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REPORT AND RECOMMENDATION OF THE PRESIDENT

TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO THE

REPUBLIC OF THE SUDAN

FOR THE

GASH SUSTAINABLE LIVELIHOODS REGENERATION PROJECT

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CURRENCY EQUIVALENTS

Currency Unit	=	Sudanese dinar (SDD)
USD 1.00	=	SDD 265
SDD 1.00	=	USD 0.0038

WEIGHTS AND MEASURES

1 kilogram (kg)	=	2.204 pounds (lb)
1 000 kg	=	1 metric tonne (t)
1 kilometre (km)	=	0.62 miles (mi)
1 metre (m)	=	1.09 yards (yd)
1 square metre (m ²)	=	10.76 square feet (ft ²)
1 acre (ac)	=	0.405 ha
1 hectare (ha)	=	2.47 ac
1 <i>feddan</i> (fed)	=	0.42 ha = 1.03 ac

ABBREVIATIONS AND ACRONYMS

AWP/B	Annual Workplan and Budget
MOIWR	Ministry of Irrigation and Water Resources
NGO	Non-Governmental Organization
WUA	Water Users' Association

GOVERNMENT OF THE REPUBLIC OF THE SUDAN
Fiscal Year

1 January - 31 December

MAP OF THE PROJECT AREA



Source: Compiled by the Office of Evaluation of IFAD (ESRI Digital Chart of the World).

The designation 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, and the authorities thereof.

REPUBLIC OF THE SUDAN**GASH SUSTAINABLE LIVELIHOODS REGENERATION PROJECT****LOAN SUMMARY**

INITIATING INSTITUTION:	IFAD
BORROWER:	Republic of The Sudan
EXECUTING AGENCY:	Ministry of Finance and National Economy
TOTAL PROJECT COST:	USD 39.0 million
AMOUNT OF IFAD LOAN:	SDR 17.45 million (equivalent to approximately USD 24.9 million)
TERMS OF IFAD LOAN:	Forty years, including a grace period of ten years, with a service charge of three fourths of one per cent (0.75%) per annum
COFINANCIERS:	None
CONTRIBUTION OF BORROWER:	USD 8.9 million
CONTRIBUTION OF BENEFICIARIES:	USD 4.7 million
CONTRIBUTION OF PARTICIPATING FINANCING INSTITUTION:	USD 0.5 million
APPRAISING INSTITUTION:	IFAD
COOPERATING INSTITUTION:	United Nations Office for Project Services

PROJECT BRIEF

Project beneficiaries. Of an estimated total population in the project area of 87 000 households, or about 480 000 people, some 75 000 households are rural, and 67 000 rural households are considered poor. It is estimated that through the project 30 000 tenant farmers will benefit from secure and equitable access to economically viable and irrigated landholdings. An additional 10 000 landless households, including some 4 500 woman-headed households, will gain legally recognized and secure access to irrigated land. About 27 000 non-tenant households will benefit from improved infrastructure for livestock production (fodder availability, veterinary services, restocking efforts) and non-farm income-generating activities.

Causes of poverty. In the Gash Delta area, as elsewhere in The Sudan, the level of rural poverty is closely related to the strength of agricultural production and productivity. The total cultivated area has decreased by 50% during the past 20 years, and the total cultivated area per tenant has declined from seven to less than one *feddan* (fed). Managerial, institutional and policy factors are the root causes of this process of impoverishment that has disrupted livelihoods in the Gash Delta. Chief among these factors are the absence of an agreed approach and a plan for development in the area, resulting in an ad hoc use of current resources and investments; unpredictable local and extra-local resource allocation, including inequitable patronage systems; lack of transparency in the management of Gash area resources and investments and the diversion of the surpluses extracted from the area away from reinvestment in the area; erratic support services; frequent exemption from or non-payment of services charges, such as water rates; and weakening of traditional solidarity and social support mechanisms. The relatively harsh and fragile agro-ecology and the cumulative degradation of the natural resource base further aggravate the situation.

Project assistance for the target group. The purpose of the project is to ensure the efficient, equitable and sustainable operation of the Gash Flood Irrigation Scheme and the integration of the scheme into the local economy. Core deliverables of the project include policy and institutional safeguards that can guarantee rational, responsible and equitable water management, an increase in the landholding from 1 fed to the more economically viable size of 3 fed of food and cash crops per year, equitable access to the tenancy rights in the scheme, the diversification of the livelihood base among non-tenant households, reliable access to potable water and to social services, the development of women's access to social and productive assets, greater access to rural financial services, the establishment of community organizations responsible for, inter alia, the management of natural resources and the provision of social, economic and financial services, and the strengthening of the capacity of the Gash Agricultural Scheme to manage the competing demands on the water resources equitably and effectively.

Beneficiary participation. The adoption of a participatory approach is essential under the prevailing conditions in the Gash Delta region, where the opportunities and priorities differ between the primary target group and other stakeholders. In this regard, communities will be represented in the land-tenancy reform process, the selection of eligible tenants, the identification of the criteria for clearing the irrigation block registers and accessing land on an equitable basis, and the formation of water users' associations and community organizations around economic and social interests. The participation of women will be supported through alliance building with local leadership, partnerships with line agencies and non-governmental organizations and quantitative targets for the representation of women in community organizations, along with the relevant training of women and men in gender-related concepts.

Innovative features. In line with the Country Strategic Opportunities Paper for The Sudan (2002), the project will create the opportunities and incentives for the policy and institutional reforms necessary to redistribute assets equitably across the population and gradually to devolve land and water management to user associations and community-based associations. Furthermore, the project is proposing socially and gender-differentiated approaches to increase the access of the poor and women to productive assets.

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TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO THE
REPUBLIC OF THE SUDAN
FOR THE
GASH SUSTAINABLE LIVELIHOODS REGENERATION PROJECT**

I submit the following Report and Recommendation on a proposed loan to the Republic of The Sudan for SDR 17.45 million (equivalent to approximately USD 24.9 million) on highly concessional terms to help finance the Gash Sustainable Livelihoods Regeneration 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 will be administered by the United Nations Office for Project Services as IFAD's cooperating institution.

PART I – THE ECONOMY, SECTORAL CONTEXT AND IFAD STRATEGY¹

A. The Economy and the Agricultural Sector

1. The Sudan, with a total land area of about 2.4 million km², is the largest country in Africa and one of the poorest countries in the world. The population is around 33 million and is growing at about 2.6% per year. By the most conservative estimates, about 20 million people in 2002 were living below the poverty line of less than USD 1 per day. Poverty in The Sudan is mainly a rural phenomenon, and the level of poverty is closely linked to the strength of agricultural productivity. Although endowed with rich natural resources, The Sudan remains underdeveloped primarily as a result of protracted civil strife and poor economic management.

2. In 1997, the Government engaged in a programme of economic reform monitored by the International Monetary Fund. During the period 1997 to 2000, the reform programme yielded considerable gains in macroeconomic stabilization and structural reform. The performance in terms of growth, inflation and the external current account balance reflected a prudent fiscal and monetary stance. Export performance remained extremely poor, while there was an increased demand for imports. This situation led to a current account deficit, averaging around 30% of the gross domestic product (GDP) in recent years. External debt is projected at USD 21.1 billion for the end of 2003, and the present value of external debt represents 135% of GDP, resulting in accumulated debt repayment arrears, including with the International Monetary Fund and the World Bank.²

3. The economy is predominantly agricultural, with 70% of the population deriving their livelihoods from this sector. In 2001, agriculture contributed 39% of GDP and continues to be a major export sector. The three major farming systems are: (i) irrigated, (ii) rainfed semi-mechanized, and (iii) rainfed traditional agriculture, accounting, respectively, for 28.7%, 9.1% and 60.8% of agricultural production. Within the sector, crop production accounts for 53% of agricultural output, livestock for 38% and forestry and fisheries for 9%. About 60% of all crop production is irrigated, 7% comes from mechanized farming, and 33% from the traditional rainfed sector. Ever since the food shortages in the eighties, the Government has given high priority to the production of food crops, resulting in large expansions in sorghum and wheat areas and output, often at the expense of the main cash crop, cotton, the production of which has declined by more than 40% since the mid-eighties. Livestock production is most prevalent in the traditional rainfed farming systems, but is increasing in

¹ See Appendix I for additional information.

² The Government of The Sudan continues to meet its loan service payment obligations to IFAD.

irrigated areas. Generally, The Sudan can now produce enough basic foods to feed its population. This self-sufficiency, however, can be compromised by inter-annual and geographical variations, combined with serious distribution problems.

