activities. They are usually involved in gum arabic harvesting, crop cultivation and livestock raising. They practise handicrafts in the home and are engaged in the marketing of the items they produce. Women cultivate *jubraka* (house gardens) for food crops that are usually quick-maturing and available for family consumption earlier than the main crops of the family landholding. For these reasons, activities and interventions for the benefit of women need to be built into the main project components, with positive action to ensure a proportionate level of involvement, at the discretion of project management.

B. Objectives and Scope

18. The overall goal of the project is to improve the standard of living of the target communities, and in particular to assure their food security and enhance the resilience of their way of life to drought and natural disaster. The specific objectives are to: (a) increase the capacity of village communities for planning, executing and managing development schemes through training and on-the-job experience, and through the provision of the technical or professional assistance initially required; (b) establish, at local council and provincial levels, support systems to assist communities in the development process with the emphasis on economy and cost-effectiveness; (c) foster communal natural resource management to support increased and sustainable utilization through changes in policy and group



agreements implemented at the local council and village levels; and (d) evolve sustainable participatory informal financial institutions for savings mobilization, credit supply and financial advice, tied to the formal banking sector.

19. To a great extent, the project will rely on local authorities and agencies, whose institutional capacity will be built up without the usual heavy accumulation of permanent staff and costs. Strong emphasis will be given to beneficiary participation. Project management will adopt a reactive and responsive stance to ideas and requests for assistance from village and rural councils. Initially, preference will be given to the worst-off communities which lack basic facilities and services, and where the target group predominates, but thereafter the main determinants of assistance will be the propensity to cooperate and the level of self-reliance of the communities themselves. Due to the pace of the process of implementation, animation and mobilization, actual investment will rise slowly in the initial years.

20. Once beneficiary response has been assured, the project will muster the necessary expertise and facilitate the carrying forward of schemes to the stage where technical and financial assistance can be effectively deployed. The core management body will be small but of high calibre. For the provision of expertise, it will rely on existing agencies, such as state government departments, institutions, NGOs, consultants, and private sector contractors and suppliers of services.

21. Wherever possible, the project will use technical solutions proven in conditions similar to those of North Kordofan, which incur the least cost and risk to the beneficiary and which can be implemented and maintained with minimal governmental financial support. Sub-projects will be selected only where the proposals for these investments are accompanied by a clear explanation of the way in which they will be operated and maintained by communal action and/or local tax revenues. After completion of the project, it is envisaged that project activity will be continued through its institutionalization within local council and state planning and development sections.

22. The project strategy adopted for women's development seeks to: (a) ease the physical workload burden of women, through programmes such as the creation of village woodlots and the provision of village water supplies; (b) improve the access of women to income-earning activities; and (c) through affirmative action, encourage the incorporation of women into all the main line activities of the project, and into the local administrative bodies concerned. In consultation with women's associations in the villages, a women's development manager will provide assistance and guidance in the selection of development activities which are appropriate to the particular circumstances of individual communities and within the support capacity of the project.

C. Components

23. The components of the project are listed and briefly defined below.

(a) Community Development

- Village animation and mobilization — inculcation of interest in participation and promulgation of development activities, ideas and plans;
- Community orientation and training — formation, training and empowerment of groups and organizations, adult literacy and extension for social and women's development;
- Community-based sub-project support — preparation and matching capital grant assistance for sustainable community-benefit sub-projects, facilities and activities, including communal resource use and conservation developments.



(b) Natural Resource Use and Development

- Support for agricultural, livestock and rangeland activities — provision of services for research training and development support for natural resource interventions;
- Water resource development — studies and support for water resource management.

(c) Rural Financial Services

- Credit lines — funding of: (i) enterprise investment: agricultural, livestock, rangeland and non-farm commercial operations, with minimal grant assistance; and (ii) informal village *sanduqs* (village saving and credit schemes);
- *Sandug* and enterprise support — development of group collateral/guarantee systems; provision of planning, organizational and management support and training for *sandug* officers and committees; advisory services for all commercial developments, including strengthening of rural financial intermediation.

(d) Project Management and Local Capacity-Building

- Rural institution-building — funding of equipment, facilities, staff allowances and training for strengthening local and village councils and their administrations;
- Project management — operational management of the project, including task force contract arrangements, technical assistance and training.

(e) El Obeid-Bara Road

- This 56 km road will reduce travel time and permit increased traffic between the isolated province of Bara and El Obeid, the regional trading centre. The road will increase connectivity to markets, and offer the potential for job creation and economic stimulation in the area. Cofinancing has been approved by the IsDB, and the start of construction is imminent. In view of the moderately adverse geological and climatic conditions, it was decided to ensure high engineering standards in order to prolong the serviceable life of the road and lighten the requirements and costs for routine and periodic maintenance.

D. Costs and Financing

24. **Costs.** Project baseline costs are estimated at USD 21.5 million, with a foreign exchange element of 31%. The base costs were calculated at February 1999 prices, excluding duties and taxes, which amount to about SDD 264 million or USD 900 000. Costs are budgeted for the full seven-year period, but vehicles and equipment are included as first expenditures only and are not replaced under the project. Investment costs account for 85% of total costs.

25. For the IFAD components, physical contingencies have been applied to infrastructure and civil works at 15% to allow for variations in construction and other costs. Physical contingencies at the rate of 5% were applied to operating and maintenance costs. Price contingencies have allowed for foreign

cost escalation at World Bank projections, at about 2.5% per year, and purchasing power parity between the SDD and the USD has been assumed.

26. Overall, total project costs including contingencies are estimated at USD 23.7 million. Excluding the cost of the El Obeid-Bara road, the cost per beneficiary household amounts to USD 610. A summary breakdown by component and local/foreign costs is shown in Table 1.

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

Component	Local	Foreign	Total	% Foreign Exchange	% Base Costs
Community development	2.20	0.35	2.55	14	12
Natural resources use and development	0.44	0.36	0.80	45	4
Rural financial services	2.05	1.04	3.08	34	14
Project management and local capacity-building	2.01	0.75	2.77	27	13
El Obeid-Bara road	8.17	4.15	12.32	34	57
Total base costs	14.87	6.66	21.53	31	100
Physical contingencies	0.83	0.33	1.17	29	6
Price contingencies	0.73	0.23	0.97	24	4
Total project costs	16.45	7.23	23.67	31	110

^a Discrepancies in totals are due to rounding.

27. **Financing.** Table 2 presents details of contributions to project funding by component. The proposed IFAD loan will amount to USD 10.5 million, or 44.3% of project costs. IsDB financing amounts to USD 9.1 million (38.5% of project costs), representing the larger part of the cost of the road component of the project. The Federal Government is expected to waive taxes of USD 900 000 (including contingencies) related to IFAD-financed components and to bear a further USD 1.9 million with the state government, provincial and local councils. Beneficiaries will contribute some SDD 380 million or USD 1.2 million, partly as funds but principally as labour and local materials, to investment and operating costs of the community-based sub-projects. In addition, the state government, and provincial and local councils will assume the post-project recurrent cost liability of some USD 485 000 per annum. Of this figure, USD 355 000 represents the annual recurrent costs of the IFAD-financed components, some USD 65 000 represents the cost of annual routine maintenance of the El Obeid-Bara road, and another USD 65 000 represents the average annual cost of periodic maintenance of the road.

TABLE 2: FINANCING PLAN ^a
(USD million)

	Government		IFAD		IsDB		Beneficiaries		Total		Foreign Exchange	Local (Excl. Taxes)	Duties and Taxes
	Amt.	%	Amt.	%	Amt.	%	Amt.	%	Amt.	%			
Community development	0	-	2.40	74.7	-	-	0.81	25.3	3.20	13.5	0.4	2.8	-
Natural resources use and development	0.12	12.8	0.83	87.2	-	-	-	-	0.96	4.0	0.4	0.4	0.1
Rural financial services	0.14	4.2	2.85	84.6	-	-	0.38	11.2	3.37	14.2	1.1	2.2	0.1
Proj. manag. and local capacity-building	1.81	56.2	1.41	43.8	-	-	-	-	3.22	13.6	0.9	1.7	0.6
El Obeid-Bara road	0.82	6.4	3.00	23.2	9.10	70.5	-	-	12.92	54.6	4.3	8.5	0.1
Total disbursement	2.90	12.2	10.48	44.3	9.10	38.5	1.19	5.0	23.67	100.0	7.2	15.53	0.9

^a Discrepancies in totals are due to rounding.

