



**New Partnership for  
Africa's Development (NEPAD)  
Comprehensive Africa Agriculture  
Development Programme (CAADP)**



**Food and Agriculture Organization  
of the United Nations  
Investment Centre Division**

## **GOVERNMENT OF THE REPUBLIC OF THE SUDAN**

### **SUPPORT TO NEPAD–CAADP IMPLEMENTATION**

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**Volume I of V**

**NATIONAL MEDIUM TERM INVESTMENT PROGRAMME  
(NMTIP)**

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**SUDAN: Support to NEPAD–CAADP Implementation**

**Volume I: National Medium–Term Investment Programme (NMTIP)**

*Bankable Investment Project Profiles (BIPPs)*

**Volume II: Smallholder Water–Harvesting & Productivity Enhancement**

**Volume III: Integrated Traditional Farming & Pastoralism**

**Volume IV: Agricultural Marketing & Rural Infrastructure Development**

**Volume V: Institutional Capacity Building**



## SUDAN:

### NEPAD–CAADP National Medium–Term Investment Programme (NMTIP)

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### Abbreviations

ABS	Agricultural Bank of Sudan
ADB	African Development Bank
ARC	Agricultural Research Corporation
ARRC	Animal Resources Research Corporation
BIPPs	Bankable Investment Project Profiles
CAADP	Comprehensive Africa Agricultural Development Programme
CBPP	contagious bovine pleuropneumonia
CBO	Community–based Organization
CCG	[JAM] Core Coordinating Group
CCPP	contagious caprine pleuropneumonia
CSP	Country Strategy Paper [EU]
DDR	Disarmament, Demobilisation and Reintegration
EC	European Commission
EDF	European Development Fund
EU	European Union
ECHO	European Union Humanitarian Aid Office
FAO	Food and Agriculture Organization of the United Nations
FMO	Framework of Mutual Obligations
GDP	Gross Domestic Product
GoS	Government of Sudan
HDI	Human Development Index
HIPC	Heavily Indebted Poor Countries [Debt Forgiveness Initiative]
I–PRSP	Interim–Poverty Reduction Strategy Paper
IDPs	Internally displaced persons
IsDB	Islamic Development Bank
IFAD	International Fund for Agricultural Development
IGAD	Intergovernmental Authority on Development
IMF	International Monetary Fund
IPF	IGAD Partners Forum
IPM	Integrated Pest Management
JAM	Joint Assessment Mission
MoARF	Ministry of Animal Resources and Fisheries
MDGs	Millennium Development Goals
MoIWR	[Federal] Ministry of Irrigation and Water Resources
MoAF	[Federal] Ministry of Agriculture and Forestry
MoARF	[Federal] Ministry of Animal Resources and Fisheries
NEPAD	New Partnership for Africa’s Development
NGO	Non–governmental Organization
NIP	National Indicative Programme [EU]
NKRDP	Northern Kordofan Rural Development Project
NMTIP	National Medium–Term Investment Programme
NSAs	Non–State–Actors
OLS	Operation Lifeline Sudan
OPEC	Organization of Petroleum Exporting Countries
PACE	Pan African Programme for the Control of Epizootics
SIFISIS	Sudan Institutional Capacity Support Programme for an Integrated Food Security, Vulnerability and Market Information System
SKRDP	Southern Kordofan Rural Development Programme

SPCCBRRP	Sudan Post–Conflict Community–Based Recovery and Rehabilitation Programme
SPCRP	Sudan Productive Capacity Recovery Programme
SPFS	Special Programme for Food Security
SPLM/A	Sudan People’s Liberation Movement Army
STABEX	Stabilization of Exports
STYCNS	Sudan Ten–Year Comprehensive National Strategy [1992–2002]
SWC	State Water Corporation
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees
WB	World Bank
WFP	World Food Programme
WSRMP	Western Sudan Resource Management Project