B. Lessons Learned from Previous IFAD Experience

4. The following lessons have been learned with regard to: (i) smallholder constraints, (ii) project impact, (iii) women-oriented activities, (iv) investment in the rainfed sector, (v) credit, and (vi) institutional and managerial aspects.

- (i) Key **smallholder constraints** pertain to climatic vagaries, the lack of opportunities to diversify income, the limited access to productive assets and financial services, poor market channels and high storage losses. The ongoing South Kordofan Rural Development Programme is addressing these issues through the establishment of a village-based extension system and the creation of seed banks.
- (ii) With regard to **project impact**, projects have generally been able to increase production and provide some critical infrastructure. In addition to the physical achievements, ongoing projects are contributing to the establishment and institutionalization of self-help organizations and the building of the capacity of agricultural extension services.
- (iii) **Women-oriented activities** have been successful, despite minimal project resource allocations. Ongoing projects in the states of North and South Kordofan have now adopted an approach aimed at involving women in mainstream project activities. The result is a 30 to 50% rate of participation among women in social, technical and community-organization activities.
- (iv) Projects for **investment in the rainfed sector** have been able to reach out to a larger relative number of households than have irrigation rehabilitation projects, and they have done this at a more affordable cost. They are less dependent on imports for their equipment and inputs and produce high-value export crops and livestock, thereby making a more significant contribution to foreign-exchange earnings. Hence, project experience suggests that the social impact and economic profitability of investments are no less important in the rainfed sector than they are in the irrigated sector.
- (v) With regard to **credit**, IFAD efforts to induce the Agricultural Bank of Sudan to reorient its operations in favour of traditional small farmers has had no obvious effect on the general pattern of lending. However, the bank has provided significant rural financial services to target groups in the project areas. Projects are still supporting the bank through credit lines and are also addressing the constraints in the provision of access to credit (an adequate extension system to support productive enterprises, group rather than individual collateral and mobile banks to enhance the outreach of the services of the Agricultural Bank of Sudan). The bank is also undergoing a restructuring programme to streamline its operations and limit them to rural financing, to relieve its debt and to increase its capital.
- (vi) The lessons learned with respect to **institutional and managerial aspects** include a new awareness of the difficulty of attracting and retaining qualified staff in remote, demanding environments, the inadequate capacity of line and parastatal agencies to provide technical backstopping and respond to the priorities of target groups, and the inadequate counterpart funds and the scarcity of foreign exchange. Solutions are being developed on a case-by-case basis and aim to ensure sufficient autonomy and incentives for project management teams and offer ample opportunities for grass-roots organizations to influence project implementation and secure counterpart funds more readily.

C. IFAD's Strategy for Collaboration with The Sudan

5. **The Sudan's policy for poverty eradication.** Assistance for the preparation of a draft poverty reduction strategy paper was supplied during 1999-2000 through a grant and technical support from the World Bank. A decree of the Council of Ministers adopted the following principles for the poverty reduction strategy paper. First, peace and reconciliation are a precondition for the release of adequate resources for poverty reduction and, second, macroeconomic policies should make room for incentives for private investment and productivity improvements. The paper also contained directives to (i) assign priority to agricultural development and food security, (ii) create employment opportunities in the agricultural and services sectors, (iii) ensure the rational utilization of natural resources, (iv) build strategic partnerships with potential donors, and (v) improve implementation mechanisms and widen the participation process to include public and private groups, civil-society and non-governmental organizations (NGOs).

6. The Government launched a 'crash' poverty-reduction programme in 2001 as a stopgap measure to improve the long-neglected rural social services. The programme is financing basic education, primary health care, malaria prevention and drinking-water supply for a total outlay estimated at USD 50 million, equivalent to 0.4% of GDP in 2001. To combat poverty and to expand the economic capacity of the country, the Government has pursued an active policy for the rehabilitation of irrigation schemes and has attempted to reform the management of these schemes. In addition, the Government is in the process of reviewing marketing policies for cash crops and livestock so as to introduce incentives for producers.

7. **The poverty eradication activities of other major donors.** Due to political problems and issues related to arrears, most donors have suspended their operations in The Sudan. The major exceptions are IFAD, the Islamic Development Bank, the Organization of the Petroleum Exporting Countries Fund for International Development, United Nations agencies and a few bilateral agencies. United Nations agencies with a humanitarian mandate have continued to operate, but the country remained isolated for almost all the nineties. Recently, considerable efforts have been made by the Government to normalize its relations with the donor community. The ground-breaking work in this respect began in 1997, when the country entered into a three-year economic adjustment programme monitored by the International Monetary Fund. During 1998-2000, regional and Arab bilateral development institutions concluded debt rescheduling and relief programmes, which permitted the resumption of lending. The World Bank also started outlining its strategy through the preparation of a country economic memorandum. Larger donor presence is premised on the negotiation and signature of the Machakos Peace Accords, and the outcome of negotiations on the external debt.

8. **IFAD's strategy in The Sudan.** In the framework of IFAD's Country Strategic Opportunities Paper for The Sudan (2002), the Government and IFAD have agreed on a strategy that (i) highlights the need to concentrate on the more disadvantaged populations in areas where rainfed agriculture predominates, (ii) promotes projects that have more direct relevance to the livelihood strategies of the target groups, (iii) empowers women to participate fully in the development process, (iv) encourages the use of investment projects to pilot critical policy reforms (local government revenues, land tenure, rural credit, marketing, and so on) and to contribute to peace-building efforts, (v) relies on an enhanced partnership with civil-society institutions, and (vi) is consistent with the main thrusts of the corporate strategic framework, the regional strategy and the Government's own poverty-reduction strategy.

9. In this context, the main thrust of the strategy is to support the livelihood strategies of target groups, focusing on the improvement of the productive capacity of rural households and on an enabling institutional environment. The strategy's second thrust is to empower both men and women to participate fully in the development process. The third thrust is the promotion of good local governance.

10. **Project rationale.** This is the first project to be proposed on the basis of the IFAD Country Strategic Opportunities Paper for The Sudan. In line with the country strategy, the project rationale is based on the need to address the policy and institutional causes of the degradation of the Gash Flood Irrigation Scheme in order to improve living standards in the Gash Delta and the adjacent range areas. This implies a reallocation of land and water rights and the establishment of appropriate institutional arrangements. The rationale for the design is also based on the expected relationship between development and peace: the improvement of the living standards of the poor in the area should reduce existing social tensions.

PART II – THE PROJECT

A. Project Area and Target Group

11. The Gash Sustainable Livelihoods Regeneration Project is located in Kassala State, in the eastern part of The Sudan. With two important water resources, including the Atbara River, which irrigates the New Halfa Irrigation Scheme,³ and the seasonal Gash River, which is captured through the flood control scheme, Kassala State serves as a refuge area, particularly in times of crisis. Drought and civil unrest have drawn internally displaced people and refugees to settle there, and this has led to increasing demographic and economic pressure on the well-endowed, but fragile resource base. It is estimated that Kassala State now hosts 20% of the refugee population in The Sudan. As such, it is an important target area for relief programmes and food aid. In the Gash area, the population is estimated to have increased sevenfold over the past 20 years; the number of tenants has increased fourfold in the Gash Flood Irrigation Scheme, whereas the production base (the cultivated area) has decreased by 50%.

12. **Project area.** The project area has been determined through an assessment of livelihood strategies that was financed by the Department for International Development (United Kingdom) and that clearly confirmed that local livelihoods rely on the integration of the crop, livestock and forestry subsectors. The project area was expanded to include the entire command area of the Gash Flood Irrigation Scheme, as well as the east bank of the Gash River and the rangelands north and west of the scheme, but excludes Kassala City to the south and its surrounding villages. The project area borders a region of insecurity to the north.

13. **Target group.** Of an estimated total population in the project area of 87 000 households, or about 480 000 people, some 75 000 households are rural, and 67 000 of these rural households are considered poor. It is estimated that 30 000 tenant farmers will benefit from more secure and equitable access to economically viable and irrigated landholdings. An additional 10 000 landless households, including some 4 500 woman-headed households, will gain legally recognized and secure access to irrigated land. Women and men in 27 000 non-tenant households will benefit from the improved infrastructure for livestock production (fodder availability, veterinary services, restocking efforts) and non-farm income-generating activities.