E. Procurement, Disbursement, Accounts and Audit

28. **Procurement.** The procurement of all goods and services financed by the IFAD loan will be carried out in accordance with IFAD Procurement Guidelines. Each contract for the supply of vehicles and technical equipment estimated to cost USD 100 000 equivalent or more will be awarded following international competitive bidding (ICB) procedures. Technical specifications of the items to be procured will be prepared by the project management unit with the assistance of the IFAD Projects Coordination Office in Khartoum which will carry out the administration and evaluation of procurement as agreed by the Project Procurement Committee of the Federal Ministry of Finance. Goods supplied under contract and estimated to cost USD 10 000 equivalent or more, up to an aggregate amount not to exceed the equivalent of USD 250 000, may be awarded on the basis of competitive bidding advertised locally, in accordance with procedures approved by the Fund. Civil works for the refurbishment of buildings will be carried out under contracts awarded following LCB procedures. Civil works for the construction of the El Obeid-Bara road are being carried out under contracts already awarded following LCB procedures, since the IsDB and IFAD consider local contracting capacity adequate to carry out the work. The additional work of reversion to the original carriageway specification will be accommodated in a contract amendment to be negotiated by the parties with the approval of IFAD. Local shopping will be used for minor items procured under contract estimated to cost less than USD 10 000 equivalent, up to an aggregate amount not to exceed USD 100 000 equivalent. Local technical assistance personnel and experts for studies required for the IFAD-financed components will be engaged through national advertisements and based on guidelines consistent with IFAD policy.

29. **Disbursement.** The IFAD loan will be disbursed over a seven-year period. Expenditures for local training, incremental operation costs, purchases of seedlings, and grants to *sandouqs* with a ceiling of USD 20 000 and works estimated to cost USD 10 000 or less will be disbursed against certified statements of expenditure (SOEs). Related supporting documents will be retained by the implementing agencies for subsequent review by supervision missions and examined in the course of the annual audit of the project accounts. All other withdrawals from the loan account will be made on the basis of full supportive documentation.

30. **Accounts and audits.** The Government will open three accounts for the project: a Special Account in hard currency and two Project Accounts in Sudanese Dinars, one for the credit and associated grant funds and the other for normal project operating expenses. The Special Account will be maintained in the El Obeid branch of the Bank of The Sudan, the central bank, where it will be accessible to project management. Of the Project Accounts, the first will be held by ABS, as the principal rural financial services contractor; the second, for operating expenditures, will be maintained in a commercial bank to be determined and acceptable to IFAD. The Government will deposit initial amounts into each of the two Project Accounts, replenishing the accounts quarterly in advance from its



own resources in accordance with the annual work plan and budget, including the prospective lending programme, of the project. The disposition of IsDB funds has been determined separately.

31. All organizations receiving project funds will maintain separate accounts, which will then be consolidated at the project level. The Project Director and Financial Controller/Administrator will contract a qualified external auditor, subject to approval by IFAD, to undertake an annual audit. This does not preclude internal examinations or audits carried out in accordance with the national administrative system. Certified audited accounts will be presented by the external auditor within six months of the end of each financial year.

F. Organization and Management³

32. Since the project is a state development scheme, the Inter-Ministerial Steering Committee which has overall national responsibility for projects of this kind will have only policy and strategy concerns. Reflecting the predominant state interest and the devolved and privatized nature of the implementation approach, the project will be supervised by a board of directors, replacing the traditional steering committee with a body of greater responsibility and accountability for project progress and success. The board will comprise representation from: not more than three of the key state ministries, preferably at director rather than ministerial level; concerned agencies such as the ABS; the private sector; beneficiaries, represented by not less than four members; and the manager of UNDP's Area Development Schemes. The Project Director will be a full member of the board and the Financial Controller/Administrator its secretary. State and local authorities — through the Board of Directors and the PMU — will make the initial selection of priority villages on the basis of the greatest need and propensity to participate.

33. **Beneficiary participation.** Community and farmer involvement underlies the whole project concept. The project will promote the idea of small specific-interest groups, as well as composite associations, consistent with formal and traditional social systems and suitable for their principal activities. Groupings will probably include village development committees, women's associations, cooperatives, *sandug* management committees, communal rangeland resource management groups, and literacy clubs. Farmers and households will be drawn into participation through the animation process and will benefit, either individually or as members of groups, from productive sub-project investments, from the provision of advisory and training services, and from the availability of *sandug* and commercial credit and the facilitation of input supply that will be ensured by the project.

34. The Project Management Unit (PMU) will consist of the Project Director, the Financial Controller/Administrator, two Operations Managers and the Women's Development Manager. The other members of the PMU, namely the Water Resources Development Adviser, the Credit Management Adviser and the Monitoring and Evaluation Manager, will be employed on competitive contract terms and will be co-opted for board attendance as appropriate. The PMU will be answerable directly to the board. It is envisaged that the senior management cadre of the project will be made up of national staff and that external/expatriate inputs will be confined to short-term consultancies.

35. **Annual work plans, budgets and reports.** An annual work plan and budget for the first year of project operations will be prepared as part of start-up operations and will be presented to IFAD within three months of loan effectiveness. Subsequent annual work plans, budgets and reports will be prepared and submitted to IFAD not later than 1 September of each year. A mid-term review will be carried out in Year Four and a project completion report — giving detailed information on implementation and operation of the project, costs, benefits and lessons learned — will be submitted within six months of loan closure.

³ See Appendix VII for additional information.



36. Effective **monitoring and evaluation** (M&E) is essential for flexible and sensitive management of the project and can also assist in early warning of drought and food availability problems. It is anticipated that this latter information will be fed into the Food Information System Project of CARE, which is already being implemented in the project area. This might be able to be supplemented by more detailed analysis and interpretation of satellite imagery, contracted out to existing Geographic Information System (GIS) agencies within The Sudan, to become a predictive, early warning tool.

37. The **management information system** (MIS) will generate information to assist project management, local councils and village development committees and groups to: (a) plan activities on a short-term basis; (b) produce annual and interim work plans; (c) compare actual with planned progress; and (d) take any necessary remedial action in a timely manner. The evaluation system (ES) will analyse the project's impact on: (a) the incomes and food security of the target group; (b) communal resource management activities; (c) the natural resource base; (d) the effectiveness of extension initiatives; (e) the generation of income through off-farm enterprises; and (f) the status of health, education and welfare. MIS data will be used in the ES; the former will be collected, collated and analysed in-project; the latter will be contracted out to a professional, independent external service provider. Annual surveys of a permanent sample of target group households will also be conducted.

G. Economic Justification

38. The principal, readily-quantifiable benefits deriving from the IFAD-financed components are to be seen in the incremental farm incomes of 17 600 small farmers — comprising 25% of the primary target population of 70 400 households — who, it is estimated, will adopt the main productive interventions of the project and obtain their benefits. All incremental costs for the IFAD-financed components, including those for the social and institution-building activities of the project, were accounted for in the economic analysis. The economic internal rate of return (EIRR) is 14.6%. This reflects the limited natural resource base and low-yield production systems, but represents a satisfactory return for a community and institutional development project in the difficult conditions of North Kordofan. Sensitivity calculations show that the project is resilient to changes in the levels and timings of costs and benefits; e.g. a 20% benefit drop will still imply a 12.7% return.

39. The substantial additional benefits which will result from partial uptake of project advice and services for farm, livestock and rangeland improvement, by farmers other than the 17 600 households above, and the profits from non-farm enterprises, are discounted for the purposes of calculation of project returns. There will also be a range of significant non-quantifiable benefits, which include major social and long-term environmental improvements, in addition to significant improvements in the socio-economic situation and role of women.

H. Risks

40. By far the most important risk is that of periodic drought. Furthermore, the project design assumes continuation of the present decentralization and privatization policies, but if these are reversed, or not carried out in a coherent and rigorous manner, implementation will be difficult and the chances of success reduced. Inflation and economic turbulence are also a continuing threat to any kind of development in The Sudan. The project design attempts to take these risks into account with its emphasis on low-cost and minimal risk interventions; its participatory/self-help approach; and its reliance on sound principles of credit provision.



I. Environmental Impact

41. The environmental impact will almost certainly be positive. Indeed, conservation underlies the whole philosophy of sustainable rainfed farming, livestock and rangeland production which is proposed and which has already been shown to work (albeit to a limited extent so far in The Sudan). The project will re-introduce the practice of rotational use of land and vegetation, and foster, through revitalization of traditional tribal control systems, the concept of communal resource management, including active engagement with the nomadic and transient users of these resources in order to prevent the excessive pressures of the past. The techniques for improved crop and livestock production deviate little from present, well-established practices and involve no heavy use of fertilizers, chemicals or drugs. Replanting and sand dune stabilization measures will greatly increase vegetative cover and help prevent wind damage, erosion and loss of arable land. Proposed work on water harvesting and soil conservation will improve infiltration and aquifer recharge, while groundwater monitoring will ensure control of excessive abstraction.

J. Innovative Features

42. The project has been formulated and appraised through a strong consultative and participatory process. Central Government, line departments, state ministries, provincial administrations and local council staff, as well as NGOs, beneficiary communities and individual stakeholders, have been involved throughout. This process will continue into implementation, through partnership with agencies and the commercially-oriented and performance-related organization and management systems proposed.