### *Preface*

*In an effort to halt and reverse the decline of the agricultural sector in the continent, the African ministers for agriculture unanimously adopted, at the 22<sup>nd</sup> FAO Regional Conference for Africa, held on 8 February 2002 in Cairo, a resolution laying down key steps to be taken in relation to agriculture in the framework of the **New Partnership for Africa’s Development (NEPAD)**. As a follow–up to this resolution, they endorsed, on 9 June, 2002, the **NEPAD Comprehensive Africa Agriculture Development Programme (CAADP)**. The recent **Declaration on Agriculture and Food Security in Africa**, ratified by the African Union Assembly of Heads of State and Government during its Second Ordinary Session, held in Maputo between 10 and 11 July 2003, provided strong political support to the CAADP. During this session, the Heads of State and Government agreed to adopt sound policies for agricultural and rural development, and committed themselves to allocating at least 10 percent of national budgetary resources for their implementation within five years.*

*The CAADP provides an integrated framework of development priorities aimed at restoring agricultural growth, rural development and food security in the African region. In its very essence, it seeks to implement the key recommendations on food security, poverty reduction and sustainable use of natural resources, made at recent global conferences. The CAADP comprises **five pillars**:<sup>1</sup>*

- 1. Expansion of the area under sustainable land management and reliable water control systems.*
- 2. Improvement of rural infrastructure and trade–related capacities for improved market access.*
- 3. Enhancement of food supply and reduction of hunger.*
- 4. Development of agricultural research, technological dissemination and adoption to sustain long–term productivity growth.*
- 5. Sustainable development of livestock, fisheries and forestry resources.*

*As an immediate follow–up to the Maputo Declaration, representatives of 18 African ministries for agriculture from member countries of the NEPAD Implementation Committee, the NEPAD Steering Committee, the African Development Bank, the World Bank, the International Fund for Agricultural Development, the World Food Programme, FAO and civil society, participated in a meeting held in Rome on 17 September 2003, in order to discuss the implementation of the CAADP, and more specifically the:*

- Methodology for the review/update of the **national long–term food security and agricultural development strategies**.*
- Preparation of **National Medium–Term Investment Programmes (NMTIPs)**.*
- Formulation of the related “**Bankable Investment Project Profiles**”(BIPPs).*

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<sup>1</sup> Pillar 5 was initially not part of CAADP, but has been added in recognition of the importance of the sub–sectors.

*It is within this context that the Government of the Sudan, in an effort to reinforce its interventions aimed at fighting poverty and food insecurity, has requested FAO to assist in preparing a NMTIP and a portfolio of BIPPs, with the aim to:*

- *create an environment favourable to improved competitiveness of the agricultural and rural sector;*
- *achieve quantitative objectives and mobilize resources to the extent needed for the associated investment in agriculture;*
- *achieve the targeted allocation of national budgetary resources to this area, reflecting the commitment made in the Maputo Declaration; and*
- *create a framework for coordinated bilateral and multilateral financing of the sector.*

*The present NMTIP, which draws on work of the recent “Sudan Ten Years Comprehensive National Strategy”(1992– 2002) and the Vision of the “25–Year Strategic Quarter Centennial Plan” (2003–2007) and is intended to contribute to the Interim Poverty Reduction Strategy Programme (I-PRSP) 2004–2006. It was prepared by the Lead National Consultant,<sup>2</sup> under the overall supervision of the National Project Coordinator/NEPAD focal point in the Federal Ministry of Agriculture and Forestry<sup>3</sup> and in close collaboration with the NMTIP Core Team from the Ministry. The team was assisted by experts from the FAO Investment Centre Division<sup>4</sup> while the Office of the FAO Representative provided crucial administrative support. In the process of preparing this document, participation was sought from major stakeholders from government, development partners, farmer’s organisations, private sector and civil society. Key to the finalization of the NMTIP was the **National Stakeholder Workshop** held on 18 October 2004, during which a draft of this document was discussed and validated, and project ideas for the BIPPs prioritized, based on agreed–upon selection criteria. **Four** of these were further developed into BIPPs, which are presented in a separate document.<sup>5</sup> Lastly, the NMTIP and the BIPPs were reviewed by an FAO Virtual Task Force of technical experts.*