B. Objectives and Scope

14. The overall **goal** of the project will be to regenerate the livelihoods of 67 000 poor households in and around the Gash Delta in a manner compatible with the efficient and sustainable use of the land and water resources and based upon a shared vision of development and the stability of the related institutional arrangements. The **purpose** of the project is to ensure the efficient, equitable and sustainable operation of the Gash Agricultural Scheme and the integration of the scheme into the local economy. The **specific objectives** of the project are (i) the elaboration and maintenance of a shared vision of development, (ii) the establishment of the related institutional arrangements appropriate to

³ From 1980 to 1988, IFAD cofinanced the New Halfa Irrigation Rehabilitation Project, located approximately 150 km to the west of the Gash Sustainable Livelihoods Regeneration Project.

the shared vision, (iii) rehabilitated water and other social infrastructures and water-harvesting devices, (iv) improved crop and livestock husbandry practices, (v) the establishment of financial services, and (vi) strengthened state planning capacity.

15. **Implementation approach.** Arresting and reversing the deterioration of the Gash Flood Irrigation Scheme require that, first and foremost, the institutional factors be addressed that have played a prominent role in the deterioration. The project implementation approach will therefore take into account enabling policies aimed at securing equitable access to strategic assets by the primary target group, with the ultimate aim of developing an equitable and sustainable system for the co-management of natural resources. To this effect, five policy areas are being considered essential for the reform process required to ensure that the project is successful. The first four relate to water and land rights, the delineation of responsibilities in the management of productive and social infrastructure, water users' association (WUA) membership rights, and organization. They will be implemented in concert with a fifth: the rehabilitation of the irrigation infrastructure. Capacity-building among the various stakeholders, the regular monitoring of the effects of the institutional reforms and the development of enabling legal provisions will be critical in the implementation of the project and for the sustainability of the benefits of the project.

C. Components

16. The project will be implemented over an eight-year period. In the fourth project year, the mid-term review will be undertaken to assess the achievements of the first phase of the project in terms of the effectiveness and equity of the reforms proposed and the preliminary results from the livelihood improvements and the bridging of gender gaps in the access to social and productive services. The findings of the mid-term review will inform the subsequent steering of the reform process and the implementation modalities of the project. The project has five components, as follows.

17. **Irrigation scheme rehabilitation.** The planned output of the scheme is the enhanced productivity of the irrigated rangelands and the surrounding rangelands through improved administration and capture of flood waters. This will be achieved through combined institutional and technical improvements. The institutional aspects will include tenant selection and registration, the establishment of tenancy rights to secure and viable landholdings and the voluntary organization of farmers into legally recognized WUAs, with which the Gash Agricultural Scheme will enter into service provision contracts for the delivery of water at the *masga* or *sub-masga* level (unit within an irrigation block). The establishment of a legally recognized WUA will be a condition for gaining access to land development initiatives, including the security of land holdings, land levelling, mesquite clearance, the improvement of *masga* and *sub-masga* intake and the desiltation of canals. Rehabilitation works will include upstream and downstream river training undertaken by the Ministry of Irrigation and Water Resources (MOIWR) and the reconstruction of the water reticulation network, canals and access roads. At full capacity, the new irrigation system will ensure the availability of 120 000 *feddans* (fed) of cultivated area per year and will function on the basis of a two-year rotation. Approximately 40 000 tenants – 10% of whom will be woman-headed households – will be registered with a landholding of 3 fed of cultivated area per year.

18. **Animal production and rangeland management.** The planned output of the animal production and rangeland management component is improved forestry production and livestock productivity. This will be achieved through enhanced animal health services, the restocking of non-tenant households (especially woman-headed households) with improved animal breeds and the implementation of a sound land-use policy that will enable the development and community-based management of range resources such as stock water facilities, water containment and spreading structures and the control of the spread of mesquite. The administration of flood waters will also be integrated with the development of the livestock and forestry sector. The anticipated long-term benefits of this component will accrue to 27 000 households and will consist of the doubling of the

herd size and the building up of the livestock assets of women, landless households and small livestock owners.

19. **Community development, capacity-building and empowerment.** The main output of this component is the increased access by communities to safe and reliable sources of potable water that will benefit approximately 70 village clusters and the greater access of women and landless households to social and productive assets (15 000 women and 3 000 men beneficiaries). This will be achieved through the refurbishment of existing water facilities and the transfer of the management of these facilities to legally recognized potable water management committees. With grant support from the project, representative and legally recognized community development committees will establish basic social services on a proportional-financing basis. In order to assist women in tenant and non-tenant households to cope with changes in the on-farm and off-farm workloads and to enable them to manage resources in an efficient manner, the project will build strategic alliances with local leaders to promote the participation of women in social and economic life, organize awareness campaigns targeting women and men, train women in social and economic skills, set targets for the involvement of women in different activities, encourage the representation of women on community development committees and build up the outreach capacity of community-based organizations and local councils.

20. **Financial services and marketing.** This component will improve the outreach of rural financial services to small tenants, small herders, landless households and women. A study will be conducted to identify the demand and supply of credit in relation to the rehabilitation of the irrigation scheme, the introduction of cash crops, the increase in the productivity of rangelands and the creation of new off-farm income-generating opportunities. For the purpose of establishing a crop-produce processing facility, a marketing study will explore the feasibility of enterprises that add value. Credit financing will be based on two modalities: a credit line for the supply of seasonal inputs and the establishment of a community-based investment credit system to meet the needs of WUAs, the consumption needs (pre-marketing) of households and the requirements for food and feed processing for the marketing of produce. A participating financing institution will take responsibility for the disbursement of credit on a commercial basis and will contribute 20% of the cost of credit. Profits from lending will be applied to cover the overheads and operating costs of this institution. The institution will receive support for physical and human capacity-building. Targets for the participation of women in rural financing activities will be determined based on the findings of the study of the demand and supply of credit.

21. **Institutional support and management.** This component will enable interested parties to develop a strategic vision for the Gash Delta and its related resources and to steer their organizations towards the realization of this strategic vision. Already, the base elements of the vision include the security of livelihoods through access to cash, improved agriculture and livestock production, awareness and education, basic services and responsive and effective institutions. A critical element in the realization of this vision will be the coherent management of the resources of the Gash Delta. The project will support the development of an institutional arrangement based on the co-management of these resources whereby the administration of the irrigation network and the range resources is gradually devolved to users' associations, while government agencies assume responsibility for service provision, regulation and arbitration. The institutions receiving specific organizational support through training, technical assistance, incentives on a declining scale, or equipment include WUAs, community-development committees, the Gash Agricultural Scheme, MOIWR, line ministries and the participating localities.

D. Costs and Financing

22. Project baseline costs for the eight-year implementation period are estimated at USD 32.4 million, or about SDD 9.1 billion, with a foreign exchange element of 33%, or about USD 10.8 million. Investment costs account for 91% of the total costs. The overall total costs, including contingencies, are estimated at USD 39.0 million or about SDD 13.4 billion. The cost per

direct beneficiary household amounts to USD 582. The proposed IFAD loan will be approximately USD 24.9 million, or 63.9% of the total project cost. The participating financing institution will contribute the equivalent of USD 0.5 million to the formal credit line. The Government will contribute the equivalent of USD 8.9 million in the form of waived taxes, Gash River control works and other local expenditures. The beneficiaries will contribute the equivalent of USD 4.7 million to cover the community-based irrigation investment and operating costs through their payment of water rates and the provision of labour and local materials. A components project cost summary is shown in Table 1.

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

Component	Local	Foreign	Total	% Foreign Exchange	% Total Base Costs
A. Irrigation scheme rehabilitation					
Irrigation scheme rehabilitation	2.1	1.1	3.3	35	10
River control	3.7	2.0	5.7	35	17
Subtotal	5.8	3.1	8.9	35	28
B. Animal production and rangeland management	1.6	1.0	2.7	39	8
C. Community development, capacity-building and empowerment	3.5	1.0	4.5	23	14
D. Financial services and marketing	3.0	0.1	3.1	4	10
E. Institutional support and management					
1. WUAs	3.1	1.5	4.6	32	14
2. Gash Agricultural Scheme	1.2	1.8	2.9	60	9
3. Agricultural services	0.7	0.2	0.9	22	3
4. MOIWR-Gash	1.0	1.2	2.2	54	7
5. Project coordination unit	1.8	0.8	2.6	32	8
Subtotal	7.8	5.5	13.2	41	41
Total base costs	21.7	10.8	32.4	33	100
Physical contingencies	2.0	1.1	3.0	35	9
Price contingencies	2.5	1.1	3.6	30	11
Total project costs	26.1	12.9	39.0	33	120

^a Discrepancies in totals are due to rounding.