43. This will be one of the first state-based projects in The Sudan. Effectiveness of the project on the ground will be enhanced by: (a) the high degree of beneficiary participation and responsibility; (b) the flexibility of contingent funding; (c) the optimal utilization of existing knowledge, resources and expertise, including the labour and skills of local people; (d) the further development of systems of small farmer group credit, still in the early stage of development in the country; and (e) the backing of training, orientation, advice and follow-up support to bolster community group and local authority capabilities.

44. The project will also contribute to some of the challenges of decentralization and devolution. Local councils and their cadres will be among the principal recipients of resources, training and expertise, not least in the development of better planning, management and revenue-raising systems; and less directly but just as importantly, through local area economic growth and enhancement of the self-reliance of community organizations themselves.

PART III - LEGAL INSTRUMENTS AND AUTHORITY

45. A loan agreement between the Republic of The Sudan 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.

46. The Republic of The Sudan is empowered under its laws to borrow from IFAD.

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



PART IV - RECOMMENDATION

48. 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 The Sudan in various currencies in an amount equivalent to seven million seven hundred and fifty thousand Special Drawing Rights (SDR 7 750 000 million) to mature on and prior to 15 April 2039 and to bear a service charge of three fourths of one per cent (0.75%) per annum, 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 15 April 1999)

1. The North Kordofan State (the lead project agency) will open and maintain in the El Obeid branch of a commercial bank, or another bank approved by IFAD, a current account in Sudanese dinars for project operations.
2. For the purpose of carrying out the community development, the natural resources utilization and development, the project management and local capacity-building and the El Obeid-Bara road components of the project, the Government of The Sudan will make the loan proceeds allocated from time to time for this purpose available to the lead project agency in Sudanese dinars and, additionally, proceeds on a grant basis under a lead implementation and subsidiary grant agreement to be concluded with the lead project agency. These disbursements will be upon terms and conditions satisfactory to IFAD, and whereby: (i) the Government and the lead project agency will adopt and include a formal set of guidelines setting forth the procedures, conditions and modalities to be followed by each of them for the implementation of the project and the respective rights and obligations arising therefrom to assure full cooperation and commitment to the success of the project; and (ii) the lead agency will undertake to carry out and cause the project parties to carry out the project in accordance with the provisions of the loan agreement and, in particular, comply with the provisions regarding project implementation.
3. The Government will make counterpart funds available to the lead project agency during the project implementation period from its own resources in an aggregate amount equivalent to USD 2 899 500, in accordance with its customary national procedures for development assistance. For this purpose, the Government will deposit counterpart funds in an initial amount equivalent to USD 30 000 into the project account to cover the first three months of project implementation, and will thereafter replenish the project account by depositing in advance the counterpart funds called for in the AWPB for the relevant quarter. In addition, the Government will further ensure that the proceeds of the SOF grant and the cofinancier credit are made available to the lead project agency in accordance with the AWPBs and the relevant provisions of the loan agreement.
4. For the purpose of carrying out the rural financial services component of the project, the Government will make the loan proceeds allocated from time to time for this purpose available to ABS under a subsidiary loan and grant agreement to be concluded with ABS upon terms and conditions satisfactory to IFAD, and whereby: (i) (1) the Government will (a) relend to ABS in Sudanese dinars the loan proceeds allocated from time to time for enterprise investments and valued as of the date of withdrawal from the Loan Account and (b) bear the risk resulting from changes in the foreign exchange for Sudanese dinars and other currencies used by ABS in its operations; and (2) ABS will agree to (a) pay service charges on the principal amount of the proceeds of the loan thus relend and outstanding from time to time at an annual rate of 6% and (b) repay this amount in Sudanese dinars in accordance with an amortization schedule not exceeding 20 years, including a grace period of seven years; (ii) the Government will make available to ABS, in Sudanese dinars and on a grant basis, the proceeds of the loan allocated from time to time for *sandug* operations; and (iii) ABS will declare its commitment to the goal and purposes of the project and will undertake to carry out the rural financial services component of the project in accordance with the provisions of the loan agreement.
5. For the purpose of subprojects consisting of enterprise investments under the rural financial services component, ABS will make sub-loans to beneficiaries on the basis of its credit by-laws. These sub-loans will be upon terms and conditions whereby ABS will obtain, by written contract or other



ANNEX

appropriate legal means, the right to: (i) require the beneficiary to carry out and operate the subproject with due diligence and efficiency and in accordance with sound technical, financial, environmental and managerial standards; (ii) ensure that the beneficiary undertake procurement in accordance with established commercial practices acceptable to IFAD; (iii) require the beneficiary to maintain adequate records and accounts; (iv) inspect its operations and any relevant records and documents independently or jointly with the representatives of IFAD and ABS; (v) obtain all such information as IFAD and ABS shall reasonably request relating to the foregoing; and (vi) suspend or terminate, as the case may be, the right of the beneficiary to use the proceeds of the sub-loan upon the failure of the beneficiary to perform its obligations towards ABS.

6. In consultation with IFAD, ABS will establish and maintain a revolving credit fund into which all net revenues from sub-loans for enterprise investments under the rural financial services component of the project will be deposited. ABS will use this fund to further the development activities of beneficiaries in accordance with the loan agreement, at least until such date as will be specified in the ABS subsidiary loan and grant agreement or, if no date is so specified, until all loan service payments will have been made in full.

7. For the purposes of subprojects consisting of investments with high community benefit under the rural financial services component of the project, ABS will open and maintain on its books a *sandug* account in Sudanese dinars into which it will credit the loan amount allocated from time to time for such purposes and to be used to finance sub-loans.

8. The village development committees, under the supervision of the Executive Group, will be responsible for setting up new *sanduqs* and administering existing ones. Promptly after the date of effectiveness, the Executive Group will cause the village development committees wishing to participate under the *sandug* activities to develop jointly with ABS, and in consultation with IFAD, terms, conditions and procedures for the operation of the relevant *sandug* and including provisions regarding: (i) the target group; (ii) beneficiary eligibility criteria; (iii) women's participation; (iv) eligible activities and purposes; (v) collateral; (vi) loan ceilings, which will not exceed 90% of the capital cost of the subproject; (vii) service charges and repayment periods; and (viii) beneficiary contribution. The village development committees will extend sub-loans to beneficiaries on the basis of the said terms, conditions and procedures and will submit applications received from beneficiaries for sub-loans to ABS for its review. Promptly upon ABS's evaluation of, and advice on, the application and subproject proposal, the Executive Group will decide on the approval of the application and direct deposit of the sub-loan by ABS into the *sandug*. Village development committees will disburse the sub-loan to the beneficiaries under the *sanduqs* they administer and, assisted by ABS, will be responsible for sub-loan monitoring and collection.

9. IFAD may suspend, in whole or in part, the right of the Government to request withdrawals from the loan account in accordance with the provisions of the General Conditions, upon the occurrence of any of the events set forth therein or any of the following additional events:

- (a) The right of the Government to withdraw the proceeds of the cofinancier credit will have been suspended, cancelled or terminated, in whole or in part, or the cofinancier credit will have become due and payable prior to the agreed maturity thereof, or any event will have occurred which, with notice or the passage of time, could have resulted in any of the foregoing;
- (b) The credit by-laws, or any provision thereof, or the terms, conditions and procedures for *sandug* operations will have been waived, suspended, terminated, amended or otherwise modified without the prior consent of IFAD, and IFAD will have determined that such



waiver, suspension, termination, amendment or modification had had, or will have had, a material adverse effect on the rural financial services component of the project; and

- (c) The project implementation manual, or any provision thereof, will have been waived, suspended, terminated, amended or modified without the prior consent of IFAD, and IFAD will have determined that such waiver, suspension, termination, amendment or modification had had, or will have had, a material adverse effect on the project.

10. Each Local Council, headed by a councillor and duly strengthened by the lead project agency with an adequate number of technical staff and specialists, will be responsible for: (i) assisting beneficiaries in the promotion, preparation and implementation of subprojects; (ii) monitoring and evaluating activities in accordance with the performance indicators; and (iii) providing extension services to beneficiaries. For such purposes, each Local Council will establish a core team of specialists recruited from the council and will be assisted, as required, by a task force consisting of additional staff from governmental and parastatal agencies, NGOs, and the private and professional sectors. The councillor, assisted by tribal leaders and the task force, will be specifically responsible for: (i) selection of villages having priority under the project; (ii) mobilizing communities, generating interest in project participation, and promoting self-reliant processes for project planning; (iii) helping in collecting and providing data for project monitoring and evaluation; (iv) selecting and testing of subproject proposals; (v) making arrangements for the financial and socio-economic analysis and scoring of subproject proposals for submission to the operations managers within the Executive Group; (vi) mobilizing and making available the financial or in-kind contributions from the communities; and (vii) ensuring the sustainability of project facilities and services by means of the development of improved financial management of council resources, in particular, appropriate resource mobilization and taxation policy.