*This document starts with a brief description of Sudan’s agricultural sector in the context of the country’s economy and poverty and food security situation. This is followed by a review of national and development partner strategies and programmes, lessons learned, and an analysis of the principal constraints to, as well as opportunities for, the development of the sector. Based on this analysis and taking into account existing government strategies and the five pillars of CAADP, priority areas for investment have been identified. Finally, an attempt has been made to estimate the financing gap in terms of additional resources that would be required to meet the target of allocating 10 percent of national budget to the sector within five years, and a proposal put forward for monitoring and evaluation of the NMTIP implementation.*

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<sup>2</sup> Dr Salih, Agriculturist.

<sup>3</sup> Mr Mohamed Hassan Gubara, Director–General, Department of International Cooperation and Investment.

<sup>4</sup> Mr Charles Bevan, Senior Agriculturist, TCIP, and Dr Albert Lieberg, Consultant.

<sup>5</sup> For the purposes of the present exercise, “Bankable Investment Project Profiles” are defined as documents elaborated in a format and with the information that could make them favourably considered by the financial institutions, donors and private investors foreseen in the Maputo Declaration. These documents should enable cooperating partners to make preliminary indications of interest, and of approximate level of funding commitment. Further feasibility analysis and subsequent processing through the concerned partner(s) regular project formulation systems would follow to obtain a project/programme proposal elaborated to the feasibility study level.

## I. INTRODUCTION<sup>6</sup>

### A. Historical Context

I.1. Since Sudan's independence in 1956, the country has been severely affected by continuous conflicts between the North and the South, with a period of peace only from 1972 to 1983. The last 20 years of civil war have left little physical and institutional infrastructure intact. It has also caused the loss of some two million lives, the displacement of an estimated 4.5 million people, economic decline, and has severely hindered the Sudan's capacity to develop as a nation. Equitable power and wealth sharing between the North and the South is generally recognized as the fundamental cause of the war. Inter-tribal and land and natural resources related conflicts have exacerbated the problem.

I.2. **Peace process.** However, despite the difficult situation, recent political initiatives seem promising. Under the auspices of the *Intergovernmental Authority on Development* (IGAD), the Government of Sudan (GoS) and the *Sudan People's Liberation Movement/Army* (SPLM/A) signed the Machakos Protocol, in July 2002, thus paving the way for the peaceful settlement for the 20-year old civil war. The comprehensive peace agreement between the government and the SPLM/A is composed of two parts: (i) the peace agreement which includes six protocols namely: Machakos protocol, Security arrangement, Power sharing, Wealth sharing, Resolution of conflict (in the three areas of Southern Kordofan/Nuba Mountains, Blue Nile and Abyei), and the Memorandum of understanding for cessation of hostilities; (ii) the annexes which will contain the cease fire arrangements and the implementation modalities. In June 2004, the GoS and the SPLM signed the first part, i.e. the six peace protocols, thereby concluding the peace agreement. They have yet to agree on two other protocols, namely the ceasefire arrangements and the implementation modalities, which are currently being negotiated, in order to reach a comprehensive peace agreement. However, the two parties, GoS and SPLM, are now involved in developing a common strategy for poverty reduction, paving the way for a common development strategy during the interim period, and subsequently eligibility to HIPC (*Heavily Indebted Poor Countries Initiative*).

I.3. The framework for the peace protocols sets forth the principles of governance, the general procedures to be followed during the transitional process and the structures of government to be created under legal constitutional arrangements — yet to be established. It includes agreement on fundamental human rights, revision of the constitution to incorporate the peace agreement protocols, the strengthening of governance at Federal/Southern Sudan/State levels, the modalities for wealth sharing including the recognition of customary rights to land and the allocation of oil revenues. The comprehensive peace agreement would augur a six-year interim period, during which fair elections are planned within the first half of the interim period in both northern and southern Sudan, and a referendum on self-determination for the peoples of South Sudan at the end of the interim period.