TABLE 2: FINANCING PLAN ^a
(USD million)

Component	Government		IFAD		Financing Institution		Beneficiaries		Total		Foreign Exchange	Local (Excl. Taxes)	Duties and Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
A. Irrigation scheme rehabilitation													
Irrigation scheme rehabilitation	0.60	15.0	3.38	85.0	-	-	-	-	3.98	10.2	1.39	1.99	0.60
River control	3.38	50.0	3.38	50.0	-	-	-	-	6.76	17.3	2.37	3.38	1.01
Subtotal	3.98	37.0	6.76	63.0	-	-	-	-	10.74	27.5	3.76	5.37	1.61
B. Animal production and rangeland management	0.52	16.3	2.27	70.7	-	-	0.42	13.0	3.21	8.2	1.25	1.47	0.50
C. Community development, capacity-building and empowerment	1.22	22.4	4.07	74.8	-	-	0.15	2.8	5.44	13.9	1.24	3.62	0.58
D. Financial services and marketing	0.07	1.9	3.29	85.9	0.47	12.2	-	-	3.83	9.8	0.14	3.61	0.07
E. Institutional support and management													
1. WUAs	0.78	13.7	0.76	13.4	-	-	4.13	72.9	5.66	14.5	1.81	3.07	0.78
2. Gash Agricultural Scheme	0.97	27.8	2.52	72.2	-	-	-	-	3.49	8.9	2.10	0.48	0.90
3. Agricultural services	0.28	26.3	0.78	73.7	-	-	-	-	1.06	2.7	0.23	0.68	0.14
4. MOIWR Gash	0.74	29.3	1.77	70.7	-	-	-	-	2.51	6.4	1.37	0.50	0.64
5. Project coordination unit	0.38	12.1	2.74	87.9	-	-	-	-	3.11	8.0	1.01	1.83	0.28
Subtotal	3.13	19.8	8.56	54.1			4.13	26.1	15.82	40.5	6.52	6.57	2.73
Total project cost	8.93	22.9	24.95	63.9	0.47	1.2	4.70	12.0	39.03	100.0	12.90	20.64	5.50

^a Discrepancies in totals are due to rounding.

E. Procurement, Disbursement, Accounts and Audit

23. **Procurement.** The procurement of the goods and services financed by the IFAD loan will be carried out in accordance with IFAD procurement guidelines. Each contract for the supply of goods, including vehicles and technical equipment, estimated to cost more than the equivalent of USD 100 000 will be awarded following international competitive bidding procedures. Goods supplied under contract that are estimated to cost the equivalent of between USD 10 000 and USD 100 000 may be procured following local competitive bidding procedures. Civil works will be awarded following local competitive bidding procedures for works undertaken by the Gash Agricultural Scheme and force account procedures for works undertaken by MOIWR. The project will prepare the technical specifications of the goods and services to be procured under international competitive bidding and local competitive bidding procedures, and a project procurement committee will undertake the evaluation of the procurement process. Local shopping will be used for minor items each costing less than USD 10 000 through contracts awarded on the basis of the evaluation and comparison of bids from at least three suppliers. Local technical assistance personnel and experts to carry out the studies for the IFAD-financed components will be engaged through national advertisement. Their services, as well as the services of consultants, organizations (including NGOs) and other appropriate implementing agencies will be retained under contracts that specify terms of reference appropriate to the task and designed to secure the services of individuals, firms and organizations with qualifications and experience that are satisfactory to IFAD and the IFAD cooperating institution. The services of the project coordinator, the professional staff of the project coordination unit and the expatriate technical assistance will be procured in accordance with competitive procedures acceptable to IFAD and the cooperating institution.

24. **Disbursement.** The IFAD loan will be disbursed over an eight-year period. Local expenditures for contracts costing less than the equivalent of USD 50 000 each for training, the services of consultants, goods and works, payments to the social services support funds and credit and incremental operating costs will be disbursed against certified statements of expenditure. Related supporting documents will be retained by the project management unit for subsequent review by supervision missions and will be examined in the course of the annual audit of the project accounts. All other withdrawals from the loan accounts will be made on the basis of full supportive documentation. Expenditures of up to USD 120 000 incurred before the effectiveness date but after 1 December 2003 for civil works, vehicle and equipment, technical assistance and incremental operating costs will be financed retroactively from the loan.

25. **Accounts.** The Government will open and maintain two special accounts in euro in the Khartoum branch of the Bank of Sudan (the Central Bank) or another bank proposed by the borrower and approved by the Fund. One account will be accessible to the project coordination unit for project management and coordination of all activities except those related to river control, and the other restricted to MOIWR for the financing of river control works. The special accounts will be established for the purpose of pre-financing IFAD's share of project expenditures on terms and conditions satisfactory to IFAD. They will be used to make both foreign and local currency payments, including disbursements to the project's local accounts. The initial amounts deposited in the special accounts will correspond to the IFAD share of the first six months of project expenditures. Thereafter, they may be increased to the authorized amounts against the forecast expenditure estimates for IFAD's share of the financing in the approved annual workplan and budget (AWP/B). For normal operating expenses, the Government will open and maintain local **project accounts** in SDD in the Kassala branch of a commercial bank for the project coordination unit and the MOIWR Kassala office. The bank, which is to be determined, must be acceptable to IFAD. The Government will deposit the initial amounts in the project accounts and replenish the accounts biannually in advance from its own resources in accordance with the consolidated AWP/B, including the prospective lending schedule of the project.

26. **Audit.** The project management will contract a qualified external auditor, subject to the approval of IFAD, to undertake an annual audit. The external auditor will present a certified audited accounts and management report in long-form within six months of the end of the financial year.

F. Organization and Management

27. The participation and collaboration of stakeholders are critical to the success of the project. The project will enable the local population to use the practices of existing community organizations⁴ to develop new forms of organization that allow the local people to gain more secure rights to natural resources and to manage the resources in a concerted, equitable and sustainable manner. Community-based and resource-based users' associations will be responsible for the management of a given resource (such as wetlands, potable water outlets and rangelands), the development of use and cost-recovery modalities with their constituents and relevant authorities, the assessment and efforts to address the needs of poor women and men, and the monitoring of the effects of the project. The mandate and discretionary powers of these entities will be recognized by legislation that ensures the autonomy and accountability of these entities.

28. The project will be placed at the central level in line with government policy for agricultural schemes. The lead project agency will be the Ministry of Agriculture and Forestry. The Board of Directors of the Gash Agricultural Scheme will be responsible for the policy issues and strategies relevant to the Gash Agricultural Scheme, as well as coordination and linkages among agencies and stakeholders. A project executive board, located in Kassala State, will be responsible for the supervision and monitoring of the progress of the project. The project executive board will act as an enabling agency to support the institutional reform process through relevant legislation, stakeholder consultation and the channelling of resources. It will encompass the different project stakeholders and will consist of the Minister of State for Agriculture, Animal Wealth and Irrigation in Kassala State as chairperson, two representatives from the Ministry of Finance and National Economy (from the Budget Department and International Cooperation Department respectively), one representative from the federal Ministry of Agriculture and Forestry, the Director of the Gash Agricultural Scheme, the senior coordinator for IFAD projects in The Sudan, the state representatives of MOIWR, the state Director of the Forestry National Corporation, the state Director of the Animal Health Administration, two representatives of the Farmers Union (who also sit on the Board of Directors of the Gash Agricultural Scheme), a WUA representative from each irrigation block as it is brought into the rehabilitation programme, a representative of the range (off-scheme) community, the commissioners from the concerned localities and the representative of the Union of Sudanese Women.

29. The project coordination unit will be located in Kassala, the state capital, and will be responsible for the overall coordination of project interventions, the follow-up for critical policy decisions at federal, state and scheme levels, procurements (with the support of the central coordination unit of IFAD projects), financial management and control, and the monitoring of the progress and impact of implementation. The project coordination unit will be responsible to the project executive board. Core staff will include a project coordinator, a financial controller, a community development officer, a water management officer, a monitoring and evaluation officer and an expatriate state planning advisor. Implementation functions will be undertaken by the relevant agencies, including the Gash Agricultural Scheme, MOIWR, state line agencies, localities and NGOs. The project coordinator will act as the secretary of the project executive board. A legal Committee for Land Reform was established by decision of the Federal Ministry of Agriculture and Forestry on 6 September 2003. It is responsible for setting the procedures for the equitable allocation of fixed and viable landholdings. The appropriate procedures and a period of appeal against the decisions of the Committee will be defined. The recommendations of the Committee will be submitted to the Government and IFAD for review before proceeding with any reallocation of land rights.