11. In order to ensure that community-based institutions are properly unified and limited to only one body in each village within the project area, the lead project agency, together with the relevant Local Council, will establish a Village Council Advisory Committee in each village composed of members from all the targeted villages within the respective Village Council. Each such targeted village will be represented by two or three members, depending on the number of villages comprising the Village Council. The advisory committees so established will assist the PMU in resolving disputes among beneficiaries, mobilizing communities and ensuring equity and homogeneity of project resources among communities.

12. At the village level, village development committees will be established by the lead project agency to channel the participation of village communities in the project. Each such committee will consist of not more than eleven members, with a women's representation of at least 30%, and will be responsible for: (i) mobilization of human and financial resources; (ii) identification of priorities and demand for project activities at the village level; (iii) operation and maintenance of the village utilities; (iv) management of the village *sandug*; and (v) ensuring the sustainability of development activities under the community development, the natural resource utilization and development, and the rural financial services components of the project.

13. The Executive Group will prepare a draft project implementation manual as soon as practicable, but in any event not later than 90 days after the date of effectiveness, setting forth, *inter alia*, the procedures and criteria to be used by the PMU and the local councils in the selection of target villages and village councils, the methodology for the identification, appraisal and implementation of subprojects, and the performance indicators. The Executive Group will submit the draft project implementation manual to the Board of Directors for approval, and, when so approved, the lead project agency will forward the draft manual to IFAD for its comments and approval no later than 120 days



ANNEX

after the date of effectiveness. The Board of Directors will adopt the project implementation manual substantially in the form approved by IFAD.

14. For the purpose of ensuring that the social development and environmental conservation activities under the community development component of the project are carried out in a harmonized and interrelated fashion, not later than one year after the date of effectiveness, the PMU will present a proposal prepared in consultation with the implementing agencies to IFAD for its review and approval of said complementary activities, defining the modalities and procedures for suitably integrating the proposed activities under the project.

15. Subproject proposals benefiting from grants under the community development component of the project will be technically prepared by village and local-level staff and thereafter submitted to the respective Local Council. The Local Council will review, among other things, the compliance of the proposed subproject with agreed financial and economic justification and the beneficiary commitment to make a financial, labour, material or service contribution under the subproject. If found acceptable, thereafter the Village Council will submit the endorsed subproject proposal to the operations manager responsible within the Executive Group for the province in which the subproject will be carried out, and who, in turn, will decide on the approval of a grant not exceeding 60% of the capital cost of the subproject. If approved, the PMU will make the grant available directly to the beneficiary.

16. For the purpose of strengthening the delivery and coordination of developmental assistance presently carried out in the project area, the Government and the lead project agency will facilitate and allow the inclusion of the activities presently undertaken by the government National Forestry Corporation and the United Nations Office to Combat Desertification and Drought under the Gumbelt Restocking Project in the community development component of the project in accordance with appropriate requirements established by the Board of Directors.

17. The Government and the lead project agency will cause, respectively, its Ministry of Irrigation and Water Resources and its State Ministry of Engineering Affairs to make available, free of charge, the existing staff and resources of the government Groundwater Monitoring Programme to the water resources development adviser under the project for the purpose of assisting the PMU in carrying out studies on the monitoring and use of water from Khor Abu Habil and Rahad Turda.

18. As part of the maintenance of sound environmental practices, as required by Section 7.15. (Environmental Factors) of the General Conditions, the project parties will maintain appropriate pest management practices and, furthermore, the Government will ensure that pesticides procured under the project do not include any pesticide 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, as amended from time to time, or listed in Tables 1 (Extremely Hazardous) and 2 (Highly Hazardous) of the World Health Organization Recommended Classification of Pesticides by Hazard 1996-1997, as amended from time to time.

19. No withdrawals will be made in respect of expenditures under sub-loans until and unless: (i) the ABS subsidiary loan and grant agreement will have been approved by IFAD in draft, and a signed copy thereof, certified by a competent officer of the Government, will have been delivered to IFAD, and all conditions precedent to its effectiveness will have been fulfilled; and (ii) the sub-loan will have been made in accordance with the relevant provisions of the loan agreement.



20. The following are the conditions precedent to the effectiveness of the loan agreement:
- (a) The Board of Directors and the Executive Group will have been duly established by the Governor of the lead project agency under terms of reference and with resources approved by IFAD;
 - (b) The PMU will have been duly established by the Governor of the lead project agency under terms of reference and with resources approved by IFAD;
 - (c) The project director, the financial controller-administrator, the two operations managers and the women's development manager of the Executive Group will have been duly appointed by the Governor of the lead project agency in accordance with the terms of reference and with qualifications and experience approved by IFAD;
 - (d) The Government will have duly opened the special account;
 - (e) The Government will have duly opened the project account and shall have made in it the initial deposit of counterpart funds in accordance with the relevant provisions of the loan agreement;
 - (f) The Government will have duly established the information management system;
 - (g) The loan agreement will have been duly signed and the signature and performance thereof by the Government will have been duly authorized and ratified by all necessary administrative and governmental action;
 - (h) The lead implementation and subsidiary grant agreement will have been approved by the Government and IFAD in draft, and a signed copy thereof, certified by a competent officer of the Government, will have been delivered to IFAD, and all conditions precedent to its effectiveness (other than the effectiveness of the loan documents) will have been fulfilled; and
 - (i) A favourable legal opinion, issued by the Government's Ministry of Justice in respect of the pertinent matters set forth in the loan agreement, in form and substance acceptable to IFAD,

COUNTRY DATA

THE SUDAN

Land area (km² thousand) 1995 1/	2 376	GNP per capita (USD) 1996 2/	estimated <=785
Total population (million) 1996 1/	27	Average annual real rate of growth of GNP per capita, 1990-96 2/	n.a.
Population density (people per km²) 1996 1/	10	Average annual rate of inflation, 1990-96 2/	86.2
Local currency	Sudanese Dinar (SDD)	Exchange rate: USD 1 =	SDD 240
Social Indicators		Economic Indicators	
Population (average annual population growth rate) 1980-96 1/	2.4	GDP (USD million) 1996 1/	n.a.
Crude birth rate (per thousand people) 1996 1/	34	Average annual rate of growth of GDP 1/	
Crude death rate (per thousand people) 1996 1/	12	1980-90	0.6
Infant mortality rate (per thousand live births) 1996 1/	74	1990-96	6.8
Life expectancy at birth (years) 1996 1/	54		
		Sectoral distribution of GDP, 1996 1/	
Number of rural poor (million) 1/	n.a.	% agriculture	n.a.
Poor as % of total rural population 1/	n.a.	% industry	n.a.
Total labour force (million) 1996 1/	10	% manufacturing	n.a.
Female labour force as % of total, 1996 1/	28.6	% services	n.a.
		Consumption, 1996 1/	
Education		General government consumption (as % of GDP)	n.a.
Primary school gross enrolment (% of relevant age group) 1995 1/	54.0	Private consumption (as % of GDP)	n.a.
Adult literacy rate (% of total population) 1995 3/	46.1	Gross domestic savings (as % of GDP)	n.a.
		Balance of Payments (USD million)	
Nutrition		Merchandise exports, 1996 1/	468
Daily calorie supply per capita, 1995 3/	2 310	Merchandise imports, 1996 1/	1 439
Index of daily calorie supply per capita (industrial countries=100) 1995 3/	73	Balance of merchandise trade	- 971
Prevalence of child malnutrition (% of children under 5) 1990-96 1/	34.0	Current account balances (USD million)	
		before official transfers, 1996 1/	-1 600
Health		after official transfers, 1996 1/	-1 457
Health expenditure, total (as % of GDP) 1990-95 1/	0.3	Foreign direct investment, 1996 1/	0
Physicians (per thousand people) 1994 1/	n.a.		
Percentage population without access to safe water 1990-96 3/	50	Government Finance	
Percentage population without access to health services 1990-95 3/	30	Overall budget surplus/deficit (including grants) (as % of GDP) 1995 1/	n.a.
Percentage population without access to sanitation 1990-96 3/	78	Total expenditure (% of GDP) 1995 1/	n.a.
		Total external debt (USD million) 1996 1/	16 972
Agriculture and Food		Present value of debt (as % of GNP) 1996 1/	260.3
Food imports as percentage of total merchandise imports 1996 1/	n.a.	Total debt service (% of exports of goods and services) 1996 1/	5.0
Fertilizer consumption (hundreds of grams per ha of arable land) 1994-96 1/	43		
Food production index (1989-91=100) 1994-96 1/	125	Land Use	
		Agricultural land as % of total land area, 1994 4/	51.8
		Forest area (km ² thousand) 1995 1/	416
		Forest area as % of total land area, 1995 1/	17.5
		Irrigated land as % of cropland, 1994-96 1/	15.0