I.4. **Post-conflict efforts.** The efforts exerted by the international community particularly the *IGAD Partners Forum* (IPF) composed of the US, Norway, UK and Italy, on both parties, as well as the '*people to people peace initiatives*' developing on the ground are maintaining the peace momentum. The international community is fully aware that following several years of war and destruction, the financial resource needs of post-conflict Sudan are substantial. Resources are needed to cover the cost of monitoring the peace agreement, resettlement of millions of internally displaced and refugees, demobilization, de-militarization and reintegration, de-mining, reconstruction and rehabilitation, debt relief and development.

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<sup>6</sup> See also Annex 1.

I.5. **Joint Assessment Mission (JAM).** Taking cognizance of these needs, the international community has initiated a *Joint Assessment Mission (JAM)* under the joint coordination of the United Nations (United Nations Development Programme, UNDP, on behalf of the UN) and the World Bank, with meaningful involvement of Sudanese counterparts. The JAM, draws upon the experience and expertise of bilateral donors and NGOs (international and local). Eight clusters were formed by both the government and SPLM with assistance from international experts covering: (i) Economic policy and management; (ii) Livelihood and social protection; (iii) Governance and rule of law; (iv) Institutional development and capacity building; (v) Productive sectors; (vi) Basic social services; (vii) Infrastructure; and (viii) Information.

## B. The Economy

I.6. Sudan is the largest and one of the most diversified countries in Africa. The country lies between longitudes 4° and 24° North and latitudes 22° and 38° East and is bisected by the Nile river and its tributaries. It is bound to the northeast by the Red Sea, which separates it from Saudi Arabia, and shares common borders with Egypt, Eritrea, Ethiopia, Kenya, Uganda, the Democratic Republic of Congo, the Central African Republic, Chad and Libya.

I.7. **Population.** The population of Sudan is estimated at some 34 million, growing at about 2.6 percent per year. This includes the population in the South of Sudan which, due to the lack of data, is roughly estimated at between 5 and 10 million. It also includes approximately 4 million internally displaced persons (IDPs) who have escaped from conflict areas over the past 20 years. Overall, the country is thinly populated (average of 13 persons per km<sup>2</sup>) with the main concentrations of people along the Nile River. Large movements of people have occurred in many regions due to civil strife, drought and environmental degradation.

I.8. Although endowed with rich natural resources, Sudan remains comparatively under–developed, primarily as a result of protracted civil strife and poor economic management. The UNDP's *Human Development Index (HDI)* 2002 ranks Sudan 61 out of the 77 developing countries measured, and the yearly per capita income is estimated at US\$390 per year.<sup>7</sup> Very little information is available on South Sudan — estimates indicate the per capita income roughly at US\$90, which would make this part of the country one of the poorest areas in the world. No formal information is available on South Sudan and the following economic data mostly relate to Northern Sudan.

I.9. **Reform programmes.** The economy showed a limited response to reform packages during 1980s and early 1990s. Budget deficits have been common and the average annual rate of inflation peaked at 70 percent for the period 1991 to 1995 (but gradually subsided to 4.9 percent in 2001 and then climbed again to 8 percent in 2002). Interest rates have remained negative during the period and resulted in the collapse of saving, adversely affected the banking system and has eroded public confidence. In 1997, the government engaged into an IMF–monitored economic reform programme. During the period 1997 to 2000, the reform programme yielded some gains in macro–economic stabilisation and structural reforms. Performance in terms of growth, inflation, and external current account balance reflected a prudent fiscal and monetary stance in an attempt to create a favourable environment for investors and producers. Economic growth and the pace of reform, however, slowed down in 2001 due to a combination of severe external shocks (particularly sharp decrease in oil prices and a ban by Gulf countries on livestock imports) and more expansionary economic policies.