⁴ Existing community organizations include women's savings groups, the *gura'a* (lottery for allocation of land), *masga* (unit within an irrigation block) sheikhs and the Farmers Union.

30. **Gender mainstreaming.** The project is designed to catalyse major institutional and economic transformations, but it will also likely accelerate major social transformations, particularly with regard to gender relations. The anticipated increase in food production, labour opportunities, incomes, in affordable water and general awareness should change women's roles and outlooks in terms of livelihood options. Hence, monitoring social change and building the awareness and advocacy of key leaders so as to foster gender equity will constitute a main focal area of the project.

31. **Project planning, monitoring and evaluation.** The AWP/B for the first year of project operations will be prepared as part of project start-up activities and will be presented to IFAD within three months of the loan effectiveness. In subsequent years, the development of the AWP/B of the project will engage all stakeholders, but particularly the state line agencies, the Gash Agricultural Scheme, MOIWR and the community-based and resource-based users' organizations. The planning will take into consideration physical targets, assessments of the effectiveness of devolution in resource management, support for community-based and resource-based users' associations and the need to ensure equitable access by the poorest households and women to project services and benefits.

32. Project monitoring and evaluation will be critical to the management of project activities and the guidance of the institutional reforms required to promote the equitable, efficient and sustainable management of land and water resources in a way that is conducive to the development of local livelihoods and the reduction of poverty. The annual stakeholders' review of the reform and rehabilitation process will guarantee the effective use of the monitoring and evaluation system to coordinate project implementation and steer the reform process. Monitoring and evaluation indicators will be based on the project logframe and validated benchmark data.

G. Economic Justification

33. The principal quantifiable benefits of the IFAD-financed components are the incremental farm incomes of 67 000 farming households, 60% of which will benefit from investments in the irrigation scheme, and 40% of which will benefit from investments in the Gash terminal fan and rangeland. The main sources of the quantifiable project benefits are (i) the incremental agricultural crop production in the Gash Agricultural Scheme, (ii) the increased livestock production in the Gash terminal fan and rangeland, (iii) horticultural production in North Kassala, and (iv) the increased income from off-farm activities such as wood and charcoal production derived from mesquite and other trees. Other benefits arising from the project include enhanced nutritional status and health because of the improved domestic water supplies, greater community participation and the increased gender equity and involvement of women within the communities. The annual direct incremental economic net benefits at full development are estimated at the equivalent of USD 21.8 million from farm produce, livestock and charcoal.

34. The economic internal rate of return on the investments in the project area over 20 years is estimated at 12.7%, including the costs of river control and the costs related to the institutional support for the MOIWR. If the costs of river control and the support to MOIWR are considered as sunk costs, the economic internal rate of return is estimated at 15.4%. The economic internal rate of return drops to 10.3% with an increase in costs of 10%, to 10.0% with a 10% decrease in benefits, to 7.6% with a combination of the two criteria, and to 10.2% with a one-year lag in project benefits.

H. Risks

35. There are five main risks that the project could face and which the project design will address, as follows. (i) The institutional reforms required, especially those needed for equitable land allocation, will fail to stay in tandem with rehabilitation and development. (ii) The institutional capacity of the Gash Agricultural Scheme is inadequate. (iii) The beneficiaries will be unwilling to contribute to the costs of the investments for irrigation and water management structures or to assume responsibility for the cost of the operation and maintenance of these structures. (iv) There will be recurrent drought

and poor or high river flows. (v) The attitudes of traditional agropastoralists may emphasize livestock production at the expense of sufficient viable on-scheme crop production to offset the costs of scheme development, maintenance and operation. (vi) There is continued civil unrest around the margins of the project area.

36. Stakeholder consultations throughout the design process have enabled the development of a greater awareness of the project approach, the rationale of the institutional reforms, the necessary synchronization between infrastructure rehabilitation involved and reforms, and the implications in terms of division of responsibilities, resources and power. This awareness is currently being translated into action. The Government is already taking the lead in the establishment of the fundamental elements of the reforms in land and water governance. The expected project benefits in terms of a more equitable distribution of the asset base and of development opportunities are likely to contribute to peace.

I. Environmental Impact

37. An environmental screening and scoping note has been prepared for the project. It was supported by an IFAD environmental assessment study undertaken in conjunction with the appraisal exercise. Environmental degradation has been caused by deforestation and the invasion of mesquite in the irrigation scheme area. Recurrent drought has meant that the rangelands near population centres have come under pressure from overstocking. These problems have been devastating and can be attributed to negligence of the natural resource base and poor management of flood control and irrigation scheme operations. The project addresses this situation through its components and participatory approach. Environmental improvement and conservation will be specifically addressed through the rangeland management programme, including a mesquite control and reforestation policy, as well as an environmental conservation policy for the project area and the state. This will be complemented by a hydro-geological survey to define groundwater resources accurately. Environmental status will be monitored. The project is classified as 'environmental category b'.

J. Innovative Features

38. The Gash Sustainable Livelihoods Regeneration Project has several innovative features. Since its inception, project design and negotiation were taken up as two parallel, interactive processes. The dialogue with stakeholders was constantly maintained through recurring meetings at which community views were expressed, the concerns of the poor voiced, available options explained and choices made at each step as the design process was modified or validated. This same method will be pursued throughout implementation through the adoption of a participatory, poverty-targeted approach in the institution and monitoring of the land and water governance reform package.

39. The project has also developed a new approach to the rehabilitation of irrigation infrastructure. This approach places livelihoods rather than infrastructure development firmly at the core of future investment and helps highlight the key institutional and economic arrangements needed to enable local development, economic stability and social and gender equity. In terms of the development of the capabilities and livelihood options of women, the project will adjust the approach so that it is consistent with existing gender relations and social norms, given the conservative nature of the communities.

PART III – LEGAL INSTRUMENTS AND AUTHORITY

40. 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.

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

42. Immediately after loan approval by IFAD, the Government of The Sudan is entitled to request a financing facility to implement the start-up activities of the project, with a ceiling of USD 100 000.
43. I am satisfied that the proposed loan will comply with the Agreement Establishing IFAD.

PART IV – RECOMMENDATION

44. 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 seventeen million four hundred and fifty thousand Special Drawing Rights (SDR 17 450 000) to mature on or prior to 15 December 2043 and to bear a service charge of three fourths of one per cent (0.75%) per annum, and to be upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented to the Executive Board in this Report and Recommendation of the President.

Lennart Båge
President

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

(Loan negotiations concluded on 18 November 2003)

1. The Government of the Republic of The Sudan (the Government) will open and thereafter maintain in the Kassala branch of a commercial bank approved by IFAD the following two current accounts in Sudanese dinars for project operations (the project accounts): (i) one account for the use of the project coordination unit (PCU), which the project coordinator and the financial and administration manager of the PCU will be fully authorized to operate jointly (the PCU account); and (ii) one account for the use of the MOIWR Kassala office (the MOIWR account), which the river control coordinator and an authorized financial officer of MOIWR will be fully authorized to operate jointly.
2. The Government will make available to the MOIWR and the PCU during the project implementation period counterpart funds from its own resources in an aggregate amount equivalent to USD 8 926 900 in accordance with its customary national procedures for development assistance. The Government will take the necessary action to ensure that its counterpart funds for the project are accurately reflected in its annual development budget. Such counterpart funds will, in accordance with the AWP/B for each project year, be applied to the payment of forgone taxes, certain investment costs and recurrent costs, such as office space, salaries, allowances and operating and maintenance costs. The Government will ensure that its counterpart contributions are made available to the project in a timely fashion throughout the project implementation period. For such purpose, the Government will deposit counterpart funds in an initial amount equivalent to USD 30 000 into the PCU account and an initial amount equivalent to USD 300 000 into the MOIWR account to cover the first six months of project implementation. The Government will thereafter, every six months and in advance, replenish the respective project accounts by depositing the counterpart funds specified for such six-month period in the AWP/B of each project year. In addition, the Government will honour all its standard financial commitments towards the appropriate functioning of the public project parties.
3. In addition to the semi-annual progress reports required by the General Conditions, the PCU will submit to IFAD, between 1 January and 30 June of each project year, a monthly report on the progress of the allocation of land tenancy rights and formation of WUAs.
4. In addition to the events set forth in the General Conditions that may cause IFAD to suspend the right of the Government to request withdrawals from the loan account, IFAD may suspend the loan, after consultation with the Government, in whole or in part upon the occurrence of any of the following events:
 - (a) The Government has failed to undertake the necessary tasks to effectively coordinate land tenancy reform and to enable tenants of the Gash Agricultural Scheme to organize into WUAs with the rehabilitation of the irrigation infrastructure on a block-by-block basis. Actions by the Government that may lead to such failure include: (i) dissolution of the legal committee on land reform (LCLR) before completing the task; (ii) refusal of the authorities to distribute irrigated land as per the agreed lists of eligible farmers prepared by the LCLR; (iii) distribution of the irrigated land without due regard to the LCLR agreed lists of eligible farmers in each block; (iv) suspension or abolition of the legislation enacting WUAs; and (v) failure to allocate adequate funds to the crash programme¹ or failure to allocate adequate counterpart funds to the irrigation

¹ The crash programme is the set of physical activities that the Government will undertake and commit against its 2003 budget to facilitate implementation of the irrigation infrastructure rehabilitation component of the project.

infrastructure rehabilitation component of the project for the timely implementation of irrigation rehabilitation.