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 THE SUDAN

Loan No.	Project Title	Initiating Institution	Cooperating Institution	Terms of Loan*	Approval Date	Effectiveness Date	Actual Closing Date	Loan Amount SDR million	Disbursements as at 3.3.99	
									SDR million	%
ONGOING PROJECTS										
268-SU	Southern Roseires Agricultural Development Project	IFAD	UNOPS	HC	2.10.90	10.1.92	31.3.2000	7.5	7.0	93
304-SU	Northern Province Irrigation Rehabilitation Project - Phase II	IFAD	World Bank: IDA	HC	15.4.92	10.3.93	30.4.1999	4.3	2.9	68
SRS 032-SU	Northern Province Irrigation Rehabilitation Project - Phase II	IFAD	World Bank: IDA	HC	15.4.92	10.3.93	30.4.1999	4.4	4.3	99.98
SRS 036-SD	White Nile Agricultural Services Project	IFAD	UNOPS	HC	15.9.93	18.1.95	31.12.2001	7.6	4.4	58.5
Subtotal								23.8	18.6	
CLOSED PROJECTS										
020-SU	Southern Region Agriculture Project	World Bank: IDA	World Bank: IDA	HC	27.6.79	14.2.80	30.6.1985	10.7	10.7	100
039-SU	New Halfa Irrigation Rehabilitation Project	World Bank: IDA	World Bank: IDA	HC	7.5.80	17.2.81	31.12.1988	11.5	11.5	100
134-SU	Northern Region Agricultural Rehabilitation Project	IFAD	World Bank: IDA	HC	13.9.83	19.7.84	31.12.1993	8.5	8.5	100
155-SU	Stock Route Project	IFAD	World Bank: IDA	HC	12.9.84	18.10.85	31.12.1992	5.7	5.7	100
181-SU	Western Savannah Project - Phase II	World Bank: IDA	World Bank: IDA	HC	6.12.85	27.11.86	30.6.1994	9.1	9.1	100
SRS 005-SU	Northern Province Irrigation Rehabilitation Project	IFAD	World Bank: IDA	HC	3.12.86	7.12.87	30.6.1998	7.5	7.5	100
SRS 016-SU	En Nahud Cooperative Credit Project	IFAD	UNOPS	HC	30.11.88	15.3.89	31.12.1998	6.5	6.6	101
Subtotal								59.5	59.6	100
TOTAL								83.3	78.2	

* / HC: Highly concessional.





IFAD PROJECT STRATEGIC FRAMEWORK AND LESSONS

A. IFAD Strategy and Operations

1. IFAD has financed ten projects in The Sudan, with an investment of USD 108 million. Eight projects have closed while two are ongoing and are due to close by 2001. IFAD interventions are guided by a strategy of: (a) vertical expansion of the rainfed sector, through provision of technical packages, farmer services, credit, research and environmental protection; (b) improved livestock marketing; and (c) irrigation rehabilitation and development for small farmers. Projects have had a reasonable geographic spread and cover of both high potential and marginal areas. The location of the projects is shown in Map 1 and key characteristics and progress summarized in Appendix 1.

2. The ongoing projects are: Southern Roseires Agricultural Development, which became effective in 1992 and is proving and demonstrating a replicable system of mechanization and group organization for smallholders' rainfed agriculture; and White Nile Agricultural Services, which started in 1995 to provide improved agricultural services to small-scale irrigation farmers, through rehabilitation of schemes, provision of credit and promotion of self-help extension and seed multiplication, adaptive research and community forestry.

3. One of the most-recently completed projects is En Nahud Cooperative Credit which increased the agricultural production, incomes and food self-sufficiency of 16 400 drought-affected farmers in West Kordofan. The project tackled major constraints of environmental degradation, lack of inputs, inadequate water supply and poor crop husbandry through: (a) simple, environmentally-sound technology; (b) cooperative group credit, including that for community-managed water supply – and especially for women farmers; and (c) financing of farm enterprises and support services.

B. Relevant Lessons Learned

4. The economic and institutional constraints on project implementation in The Sudan are formidable and, the larger and more complex the project, the greater their effect. The principal obstacles to smooth and effective execution of IFAD projects in the past have included:

- **staffing and remuneration:** personnel from Government are reluctant to serve in remote and difficult locations, even with monetary incentives. Greater recourse must be made to competitively recruited private-sector consultant and contract staff; to local people trained for technical and advisory work; and to proper, performance-related, payment for the job.
- **counterpart funding:** budget stringency has been, and will continue to be, a factor in delaying or restricting Government contributions to funding. As far as possible, projects should be designed not to be over-reliant on flows of counterpart funds.
- **scarcity of foreign exchange:** for recurrent expenses such as spare parts and consumables.
- **line agency performance:** with few exceptions, line agencies and parastatals do not have the resources, capability, incentive or will to provide – through the normal official channels – the services and technical back-up that projects need. Systems of direct departmental or individual contracting – or reliance on alternative private-sector sources, both preferably through competitive bidding – have proved to be much more effective and are now accepted.



APPENDIX III

- **procurement:** once a major obstacle, this is now being satisfactorily handled, with government collaboration, through the establishment and operations of the IFAD Projects Coordination Office in Khartoum, for which service charges are made.
- **land tenure and use:** tenure arrangements in some locations do not encourage investment, agricultural improvement or responsible resource management. Normalization and legal recognition of traditional tenure systems and rights of use should be pursued.
- **reticence in encouraging beneficiary participation:** past neglect by Government and project management of farmer and community motivation, involvement and delegation of responsibility underlie a number of project problems and failures. Follow-through of decentralization and active local empowerment are crucial to project progress and success.

5. An IFAD Country Portfolio Evaluation in 1992 highlighted and emphasized several lessons which were found to have remained largely valid in the Country Portfolio Review undertaken in 1998. Those of particular relevance to North Kordofan include: (a) the necessity of beneficiary participation for giving priority to interventions and sustainability of operations; (b) the marked advantage of small, private irrigation system development; (c) the overwhelming importance of proper dialogue and analysis of the real needs and aspirations of farmers, and the practicability of their achievements, in the context of local resources and the living and production environment; and (d) the greater effectiveness of community-selected, well-supported and village-based extension agents. In the field of financial services and institutions, the evaluation suggested that future projects should focus on provision of competent and reliable financial services, enhancement of beneficiary participation in village-based financial institutions, and support for savings mobilization.

6. The new phase of IFAD assistance to The Sudan needs to include these findings in the design of projects. The limitations of Government capability call for greater reliance on local authorities and agencies, whose institutional capacity needs to be built up without the huge accumulation of permanent staff and costs, and operational paralysis, that has characterized the federal - and now the state - situation. Interventions must be selected in a responsible manner by communities and designed in order to be afforded, managed and maintained by the people. Where innovative methods have proved successful – and are applicable – these need to be adapted and applied in new projects. Above all, complexity of project content, funding and management systems should be avoided.

LOGICAL FRAMEWORK

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
<p>GOAL</p> <p>Sustainable improvement of the socio-economic well-being of rural communities</p>	<ol style="list-style-type: none"> 1. Increased outputs and sales of agricultural produce 2. Increased household income 3. Improved health and education status 	<ol style="list-style-type: none"> 1. Baseline and periodic follow-up surveys of production and sales statistics 2. Household income statistics 3. National poverty indicators 	<ul style="list-style-type: none"> - Political stability, with decentralization - Macroeconomic conditions continue to improve - Market liberalization effective
<p>PROJECT AIMS</p> <ul style="list-style-type: none"> - To empower the rural communities of Um Ruwaba and Bara Provinces to improve their standard of living and to ensure their food security in particular - To enhance their resilience to drought and natural disaster; and - To increase the sustainability and future prosperity of their way of life 	<ol style="list-style-type: none"> 1. Number of villages mobilized 2. Number of village development committees formed 3. Number of households reached 4. Increased agricultural production 5. Output/sales per household 	<p>Surveys as above</p> <p>Bi-annual local council/province reports</p> <p>Annual M&E and project reports</p> <p>Mid-Term Review findings</p>	<ul style="list-style-type: none"> - Continued support for, and success of, local government initiatives - Effective community participation - Full federal and state government support, including availability of funds and strong, autonomous management - Stability of non-project income factors, at least in the short term
<p>OUTPUTS/DELIVERABLES</p> <ol style="list-style-type: none"> 1. Village outreach programme in place 2. Grant mechanism for community and social sub-project financing in place 3. Credit facility for commercial activity financing operational 4. Natural resource development assured 5. Group collateral system developed 6. El Obeid-Bara Road constructed 	<ol style="list-style-type: none"> 1. Number of villages reached 2. Number of task forces 3. Number of contacts/visits and training sessions 4. Number of sub-projects financed 5. Amount of money expended 6. Number of loans given 7. Repayment rates 8. Kms of road constructed 	<p>Annual work plans, budgets</p> <p>Annual and 6-monthly project reports</p> <p>Project financial accounts</p> <p>M&E reports</p> <p>Completion/evaluation reports</p>	<ul style="list-style-type: none"> - Effective Project Board supervision - No severe occurrence of drought/pest - Strong participatory involvement - Positive reception and evolution of financing/saving schemes
<p>INPUTS</p> <ul style="list-style-type: none"> - Training - Community investment funds - Studies, technical assistance - Vehicles and equipment - Commercial and <i>sandug</i> credit funds - Civil works - Staffing incentives and allowances - Operation and maintenance budgets 	<ol style="list-style-type: none"> 1. Task forces formed, visits made and training conducted 2. Support to agricultural support services 3. Grant and credit funds and savings mobilized 4. Funds released, vehicles procured and training conducted 5. Kms of road constructed 	<p>As above, plus:</p> <p>project cost and management accounts</p>	<ul style="list-style-type: none"> - Continuing enthusiasm of beneficiaries - Effective engagement of Task Force, contractor and consultant



QUANTITATIVE INPUTS, TARGETS AND KEY PROJECT FACTORS

OBJECTIVES/TARGETS	Pre-project	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY 7	INSTRUMENTS	INCREMENTAL IMPACT																																												
Enhance agricultural, livestock, rangeland and non-farm productivity and incomes										Net farm income at full development (SDD) <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Farm Model</th> <th style="text-align: center;">Without</th> <th style="text-align: center;">With</th> <th style="text-align: center;">%t</th> </tr> </thead> <tbody> <tr> <td>Zone I</td> <td style="text-align: right;">341 552</td> <td style="text-align: right;">533 881</td> <td style="text-align: center;">56</td> </tr> <tr> <td>Zone II</td> <td style="text-align: right;">100 858</td> <td style="text-align: right;">185 576</td> <td style="text-align: center;">84</td> </tr> <tr> <td>Zone III a/</td> <td style="text-align: right;">14 360</td> <td style="text-align: right;">384 054</td> <td style="text-align: center;">-</td> </tr> </tbody> </table> Increased agricultural productivity Crop (kg/mh) <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Crop</th> <th style="text-align: center;">Zone I</th> <th style="text-align: center;">Zone II</th> <th style="text-align: center;">Zone I</th> </tr> </thead> <tbody> <tr> <td>Millet</td> <td style="text-align: center;">130</td> <td style="text-align: center;">185</td> <td style="text-align: center;">40</td> </tr> <tr> <td>Sorghum</td> <td style="text-align: center;">250</td> <td style="text-align: center;">350</td> <td style="text-align: center;">40</td> </tr> <tr> <td>Sesame</td> <td style="text-align: center;">110</td> <td style="text-align: center;">154</td> <td style="text-align: center;">40</td> </tr> <tr> <td>Watermelon</td> <td style="text-align: center;">1 600</td> <td style="text-align: center;">2 240</td> <td style="text-align: center;">40</td> </tr> </tbody> </table> Incremental agricultural production (t/no) <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Coarse Grains</td> <td style="text-align: right;">20 204</td> </tr> <tr> <td>Watermelons</td> <td style="text-align: right;">36 832</td> </tr> <tr> <td>Gum Arabic</td> <td style="text-align: right;">10 004</td> </tr> <tr> <td>Livestock (sales AU/year)</td> <td></td> </tr> </tbody> </table>	Farm Model	Without	With	%t	Zone I	341 552	533 881	56	Zone II	100 858	185 576	84	Zone III a/	14 360	384 054	-	Crop	Zone I	Zone II	Zone I	Millet	130	185	40	Sorghum	250	350	40	Sesame	110	154	40	Watermelon	1 600	2 240	40	Coarse Grains	20 204	Watermelons	36 832	Gum Arabic	10 004	Livestock (sales AU/year)	
Farm Model	Without	With	%t																																																			
Zone I	341 552	533 881	56																																																			
Zone II	100 858	185 576	84																																																			
Zone III a/	14 360	384 054	-																																																			
Crop	Zone I	Zone II	Zone I																																																			
Millet	130	185	40																																																			
Sorghum	250	350	40																																																			
Sesame	110	154	40																																																			
Watermelon	1 600	2 240	40																																																			
Coarse Grains	20 204																																																					
Watermelons	36 832																																																					
Gum Arabic	10 004																																																					
Livestock (sales AU/year)																																																						
Inputs									- New approach to village-based extension/contract services using part-time local resource people																																													
Equipment/materials procured (USD '000)	-	13	40	72	97	71	21																																															
Village extension operation (cum no of VEWs)	60	160	360	560	640	-	640																																															
Women's demonstration/training (no)	120	200	400	400	160	-	-		- Facilitation of essential inputs supply through VEWs and private sector channels as far as possible																																													
Farmers' demonstration/training (no)	825	2 200	4 125	5 500	3 850	1 100	-																																															
Outputs									- Intensive training and demonstration of low cost and minimal risk techniques for crop, stock and rangeland																																													
Farmers fully adopting new practices (no)	-	-	4 500	10 050	15 600	17 850	17 850																																															
Major production response (incr field crop output USD)	-	-	138	593	1 507	2 820	3 962		- Task force deployment for animation/mobilization of villages and communities																																													
Provide villages with planning, development assistance and management capability																																																						
Inputs									- Use of contract task forces from line agencies, parastatals NGOs, private and professional sector providers																																													
Animators operating (m/m)	25	35	60	60	20	-	-																																															
Task forces operating (m/m)	30	50	100	100	40	-	-																																															
Community orientation training (courses/yr)	60	100	200	200	80	-	-		- On-the-job learning and training for beneficiaries and staff through the whole project planning cycle																																													
Outputs									- Assistance of socially important infrastructure as an incentive for, and demonstration of, concerted action																																													
Village animation/mobilization (cumulative no)	30	80	180	280	320	-	-																																															
Social projects/activities initiated	50	50	40	20	20	-	-																																															
Establish cost-effective planning resources and systems at local council, provincial and state levels																																																						
Inputs									- Provision of strengthened <i>sandug</i> /village credit systems, and commercial credit/enterprise development funding																																													
Vehicles & office/communication equipment (USD '000)	240	94	-	-	-	-	-																																															
Local/village council training (courses/year)	-	3	2	2	3	-	-		- Assistance to groundwater monitoring and water resources management programme, including use and control of surface waters in Abu Habil																																													
Outputs									- Training and experience - learning-by-doing for women, farmers and entrepreneurs																																													
Sound plans/projects presented (ested no)	-	20	45	80	100	60	15		- Amplification and development of communal resource management principles, plans and actions																																													
Inculcate and foster communal resource management arrangements at local/village level																																																						
Inputs																																																						
TA survey/design services (man yrs)	1	4	4	5	5	5	-																																															
Water supply/harvesting works planning (feddans)	300	437	543	643	643	637	-																																															
Outputs																																																						
Sound CRM programmes adopted/under way (no)	-	-	30	50	100	100	40																																															
PROJECT COSTS																																																						
	USD million	%	FINANCING																																																			
		Base Costs			USD million	%																																																
Community development :	2.55	13																																																				
Natural resource use/management	0.80	4																																																				
Rural financial services	3.09	16	IFAD	10.5	49																																																	
Project management/local capacity-building	2.77	27	Government	2.9	14																																																	
El Obeid-Bara road	10.09	33	Beneficiaries	1.2	6																																																	
			IsDB	6.9	32																																																	
Base costs	19.30	100	Total	21.4	100																																																	
Contingencies	2.1	11																																																				
Total costs	21.45	111																																																				
BENEFICIARIES										ECONOMIC ANALYSIS																																												
										Households																																												
Main agricultural, livestock and rangeland activities										70 400																																												
Full adoption of main activities										17 600																																												
Cost/beneficiary (USD)										30																																												
Cost/beneficiary household (USD)										181																																												
Cost/adopter productive activities (USD)										1 220																																												
										EIRR																																												
										Benefits																																												
										Lagged																																												
										Costs																																												
										Project																																												
										-10%																																												
										3 Years																																												
										Project																																												
										14.8%																																												
										13.8%																																												
										11.4%																																												
										+10%																																												
										13.9%																																												
										13.0%																																												

a/ Transition from rainfed to irrigated through pump and well investment.