- (b) The project implementation manual, or any provision thereof, has been waived, suspended, terminated, amended or modified without the prior consent of IFAD, and IFAD has determined that such waiver, suspension, termination, amendment or modification has had, or is likely to have, a material adverse effect on the project.
- (c) The participating financial institution has suspended, cancelled or terminated the proceeds of its contribution to the project, in whole or in part, or any event has occurred that, with notice or the passage of time, could result in any of the foregoing.
- (d) The credit by-laws of the participating financial institution applicable to the financial services and marketing component, or any provision thereof, have been waived, suspended, terminated, amended or otherwise modified without the prior consent of IFAD, and IFAD has determined that such waiver, suspension, termination, amendment or modification has had, or is likely to have, a material adverse effect on that component.

5. The Government will take all action required to insure project personnel against health risks to the extent consistent with the Government's national procedures.

6. The Government will ensure that women are represented in the organization and management of the project, in particular in operational and decision-making posts of the PCU and the project executive board. The Government will also ensure that gender-equity considerations are integrated into all project activities during the project implementation period, and that women beneficiaries participate in all project activities and that they receive appropriate benefit from the project outputs.

7. As part of maintaining sound environmental practices as required by the General Conditions, the project parties will maintain appropriate pest management practices under the project and, to that end, 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's Recommended Classification of Pesticides by Hazard and Classification, 1996-1997, as amended from time to time. All such pesticides will be approved by the competent authorities of the Government prior to their use.

8. The Government will ensure that IFAD approves the selection of the team of consultants assisting in the mid-term review and that IFAD will directly recruit the team leader.

9. Withdrawals not exceeding in the aggregate the equivalent of USD 120 000 may be made from the loan in respect of expenditures incurred for the following items before the date of effectiveness of the loan agreement but after 1 December 2003: (i) construction of the Gira canal (not exceeding the equivalent of USD 75 000); (ii) office equipment and furniture for the PCU (not exceeding the equivalent of USD 10 000); (iii) the tender and consultant documents for the Government's crash programme (not exceeding the equivalent of USD 25 000); and (iv) recruitment of essential PCU staff (not exceeding the equivalent of USD 10 000). Such expenditures will be deemed eligible expenditures for all purposes of the loan agreement.

10. The following are specified as the conditions for disbursement from the loan under the financial services and marketing component:

- (a) the credit by-laws have been approved by IFAD in draft, and a copy of those credit by-laws as adopted by the project executive board, substantially in the form so approved and certified as true and complete by a competent officer of the Government, has been delivered to IFAD; and
- (b) a subsidiary agreement between the Government and the participating financial institution has been approved by IFAD in draft, and a copy of that subsidiary agreement, as signed by the Government and the participating financial institution, substantially in the form so approved and certified as true and complete by a competent officer of the Government, has been delivered to IFAD; the signature and performance thereof by the Government and the participating financial institution must be duly authorized or ratified by all necessary corporate, administrative and governmental action and all conditions precedent to the effectiveness thereof must have been fulfilled.

11. The following are specified as conditions precedent to the effectiveness of the loan agreement:

- (a) the project executive board has been duly established;
- (b) the Ministry of Agriculture and Forestry (the lead project agency) has made available appropriate office and accommodation facilities for the PCU in Kassala and the PCU has been duly established;
- (c) the project coordinator and the financial and administration manager of the PCU have been duly appointed;
- (d) the Government has duly opened the special accounts and the project accounts;
- (e) the Government has made arrangements for the availability of counterpart contributions for the first project year;
- (f) the Government has submitted to IFAD the tenant registry book of the first block on which works are planned, and the modalities for tenant selection and registration have been identified and agreed upon;
- (g) the Government has submitted to IFAD the draft legislation for the WUAs;
- (h) the Government has undertaken an audit of the Gash Agricultural Scheme to determine its financial status and has submitted a proposal for settling the Scheme's debts;
- (i) the loan agreement has been duly signed, and the signature and performance thereof by the Government have been duly authorized and ratified by all necessary administrative and governmental action; and
- (j) a favourable legal opinion, issued by the Ministry of Justice, in form and substance acceptable to IFAD, has been delivered by the Government to IFAD.

**COUNTRY DATA
SUDAN**

Land area (km² thousand) 2001 1/	2 376	GNI per capita (USD) 2001 1/	340
Total population (million) 2001 1/	31.69	GDP per capita growth (annual %) 2001 1/	4.9
Population density (people per km²) 2001 1/	13	Inflation, consumer prices (annual %) 2001 1/	16 a/
Local currency	Sudanese Dinar (SDD)	Exchange rate: USD 1 =	SDD 265
Social Indicators		Economic Indicators	
Population (average annual population growth rate) 1995-2001 1/	2	GDP (USD million) 2001 1/	12 525
Crude birth rate (per thousand people) 2001 1/	34	Average annual rate of growth of GDP 1981-1991	2.4
Crude death rate (per thousand people) 2001 1/	11	1991-2001	5.5
Infant mortality rate (per thousand live births) 2001 1/	65	Sectoral distribution of GDP 2001 1/	
Life expectancy at birth (years) 2001 1/	58	% agriculture	39
Number of rural poor (million) (approximate) 1/	n/a	% industry	19
Poor as % of total rural population 1/	n/a	% manufacturing	10
Total labour force (million) 2001 1/	12.72	% services	42
Female labour force as % of total 2001 1/	30	Consumption 2001 1/	
Education		General government final consumption expenditure (as % of GDP)	6 a/
School enrolment, primary (% gross) 2001 1/	55 a/	Household final consumption expenditure, etc. (as % of GDP)	76 a/
Adult illiteracy rate (% age 15 and above) 2001 1/	41	Gross domestic savings (as % of GDP)	18 a/
Nutrition		Balance of Payments (USD million)	
Daily calorie supply per capita, 1997 2/	2 665	Merchandise exports 2001 1/	1 630
Malnutrition prevalence, height for age (% of children under 5) 2001 1/	n/a	Merchandise imports 2001 1/	1 575
Malnutrition prevalence, weight for age (% of children under 5) 2001 3/	17	Balance of merchandise trade	55
Health		Current account balances (USD million)	
Health expenditure, total (as % of GDP) 2001 1/	5 a/	before official transfers 2001 1/	-1 349
Physicians (per thousand people) 2001 1/	.. a/	after official transfers 2001 1/	-522
Population using improved water sources (%) 2000 3/	75	Foreign direct investment, net 2001 1/	392 a/
Population with access to essential drugs (%) 1999 3/	0-49	Government Finance	
Population using adequate sanitation facilities (%) 2000 3/	62	Overall budget deficit (including grants) (as % of GDP) 2001 1/	-1 a/
Agriculture and Food		Total expenditure (% of GDP) 2001 1/	9 a/
Food imports (% of merchandise imports) 2001 1/	15 a/	Total external debt (USD million) 2001 1/	15 348
Fertilizer consumption (hundreds of grams per ha of arable land) 2000 1/	23	Present value of debt (as % of GNI) 2001 1/	n/a
Food production index (1989-91=100) 2001 1/	168	Total debt service (% of exports of goods and services) 2001 1/	2
Cereal yield (kg per ha) 2001 1/	509	Lending interest rate (%) 2001 1/	n/a
Land Use		Deposit interest rate (%) 2001 1/	n/a
Arable land as % of land area 2000 1/	7		
Forest area as % of total land area 2000 1/	26		
Irrigated land as % of cropland 2000 1/	12		

a/ Data are for years or periods other than those specified.

1/ World Bank, *World Development Indicators*, CD ROM 2003

2/ UNDP, *Human Development Report*, 2000

3/ UNDP, *Human Development Report*, 2002

PREVIOUS IFAD FINANCING IN THE SUDAN

Project ID	Project Name	Initiating Institution	Cooperating Institution	Lending Terms	Board Approval	Loan Effectiveness	Current Closing Date	Loan/Grant Acronym	Denominated Currency	Approved Loan/Grant Amount	Disbursement as % of Approved Amount
20	Southern Region Agriculture Project	World Bank/IDA	World Bank: IDA	HC	27 Jun 79	14 Feb 80	30 Jun 85	L - I - 20 - SU	SDR	11 700 000	91
39	New Halfa Irrigation Rehabilitation Project	World Bank/IDA	World Bank: IDA	HC	07 May 80	17 Feb 81	31 Dec 88	L - I - 39 - SU	SDR	11 950 000	96
134	Northern Region Agricultural Rehabilitation Project	IFAD	World Bank: IDA	HC	13 Sep 83	19 Jul 84	31 Dec 93	L - I - 134 - SU	SDR	9 500 000	89
155	Stock Route Project	IFAD	World Bank: IDA	HC	12 Sep 84	18 Oct 85	31 Dec 92	L - I - 155 - SU	SDR	5 950 000	96
181	Western Savannah Project – Phase II	World Bank/IDA	World Bank: IDA	HC	06 Dec 85	27 Nov 86	30 Jun 94	L - I - 181 - SU	SDR	9 450 000	96
268	Southern Roseires Agricultural Development Project	IFAD	UNOPS	HC	02 Oct 90	10 Jan 92	31 Mar 00	G - I - 212 - SU	SDR	40 000	86
268	Southern Roseires Agricultural Development Project	IFAD	UNOPS	HC	02 Oct 90	10 Jan 92	31 Mar 00	L - I - 268 - SU	SDR	7 500 000	100
304	Northern Province Irrigation Rehabilitation Project – Phase II	IFAD	World Bank: IDA	HC	15 Apr 92	10 Mar 93	31 Dec 98	L - I - 304 - SU	SDR	4 350 000	98
304	Northern Province Irrigation Rehabilitation Project – Phase II	IFAD	World Bank: IDA	HC	15 Apr 92	10 Mar 93	31 Dec 98	L - S - 32 - SU	SDR	4 350 000	99
448	En Nahud Cooperative Credit Project	IFAD	UNOPS	HC	30 Nov 88	15 Mar 89	31 Dec 98	G - S - 13 - SU	SDR	520 000	89
448	En Nahud Cooperative Credit Project	IFAD	UNOPS	HC	30 Nov 88	15 Mar 89	31 Dec 98	L - S - 16 - SU	SDR	6 550 000	101
459	Northern Province Irrigation Rehabilitation Project	IFAD	World Bank: IDA	HC	03 Dec 86	07 Dec 87	30 Jun 98	L - S - 5 - SU	SDR	8 050 000	94
465	White Nile Agricultural Services Project	IFAD	UNOPS	HC	15 Sep 93	18 Jan 95	30 Jun 02	L - S - 36 - SD	SDR	7 600 000	100
1045	North Kordofan Rural Development Project	IFAD	IFAD	HC	28 Apr 99	14 Jun 00	31 Dec 07	L - I - 501 - SD	SDR	7 750 000	38
1140	South Kordofan Rural Development Programme	IFAD	UNOPS	HC	14 Sep 00	12 Feb 01	30 Sep 11	G - I - 508 - SD	SDR	115 000	100
1140	South Kordofan Rural Development Programme	IFAD	UNOPS	HC	14 Sep 00	12 Feb 01	30 Sep 11	L - I - 544 - SD	SDR	13 300 000	31

HC: Highly concessional.
IDA: International Development Association.

APPENDIX III

LOGICAL FRAMEWORK

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Goal</p> <p>To regenerate the livelihoods of 67000 tenant, herder and landless households in the Gash Delta area</p>	<ul style="list-style-type: none"> - Decreased malnutrition among women and children - Build-up of livestock and other farm assets within small tenant households, non-tenant households and woman-headed households - Equitable access of women and men to productive resources (land and livestock) and to rural financial services - Improved and equitable access of women and men to education and health services - Pro-active government, farmer-based and community-based organizations 	<p>Baseline survey, mid-term review and completion evaluation and impact assessment include:</p> <ul style="list-style-type: none"> - anthropometric studies (gender disaggregated) - socio-economic surveys (gender disaggregated) - institutional analysis of Farmers Union, organizations established by the project, the Gash Agricultural Scheme, MOIWR - population survey 	<p>Upstream river flow controlled through effective national flood mitigation measures and transboundary agreements</p> <p>Economic growth in the area is not offset by population pressure</p> <p>Higher capacity of local communities and Government to predict and deal with drought</p>
<p>Project Purpose</p> <p>To ensure an efficient, equitable and sustainable operation of the Gash Flood Irrigation Scheme and its integration in the local economy</p>	<ul style="list-style-type: none"> - For each rehabilitated block, benefit/cost ratio is positive to established WUAs, farmers and the Gash Agricultural Scheme - 50% of tenants would have access to 50% of irrigated and cultivated land - 25% of registered tenants would be former landless and unregistered households - 10% of registered tenants would be woman-headed households - Increased total revenue generated from crop; livestock and forestry production - At least, 23 000 per year wage labour opportunities are created 	<p>Baseline survey report</p> <p>Project monitoring reports</p> <p>Completion evaluation report</p> <p>Tenants registry books</p> <p>the Gash Agricultural Scheme, MOIWR, WUAs budget and revenue balances</p> <p>Gash Locality budget and revenue balances</p>	<p>Government and representative agencies make decisions based on long-term vision of the development of the Gash resources</p> <p>Political stability</p> <p>Government adopts economically sound and pro-poor agricultural policies, especially with regard to food and cash crops</p>

APPENDIX III

LOGICAL FRAMEWORK (CONT.)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Project Outputs</p> <p>1. Rehabilitated flood irrigation infrastructure co-managed by users and the Gash Agricultural Scheme</p> <p>2. Rehabilitated and user-managed rangelands</p> <p>3. Improved crops, mesquite/forestry, and livestock husbandry</p> <p>4. Improved access of non-tenant households to productive and social assets</p>	<ul style="list-style-type: none"> – Increased cultivated area – Number of tenants who are members of WUAs increased – At least 10% of WUA members are woman-headed households – Full payment of water rates – Clear roles, rights and responsibilities in land and water management for WUAs, the Gash Agricultural Scheme, MOIWR. – Improved carrying-capacity of range – Number of livestock owners enrolled in rural user associations – % of women members in rural user associations – Number of financially self-reliant rural user associations – Increase in area and yields of subsistence and cash crops – Increase in number and yield of livestock – Forested area and increase in revenue generated from tree products – No. of women and men participating in vocational training and receiving vouchers and off-farm credit are not tenants in Gash Scheme – Decreased reliance of non-tenant households on food aid. 	<p><i>The means of verification apply to all eight outputs:</i></p> <p>Project monitoring reports Tenant registry books Gash Agricultural Scheme records on wet and cultivated areas Records of local associations Records and AWP/Bs of implementing agencies (Ministry of Agriculture, Animal Wealth and Irrigation – MAAWI – finance institution, etc.) State records on community-based and resource-based users' associations FAO-World Food Programme Crop and Food Supply Assessment (for information on agricultural production)</p> <p>UNICEF updates of the Multiple Index Cluster Survey and community profiles undertaken in the context of the children friendly village initiative (for information on social development indicators)</p>	<p>Government, native administration, and farmers are enforcing implementation of the agreed upon institutional reforms</p> <p>Tribal leadership enforces the use of arbitration mechanisms to resolve conflicts over range Market incentives are in place to encourage livestock off-take</p> <p>Timely and full disbursement of extension budgets</p> <p>Targeting principles are enforced and monitored by tribal chiefs and community-based associations</p>

APPENDIX III

LOGICAL FRAMEWORK (CONT.)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Project Outputs (continued)</p> <p>5. Improved access of local communities to safe and reliable domestic water supply</p> <p>6. Improved outreach of rural financial services to small tenants, small herders, non-tenant households and women</p> <p>7. Vision for the development of the Gash Delta elaborated in a collective and collaborative manner</p> <p>8. Institutional arrangements appropriate to the realization of the shared vision are established and enforceable by law</p>	<ul style="list-style-type: none"> - 100% of households have access to safe and reliable domestic water supply - Potable water rates based on cost recovery of the operation and maintenance of each delivery system - Number of potable WUAs that are financially self-reliant and have good planning skills - % of women among association memberships - Value of loans disbursed to small tenants and non-tenant households - At least 30% of borrowers are women - Repayment rates range between 95 and 100% - As of year 1, there is a charter signed by concerned parties making the vision for the development of the Gash resources explicit - Annual monitoring system in place to assess compliance with charter and emerging issues - Legal committee for land tenure reform established and operational - Legislation on community-based and resource-based users' organizations approved - State government line ministries and agencies preparing quantified and realistic AWP/Bs consistent with vision - Increase in number of women extension agents and social mobilizers recruited-working in MAAWI and in administrative units - Environmental management plan in place 		<p>State drinking water corporation, localities and native administration enforce agreements reached for community-managed water points</p> <p>Project financial institutions mainstream pro-poor, gender equitable lending and savings procedures and policies</p> <p>Ability of the project coordination unit to assist in the resolution of conflicting or divergent interests</p> <p>Procedures for the appeal and enforcement of the legislation are known to the concerned parties</p> <p>Line ministries, agencies and community organizations develop their capacity to mobilize needed resources</p> <p>Line ministries, agencies and community organizations invest in the recruitment of women staff</p> <p>Government enforces the application of the Environmental Policy Act, 2000</p>

APPENDIX III

LOGICAL FRAMEWORK (CONT.)

Activities	Inputs
<p>Component 1: Irrigation scheme rehabilitation (corresponds to Output 1, rehabilitated flood irrigation infrastructure co-managed by users and Gash Agricultural Scheme, and Output 3, improved crops, mesquite/forestry and livestock husbandry)</p> <p>Gash Delta</p> <ul style="list-style-type: none"> - New registry for tenants based on agreed selection criteria - Set up of a legally recognized arbitration system - Rehabilitation of six blocks over six years - Full scheme development with target of 120 000 fed cultivated per year, two-year rotation and a crop system based on food and cash crops - Land development in conjunction with pilot WUAs - Generalization of the adoption of the WUA model for water management and land development - Organization and implementation of a capacity-building programme for WUAs - Management of <i>balags</i> (wooded area at end of irrigation canals) and <i>hafirs</i> (excavated earth tanks) as an integral part of water management in the scheme - Road maintenance <p>River Training</p> <ul style="list-style-type: none"> - Upstream and downstream river training and flood mitigation measures (buffer zones) - Environmental management plan - Early warning system 	<p>Civil works: USD 10.8 million</p>
<p>Component 2: Animal production and rangeland management (corresponds to Output 2, rehabilitated and user-managed rangelands, and Output 3, improved crops, mesquite/forestry and livestock husbandry)</p> <p>Animal Health and Production</p> <ul style="list-style-type: none"> - Establishment of two veterinary centres, two mobile veterinary clinics - Establishment of a community-based network of men and women animal health agents, with clear institutional linkages to MAAWI and to user and community organizations - Operation of a veterinary-drugs revolving fund under the Animal Health Administration - The provision of woman-headed households with a nucleus herd of goats or cattle through an in-kind revolving fund - The provision of improved sires on credit to livestock owners for breed improvement - Extension services for dairy production and processing among women and men <p>Rangeland Management</p> <ul style="list-style-type: none"> - Range management study - Range monitoring system as part of the environmental management plan - Development of land-use plan for Gash Delta, Gash terminal fan and southern rural Kassala - Development of water conservation works to retain rainfall and enhance pasture regeneration on the eastern bank of the Gash - Establishment of community-managed livestock water points - Creation of a legally recognized arbitration system to solve conflicts over range use <p>Mesquite Control</p> <ul style="list-style-type: none"> - Development of a strategic plan for mesquite control and afforestation with alternative trees to provide a substitute source of livelihoods and to fix embankments - Identification of woodlots for women's groups - Establishment of central tree nurseries and women's group nurseries 	<p>Civil works: USD 2.2 million Vehicles: USD 0.2 million Equipment: USD 0.2 million Training and studies: USD 0.3 million Salaries: USD 0.1 million Allowances: USD 0.1 million Operation and maintenance: USD 0.1 million</p>

APPENDIX III

LOGICAL FRAMEWORK (CONT.)

Activities	Inputs
<p>Component 3. Community development, capacity-building and empowerment (corresponds to Output 4, improved access of non-tenant households to productive and social assets, and Output 5, improved access of local communities to safe and reliable domestic water supply)</p> <p>Women Empowerment</p> <ul style="list-style-type: none"> - Awareness-raising campaign on the importance of women's participation in economic and social life, with proactive support from local leadership - Training on functional literacy, hygiene, nutrition and health care, food preservation and processing, forestry and vegetable gardening, elementary group-management skills <p>Capacity-Building for Non-Tenant Households</p> <ul style="list-style-type: none"> - Organization of vocational training through apprenticeships, formal training - Facilitate access to microenterprises and small enterprises in livestock trading, marketing of scheme produce, food processing, petty trade - Support for the establishment of producer and marketing organizations for groups of microentrepreneurs <p>Potable Water Supply for Human and Livestock Consumption</p> <ul style="list-style-type: none"> - Engineering design for the existing piped system and wells - Social study of drinking water needs for humans and for the management of water points by communities - Rehabilitation of existing pipelines - Complete redesign of all water outlets - Support for community well and drainage construction in locations where the pipelines cannot reach - Establishment of water-management committees and provision of the appropriate technical support - Institutionalization of 30-50% women participation in these committees and selection among active women - Set up of a fee-collection system <p>Community-Development Initiatives</p> <ul style="list-style-type: none"> - Establishment of community-development committees with 30-50% women participation to manage development initiatives that are specifically relevant to building up the assets of the poor and non-tenant households - Disbursement of matching grants for improved social and economic services - Establishment of clear linkages among the committees, localities and concerned line agencies - Operation of a performance-based voucher system to reward high achievers participating in activities under women empowerment and capacity-building for non-tenant households 	<p>Civil works: USD 3 million Vehicles: USD 0.2 million Training and studies: USD 0.9 million Grant: USD 1.0 million Salaries: USD 0.1 million Allowances: USD 0.1 million Operation and maintenance: USD 0.2 million</p>

APPENDIX III

LOGICAL FRAMEWORK (CONT.)

Activities	Inputs
<p>Component 4. Financial services and marketing (corresponds to Output 6, improved outreach of rural financial services to small tenants, small herders, non-tenant households and women)</p> <ul style="list-style-type: none"> - Organization of a study on credit demand and supply and of another on marketing opportunities - Provision of incremental credit for farm and off-farm enterprises through a financial institution - Decide on the percentage of loan portfolios available to women based on the results of a credit study and render institutionalization of appropriate criteria for lending and repayment terms for the selection of the partner financial institution - Organization of outreach of financial services to women and men through a mobile bank - Capacity-building for the staff of finance institutions and community organizations on the management of financial services - The financing of a crop-produce processing facility to improve the marketing of main cash crops or livestock products in the area 	<p>Vehicles: USD 0.2 million Training and studies: USD 0.1 million Credit: USD 3.6 million</p>
<p>Component 5. Institutional support (corresponds to Output 7, vision for the development of the Gash Delta elaborated in a collective and collaborative manner, and Output 8, institutional arrangements appropriate to the realization of the shared vision are established and enforceable by law)</p> <ul style="list-style-type: none"> - Operation of the legal committee according to clear terms of reference and authority to reallocate land-tenancy rights - Drafting, negotiation and approval of legislation concerning community-based and resource-based users' associations - Provision of equipment and technical support to WUAs, the Gash Agricultural Scheme and MOIWR, MAAWI. - Organization of an adaptive research programme on the range of crops that can be economically exploited through the scheme - Dissemination of results through on-farm demonstration plots, etc. - Set up of the project coordination unit at the required level of competence - Recruitment of international state-planning advisor - Service contract with the central coordination unit of IFAD projects in Khartoum - Set up of a monitoring system that helps track physical progress and steer institutional reforms 	<p>Civil works: USD 5.4 million Vehicles: USD 2.0 million Equipment: USD 3.5 million Technical assistance: USD 1.1 million Training and studies: USD 1.1 million Salaries: USD 0.8 million Allowances: USD 0.7 million Operation and maintenance: USD 1.5 million</p>

APPENDIX IV

ORGANIGRAMME