COSTS AND FINANCING

Expenditure Accounts by Financiers (USD)

	Government		IFAD		Beneficiaries		Islamic Development Bank		Total		Foreign Exchange	Local (excluding taxes)	Duties and Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
I. Investment Costs													
A. Civil Works	-	-	3 002 889	24.8	-	-	9 104 167	75.2	12 107 056	51.1	4 242 316	7 864 740	-
B. Social/Community Investments	-	-	1 215 468	60	810 312	40	-	-	2 025 780	8.6	405 156	1 620 624	-
C. Vehicles	413 414	44.4	516 768	55.6	-	-	-	-	930 182	3.9	516 768	-	413 414
D. Equipment	34 305	9.3	333 842	90.7	-	-	-	-	368 147	1.6	247 628	86 214	34 305
E. Studies, Technical Assistance and Services a	-	-	1 102 217	100	-	-	-	-	1 102 217	4.7	313 727	788 490	-
F. Training	-	-	1 037 206	100	-	-	-	-	1 037 206	4.4	38 664	998 541	-
G. Credit Funds b	-	-	2 597 191	87.3	376 702	12.7	-	-	2 973 893	12.6	1 040 863	1 933 031	-
Total Investment Costs	447 719	2.2	9 805 581	47.7	1 187 014	5.8	9 104 167	44.3	20 544 481	86.8	6 805 122	13 291 639	447 719
II. Recurrent Costs													
A. Salaries and Allowances	169 739	20	678 955	80	-	-	-	-	848 694	3.6	-	678 955	169 739
B. Operation and Maintenance	2 282 045	100	-	-	-	-	-	-	2 282 045	9.6	424 455	1 559 932	297 658
Total Recurrent Costs	2 451 784	78.3	678 955	21.7	-	-	-	-	3 130 740	13.2	424 455	2 238 888	467 397
Total Disbursement	2 899 503	12.2	10 484 536	44.3	1 187 014	5.0	9 104 167	38.5	23 675 220	100.0	7 229 577	15 530 527	915 116

a Includes contracted support services and task force activities

b These funds do not include ABS financing share of project on-lending, the value of which remains to be determined during project negotiations



**Expenditure Accounts by Components - Totals Including Contingencies
(USD)**

	Community Development		Community Sub-Projects	Natural Resource Use and Development		Rural Financial Services		Project Management and Local Institution Building			Total
	Village Animation and Mobilization	Community Orientation and Training		Agricultural, Livestock and Rangeland Development	Water Resources Management	Credit Funds	Sandug and Enterprise Development	Project Management	Rural Institution Building	Bara-El Obeid Road	
I. Investment Costs											
A. Civil Works	-	-	-	-	12 117	-	-	-	-	12 094 940	12 107.056
B. Social/Community Investments	-	-	2 025 780	-	-	-	-	-	-	-	2 025 780
C. Vehicles	-	-	-	-	54 547	-	109 093	436 373	330 170	-	930 182
D. Equipment	-	-	-	175 480	53 770	-	-	77 799	61 098	-	368 147
E. Studies, Technical Assistance and Services a	236 877	-	242 832	-	246 144	-	86 995	289 369	-	-	1 102 217
F. Training	257 955	443 039	-	228 372	4 064	-	76 838	-	26 938	-	1 037 206
G. Credit Funds b	-	-	-	-	-	2 973 893	-	-	-	-	2 973 893
Total Investment Costs	494 831	443 039	2 268 612	403 852	370 641	2 973 893	272 927	803 540	418 205	12 094 940	20.544.481
II. Recurrent Costs											
A. Salaries and Allowances	-	-	-	65 263	69 078	-	34 406	573 621	106 326	-	848 694
B. Operation and Maintenance	-	-	-	-	48 535	-	86 568	824 453	498 607	823 881	2 282 045
Total Recurrent Costs	-	-	-	65 263	117 614	-	120 974	1 398 075	604 933	823 881	3 130 740
Total PROJECT COSTS	494 831	443 039	2 268 612	469 115	488 255	2 973 893	393 901	2 201 615	1 023 138	12 918.821	23 675 220
Taxes	-	-	-	32 605	47 695	-	66 659	425 238	235 457	107 463	915 116
Foreign Exchange	-	21 854	417 298	139 917	297 224	1 040 863	83 268	557 881	330 581	4 340.692	7 229 577

a Includes contracted support services and task force activities

b These funds do not include ABS financing share of project on-lending, the value of which remains to be determined during project negotiations



ORGANIZATION AND MANAGEMENT

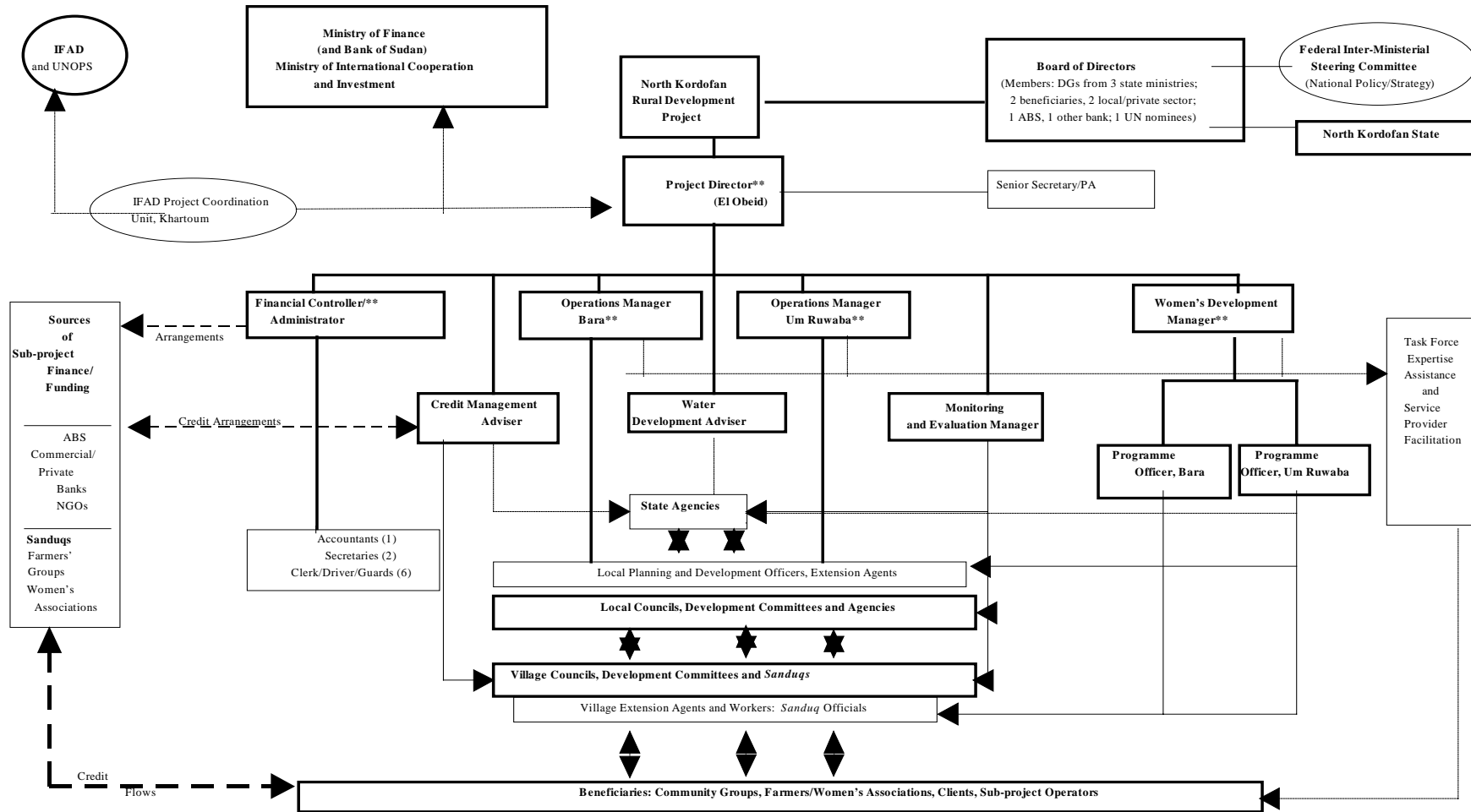
1. To implement the main activities of the project, including agricultural, non-farm and social interventions, it is envisaged that a core team of specialists will be drawn from technical personnel in local councils and strengthened through contract recruitment or secondment of additional staff from line agencies of the state and federal governments, UN and other donor agencies, NGOs and the private sector. The staff will be employed at the discretion of the project director, according to guidelines initially agreed by the board and consistent with the arrangements for direct cooperation between UN agencies, coordinated by UNDP. They will be organized in task forces, will work to an exacting programme of target achievement and will be suitably remunerated on satisfactory performance.
2. The individual components and sub-components of the project – as well as the overall approach – have virtually all been tested, and shown to be successful and acceptable to communities in adjacent areas and in similar projects in other parts of Kordofan and neighbouring provinces. There is no need to pilot the actual content or participatory philosophy of the project. However, the expected build-up of project coverage – some 30 villages in the first year, 50 in the second, 100 in the third and fourth, and 40 in the fifth, totalling 320 villages in all – takes account of the long lead time for village animation, as well as the need for care in putting together and gradually introducing the composite package of interventions which will be specifically relevant to each village or cluster of villages. It recognizes that the way in which these can be managed and taken over by local communities in Um Ruwaba and Bara remains to be developed and demonstrated, and that this will be a prime concern of village animators and locality extension agents, assisted by other project staff, in the early stages of implementation.
3. The state and local authorities – through the board of directors and the project director - will make the initial selection of priority villages on the basis of greatest need and propensity to participate. The same bodies will monitor progress and establish the parameters of success and failure, in order to guide the process of deciding the numbers and types of villages, and the spread of activities, which can be handled and included in subsequent periods. The project director and the board, in consultation with the cooperating institution and IFAD, will determine the speed of implementation and geographic coverage of interventions, in line with demonstrated interest and impact emerging from earlier activity. The project will benefit from recent relevant experiences of similar development operations carried out by IFAD, UNDP Area Development Schemes, UNICEF, the United Nations Sudano-Sahelian Office (UNSO), CARE and other NGOs.
4. The project will promote the idea of small specific-interest groups, as well as composite associations, consistent with formal and traditional social systems and suitable for their principal activities. Groupings will probably include village development committees, women's associations, cooperatives, *sandug* (village saving and credit scheme) management committees, communal rangeland resource management groups and literacy clubs.
5. **Rural financial services arrangements.** The project will develop and improve traditional, informal, participatory *sandugs*. Institutional links with the formal financial sector will be forged by contracting ABS as the executing agency for commercial credit, and as the facilitator of small farmer access through the development and operation of group collateral and guarantee schemes.



APPENDIX VII

6. Effective monitoring and evaluation (M&E) is essential for flexible and sensitive project management and can also assist in providing early warning of drought and food availability problems. For impact monitoring, the indicators will be chosen from data already available in other projects and those assembled by the initial participatory rural appraisals in selected villages. M&E activities will be based at local council level and form one of the primary responsibilities of the local planning and development officer, with support from operations managers, the M&E manager and the financial controller/administrator in the project management unit.

PROJECT ORGANIGRAMME - STAFFING CHART



Key:** Indicates members of the Project Executive

- Lines of authority/answerability
- - - Lines of technical communication
- Lines of direct project/target group contact



FINANCIAL AND ECONOMIC ANALYSIS

1. This appendix highlights the key production-oriented project activities and provides notional estimates of quantifiable impact and benefits. Production benefits will result from:

- (a) training and extension services geared towards the primary productive activities in the project area, to promote more effective husbandry and improve resource management;
- (b) demand-driven social services and community activities financed through community sub-project support funds, such as water yards, wells and *hafir* construction, health services and others; and
- (c) livestock, crop production and off-farm income-generating activities financed through commercial and *sanduuq* credit lines.

2. Additional impact on individual farmers and targeted households will result from the project's social and community interventions. Expected benefits include: a) improvements in health and nutrition; b) movement towards self-reliance, fiscal independence and community control over development activities; c) increased gender equity and inclusiveness within communities; and d) the development of replicable participatory development models. Environmental benefits will result from improved management of natural resources, supported by the project's extension service allotments. The project's success should be assessed as much in terms of the extent to which these benefits are realized as in terms of quantifiable production gains for project beneficiaries.

3. The impact on agricultural production was estimated by using four livestock models and ten crop models, which were integrated into three representative farm models designed to illustrate agricultural production scenarios in the project area.

4. Farm budgets differ according to the prevailing agroecological zones in the project area, with each model representing a mix of on-farm subsistence and cash-generating activities, including crop production, livestock husbandry and forest harvesting under either rainfed or irrigation conditions. Figures for farm sizes and crops are based on the findings of a farm survey carried out in 1992. The validity of the resource ownership patterns described in the survey has recently been verified in the field, while yields and prices have been updated in line with actual conditions. The models were also used to estimate economic internal rates of return (EIRRs). For all models, farm size remained the same in 'with' or 'without' project situations.

5. The **Zone I rainfed model** refers to a farm of 15 *makhamas* (mh) at 100% cropping intensity, under millet interplanted with watermelons, and with the average number of camels and goats for the zone. The only change introduced under the project will be to interplant arable areas with albid trees to improve soil fertility and communal rehabilitation of rangeland. Areas under crops, cropping patterns and livestock types and numbers are assumed to remain the same. Production increments will come from yield increases of millet and watermelon, and natural increases in livestock. The model assumes that the household subsistence requirement for staple grain is 1 140 kg of millet, which will be met in year four and marginally exceeded at full development. Watermelons are sold unharvested in the field to nomadic herders during the dry season and provide the major source of income for farmers. Seeds are given back to the farmers who sell them for cash. All milk increases are consumed on-farm and stover (straw), hides and camels and goats are sold for cash. Average income per household



APPENDIX VIII

‘without’ project in terms of farm family benefits amounts to SDD 341 552 — about USD 1 400 — and increases ‘with’ project by 56% to SDD 534 000 — about USD 2 220 — at maturity in year ten. This is still inadequate, although the need for out-migration of labour is reduced.

6. The **Zone II rainfed model** refers to the production system in the gum arabic belt for an average farm size of 27 mh — with 17 mh under sorghum and sesame, 10 mh of *hashab*, and sheep. Planned project activities will not change the existing production systems. The area under crop, and type and numbers of livestock will remain the same. Improved pest control will result in crop yield increases, and disease control and better health will result in additional natural increase of livestock and by-products. Yields will peak in year eight as a result of ley farming rotation. Surplus stover, milk and livestock will be sold for household cash generation. At farm maturity, the major source of family income will be the sale of gum arabic. Income per household in terms of farm family benefits increases from SDD 100 858 ‘without’ project to about SDD 185 600 — USD 773 — at farm maturity in year eight.

7. The **Zone III vegetable irrigation model** refers to a 1.2 mh farm with production of three crops — tomatoes 0.4 mh, eggplants 0.4 mh and onions 0.4 mh. Two crops of tomatoes are produced per year and one crop each of onions and eggplants. Assuming rainfed watermelon cropping ‘without’ the project, and adding small well and pump investment costs to the irrigated (‘with’ project) situation, farm incomes rise considerably as a result of the intensive production system.

8. The stream of net benefits was determined for both the ‘without’ and the ‘with’ project scenarios. The value of production at full development, net of labour and incremental inputs, is described below.

	Gross Value of Production	Operating Costs	Farm Family Benefits	
	SDD	SDD	SDD	USD
Farm Model I				
Without	453 493	848 570	341 552	1 423
With	729 491	157 058	533 881	2 225
Farm Model II				
Without	189 515	68 155	100 858	420
With	338 726	113 285	185 576	773
Farm Model III				
Without	22 330	7 970	14 360	60
With	450 000	65 946	384 054	1 600



**INCREMENTAL PRODUCTION, FULL VILLAGE UPTAKE,
TECHNOLOGY ADOPTION (YEAR 15)**

	Unit	Quantity	Value	
			SDD	USD
Main production				
Sorghum	kg	11 770 000	235 400 000	980 833
Millet	kg	4 809 750	216 438 750	901 828
Sesame	kg	3 625 160	242 885 720	1 012 024
Watermelon	kg	36 832 000	405 152 000	1 688 133
Watermelon seed	kg	920 800	23 2094 160	96 684
Tomatoes	kg	360 000	43 200 000	180 000
Onions	kg	390 000	27 300 000	113 750
Eggplant	kg	300 000	42 000 000	175 000
Gum arabic	kg	10 004 500	350 157 500	1 458 990
Nitrogen fixation	kg	760 650	-	-
Sheep	head	35 310	229 515 000	956 313
Goats	head	70 400	211 200 000	880 000
Camels	head	5 830	320 650 000	1 336 042
Milk	lt	26 721 200	935 242 000	3 896 842
Sub-total main production			3 282 345 130	13 676 438
By-products				
Sorghum straw	kg	25 894 000	155 364 000	647 350
Millet straw	kg	5 072 100	34 490 280	143 710
Sub-total by-products			189 854 280	791 060
Gross value of production			3 472 199 410	14 467 498

Economic Analysis

9. To estimate the economic viability of the project, a 20-year period was used. The project cost stream comprises all component costs, with the exception of credit funds. A standard conversion factor of 0.9 was used to derive project economic costs, reflecting equivalent foreign exchange pricing from parallel markets and official sources, and also The Sudan's recent market liberalization programme. Price contingencies and taxes were excluded from the economic analysis.

10. A set of conversion factors, primarily reflecting an estimated 20% in commodity sales taxes and a shadow price for labour (at 75% of a wage rate of SDD 250 per day, capturing the return to labour for activities of last resort) was used to derive economic prices. The remoteness of the project area, an active local market, together with chronic food supply deficits, leads to a high degree of convergence between the economic and financial values of primary outputs, so the usual commodity import and export parity price valuations were not used. All prices were assumed to remain fixed in real terms throughout the life of the project.



APPENDIX VIII

11. The EIRR was calculated at 14.8%. This excluded cofinancing by the IsDB, which had been approved soon after IFAD's appraisal mission of 1995, and was consequently taken as a sunk cost. Including the cost of the IsDB sub-component reduces the EIRR to 11.0%. These rates of return do not reflect benefits derived from community sub-projects, or from savings in time and equipment resulting from the proposed road construction. Extraction of the community sub-project costs (a sub-component with its own independent benefit stream) raises the EIRR to 19.0% without the road, and to 11.7% inclusive of total road construction costs.

12. The EIRR was tested for sensitivity to changes in costs and benefits, as well as a two-year lag in the project's net farm benefits. The analysis showed the project to be fairly robust, exhibiting an EIRR of 13.1% in the case of a 20% increase in project costs, 12.7% in the case of a 20% reduction in farm benefits and 11.4% in response to a two-year lag in gross benefits.



INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT