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<sup>7</sup> An estimate for 2002. World Bank. *Sudan at a Glance*. September 2003.

I.10. **Gross Domestic Product (GDP).** The annual growth rate of GDP was estimated at 8 percent over the period 1990 to 1998, and was around 8.5 percent for 2002.<sup>8</sup> This figure is substantially higher than population growth. However, it seems somehow optimistic in the light of the overall economic situation and of the reality of daily life in a country known for the low level of household consumption. It may also indicate that a large part of the national income is absorbed by general government consumption, including security and debt repayment. Capital intensive investments in the oil industry, with little effect on employment and inequitable redistribution of growth, seem also to contribute to the emerging paradox of growth with poverty. Most social indicators as well as consumption indicators have been deteriorating during the same period, meanwhile the food production index increased from 100 for the period 1990/91 to 156 in 1998.<sup>9</sup>

I.11. While agriculture is the largest sector contributing to GDP, its share in GDP declined to 32 percent in 2003 (GoS estimate). This is mainly due to the difficulties encountered in reforming the sector and to the growth in other sectors. The emerging oil sector has increased the contribution of manufacturing and mining to over 7 percent in 2002, compared to about 2 percent in 1996. The oil sector has also influenced economic services sectors namely, transportation, power, and manufacturing whose combined share in GDP increased from 20 percent in 1996 to 25 percent in 2002.

I.12. The oil policy encourages foreign partners to invest in infrastructure and exploration projects in order to secure the future of the oil sector. The output of the emerging oil sector rose from an average of 185,000 barrels per day in 1999 to 250,000 barrels per day in 2002, when oil exports contributed about 40 percent of public revenues. While oil revenues have had a marked effect on the balance of trade, its effect on the balance of payment is much less important as much of these revenues are absorbed to repay the investments made by oil companies and its contribution to the labour market is minimal. With declining prices in 2001, the net income from oil activities dropped to almost insignificant levels (US\$5 million) but recovered in 2002 (US\$84 million) and has increased exponentially since 2003.

I.13. **Export and debt.** Export performance in general remains extremely poor, while there has been an increased demand for imports. This situation led to the current account deficit, averaging around 30 percent of GDP in recent years. Furthermore, colossal arrears on external debt continue to burden the economy and deny Sudan's access to international financial resources. According to the World Bank, the total external debt stood at US\$21 billion in 2003, 86 percent of which is in arrears. In order to meet its international obligations Sudan requires debt rescheduling and relief measures, but whether the HIPC initiative of the World Bank and the IMF for debt forgiveness will be extended to the country remains to be seen.

I.14. **Public investment.** Funding for public investments in infrastructure and the delivery of basic services for agricultural development has remained minimal. Total annual development expenditures averaged only 2.3 percent of GDP during 1998–2001. Expenditures in the development budget for agriculture, transport services and water averaged 0.63 percent of GDP during the period 1998–2002.<sup>10</sup>

I.15. **Poverty.** In absolute numbers, between 25 and 27 million people are living on less than one US\$ per day in Sudan.<sup>11</sup> Under the most favourable conditions, poverty levels still range between 50 and 70 percent of the population. As indicated above, the UNDP's HDI ranks Sudan in 61<sup>st</sup> place among 77 developing countries, alongside Uganda, Haiti and Mauritania. Some 30 percent of the

<sup>8</sup> World Bank. *Sudan: Country Economic Memorandum – Stabilisation and Reconstruction*. 2003.

<sup>9</sup> IFAD. Republic of Sudan. Savannah Sahel Resource Management Programme – Inception Report. 2003.

<sup>10</sup> Government of The Sudan.

<sup>11</sup> IFAD. *Republic of The Sudan – Country Strategic Opportunities Paper*. 2002.

population do not have access to health services, almost half do not have access to sanitation, and about 50 percent are illiterate, with only 50 percent enrolment rates in primary schools followed by high dropout rates. Other indicators listed in the GoS' draft *Poverty Reduction Strategy Paper* include: the spread of malaria (40 percent of total reported illnesses); respiratory diseases in 28 percent of the population; and a wide prevalence of diarrhoea, malnutrition and anaemia, particularly among children. Life expectancy at birth is estimated to be 54 years for males (infant mortality rate: 13 percent) and 57 years for females (infant mortality rate: 11 percent). Government spending on health and education is estimated at 0.7 percent and 1.8 percent of GDP, respectively. Key constraints to poverty–reducing actions in the rural sector seem to be: weak political commitment to decentralisation; unclear division and lines of responsibility between Federal and State governments; and inadequate financial and implementation capacity at State and local levels.

### C. The Agricultural and Rural Sector

I.16. As a result of the North–South civil war, the country is effectively divided into two sectors respectively controlled by the Government of Sudan and by the SPLM. Out of the total 2.4 million km<sup>2</sup> the SPLM–controlled South Sudan covers an area of about 640,000 km<sup>2</sup>. This includes stretches of tropical and equatorial forests, wetlands, savannah and mountains. The remaining consists of: (i) the northern part of the country under GoS control; (ii) the “enclaves” (including the garrison towns) in South Sudan under government control (until the signature of the peace accord); and (iii) the disputed areas in Abyei, Nuba mountains and Southern Blue Nile. Of the total land area, 7 percent is agricultural, 42 percent range land and grazing, 33 percent desert and 18 percent are forests, mostly in the South.

I.17. Even with the advent of oil, agriculture remains a key engine of economic growth and provides the most important livelihoods and poverty alleviation opportunities for about 70 percent of the population, and was the main source of exports until the start of oil production in 1999.

I.18. **GDP and exports.** The share of agriculture in total GDP was estimated at 37 percent in the early 1980s.<sup>12</sup> As agriculture declined between the mid–1980s and the early 1990s, its share of total GDP fell to 28 percent, but recovered again to over 30 percent in 2002/03. The sector grew at an average rate of over 10 percent per annum between 1991 and 1999. It is noteworthy that the growth rate of traditional rainfed agriculture was the highest (25 percent p.a.) during the aforementioned period. Rapid expansion of harvested areas accelerated the growth of this sub–sector, especially for sesame and groundnuts. Cultivation of non–traditional crops, such as melon seeds and karkade, became important in the traditional rainfed agriculture. The agricultural growth rate achieved during the 1990s reflected a rebound from decline in the 1980s that was mainly due to serious droughts and the Government's intervention policies, which reduced incentives for farmers to increase production. The rebound was not the result of a major technological transformation of the sector, rather than a return to earlier levels of output. Agricultural exports also increased during the 1990s, with strong growth of products such as livestock, karkade, oilseed and sesame. In 2003, agriculture contributes about, and 20 percent to exports. The latter declining from 80 percent in 1999.

I.19. **Resource base.** Sudan's substantial agricultural resource base covers several *agro–ecological zones* that encompass forests, swampland, arable cropland, and grazing land for livestock, as well as fisheries in the Nile Basin and the Red Sea. The area currently cropped is estimated at 17 million hectares, about 20 percent of land area. Main crops are sorghum, wheat and cotton. The relatively light infertile soils and the limited availability of water are, however, serious constraints to

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<sup>12</sup> World Bank, *cit.*

agricultural production in most areas. Rainfall varies from near zero in the extreme north–west to a high of 1 600 mm per year in the temperate and rich forest zones in southern Sudan. About half of Sudan is susceptible to periodic severe droughts that are known to often span over two years. Even with average rainfall, large areas are ecologically sensitive and require careful management in order to achieve sustained production. The three major *farming systems* are: (i) irrigated agriculture; (ii) rainfed semi–mechanized; and (iii) rainfed traditional agriculture. They generate respectively 29 percent, 9 percent and 61 percent of agricultural production; fisheries account for another 1.4 percent. Pastoralism is usually integrated with traditional rainfed agriculture, but cattle and sheep are also an important source of income for farmers in irrigated areas. Within the sector, crop production accounts for 53 percent of agricultural output, livestock for 38 percent and forestry and fisheries for 9 percent. About 60 percent of all crop production is irrigated.

I.20. ***Irrigated agriculture*** is practiced in the Nile basin, occupying an estimated 2 million ha or 12 percent of the total cropped area (less than 1 percent of total area of the country). Four major Government–owned schemes (Gezira, Rahad, Suki and New Halfa) alone have a total command area of over 3 million feddan (1.3 million ha).<sup>13</sup> Irrigated agriculture supplies the bulk of the main food and export crops, namely wheat, sugar and pulse crops, nearly all cotton, about 80 percent of fruits and vegetables, and over 50 percent of groundnuts are produced on irrigated land on the Nile basin. Cotton used to be the most important export crop, but by the mid 1990s was replaced by sesame as the most important agricultural commodity for export markets.

I.21. ***Semi–mechanised rainfed farming*** covers approximately 14 million feddans (6 million ha), concentrated in eastern states (El Gedaref, Blue Nile, Upper Nile, White Nile, Sinnar and Southern Kordofan). Farms are typically 1,000 feddans or larger, and the land is leased by agribusiness companies from the government. Sorghum and sesame are the two major crops. ***Traditional rainfed farming*** includes nomadic, transhumance and sedentary agriculture. Cropped land under this farming system is estimated at 9 million ha and divided into three agro–ecological zones: central rainlands, flood plains and equatorial zones.

I.22. ***Livestock*** production constitutes an increasingly important sub–sector, accounting for 47 percent of the total value of agricultural production between 1991–1999. The bulk of livestock production is for commercial sale to the Gulf states. Livestock also plays an important role in the livelihoods of rainfed traditional systems, even for sedentary agriculture, and serves as essential capital assets for smallholders.

I.23. ***Fish*** production is predominantly artisanal and mostly intended to meet subsistence needs. In 2001, total fish catch accounted for 58,000 tons, the bulk of which came from inland sources, including the Blue and White Nile rivers, swamps and lakes in the South. According to government estimates, the yearly fisheries catch potential is around 150,000 tons for inland catch and another 10,000 tons for the Red Sea.

I.24. ***Forest*** land covers 18 percent of the total area of the country. In the north, forests and woodlands are mainly tall shrubs, whereas in the south exist tropical forests. Important forestry products include timber, charcoal, and gum arabic.

I.25. ***Institutions***. While the state governments have responsibility for agricultural development, the federal government is in charge of large scale federally owned irrigation projects, and for water policies. Key research institutions are the *Agricultural Research Corporation* (ARC) for crops, pastures and forestry, and the *Animal Resources Research Corporation* (ARRC) for livestock. The

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<sup>13</sup> One feddan is 0.42 ha.

Department of Extension of the Federal Ministry of Agriculture and Forestry has been transformed into a *Technology Transfer and Extension administration* with a view to improving extension services. A plan is underway to establish parallel administrations at state level within the state ministry in charge of agriculture. The private sector plays the key role in marketing of most agricultural commodities, including livestock. An important exception being gum arabic, the export of which is under state control. The main sources of formal agricultural credit are the state–owned *Agricultural Bank of Sudan* and commercial banks. Almost all the formal credit is extended to irrigated agriculture, semi–mechanised farmers, and large–scale livestock producers, leaving very little for traditional small–scale farmers. Traders are the most important source of informal credit.

#### D. The Strategic Framework

##### (i) Context

I.26. Development policies in the past were concentrated on irrigated agriculture, which was supplied with most of the services such as irrigation water supplies, research, extension, credit, and other infrastructure (rail and roads). Traditional agriculture was neglected, receiving no research services and limited extension, credit, infrastructure, basic social services in the form of education, primary health care, and safe water supply. This situation was aggravated by marketing monopolies and absence of any land reform. Previous efforts to improve traditional agriculture through rural development projects have failed to realize the production potential. These projects which were mostly funded by foreign donors proved to be unsustainable and have collapsed after withdrawal of foreign funding. The initial design of these programmes was based on top–down arrangements, neglecting empowerment of rural population, and were not carried out within a holistic approach to rural development.

I.27. Negligence of traditional agriculture has caused massive migration from rural areas to urban centres, especially to Khartoum. The collapse of irrigated agriculture and deterioration in semi–mechanized agriculture, which used to provide employment for about over a million labourers in traditional agriculture, has negatively affected rural population. Most of rural migrants are ill–suited for urban life and lack skills for urban employment. This process was further compounded by the civil war. The conflict has claimed substantial resources, which could have been utilized in the development of agriculture and other social services. It has also limited the access to land and assets leading to loss of production and income. In addition, the prevalence of drought cycles in the absence of coherent food security intervention has resulted in the exhaustion of traditional farming coping mechanisms and consequently massive migration and widespread poverty.

I.28. It seems to be evident that without a reorientation of agricultural development strategies, the root causes of poverty will continue to prevail.

I.29. **Budget allocations.** According to the PRSP, total public expenditures (2004) constitute about 16 percent of GDP, of which agriculture receives only 0.9 percent, i.e. about 5 percent of total expenditures. Within the 0.9 percent of GDP allocated to agriculture, the irrigated sector is allocated around 0.6 percent of GDP, i.e. 65 percent of total allocations to agriculture, traditional and livestock sub–sectors are allocated 0.25 percent of GDP, i.e. about 25 percent of total allocation to agriculture, while research receives about 0.05 percent of GDP or 10 percent of total allocations to agriculture.

**(ii) Government Objectives and Strategy**

I.30. Serious efforts are now being undertaken to address poverty in the country in a comprehensive manner. The government has launched an *Interim Poverty Reduction Strategy Paper* (I–PRSP) 2004–2006, as commitment to seriously address the poverty problem of the country in a sustained manner. A *National Council for Poverty Alleviation* was established within the Ministry of Finance and National Economy to finalize the PRSP. The Council of Ministers recognized the importance of poverty reduction, and decided that the poverty reduction strategy should be consistent with ‘lessons learned’ from the *Sudan Ten–Year Comprehensive National Strategy* (STYCNS) for 1992–2002, and the strategic vision of the current *25–year Strategic Quarter Centennial Plan* for 2003–2027.

I.31. In the STYCNS, the GoS identified agriculture as the centrepiece of its economic plans, with food security, and exports derived from the expansion of cropped area and intensification of production from irrigated and rainfed farming, increasing three–fold and ten–fold respectively. Other priorities included private investment and support to small producers. With hindsight it became evident that these targets were far too ambitious.

I.32. The overall theme for agriculture development is presently contained in the vision for the *25–year Strategic Quarter Centennial Plan*, prepared by the government to achieve faster rural development. The phased (5–year plans, currently 2003–2007) and rolling strategic sub–sector development plan makes a commitment “to stir and trigger rural development so as to give rise to rural communities in which all services are provided: fresh water, technical education, health care, electricity, fossil fuel and renewable sources of energy and other development projects with fair and just distribution between all regions, cultures and ethnic groups.” The Plan addresses five constraints facing the sector in the medium term, namely: (a) low and declining productivity; (b) recurrent drought; (c) inadequate infrastructure; (d) trade constraints; (e) weak institutional capacity; and (f) low private investment. It also suggests that the main policy for resolving these constraints should be through a broad framework for growth in the agricultural sector based on the following actions: (i) a new land law that provides for, among other things, long term leases with land use conditions, tradability of leases, and a reduction in the number of large farms in the semi–mechanized areas; (ii) more relevant and effective agricultural research and extension; (iii) improved financial services in rural areas; (iv) programmes to improve marketing of agricultural and livestock products such as wheat, oilseeds and milk; (v) maintenance of a strategic reserve to enhance national food security; (vi) investments to improve domestic water supplies in rural areas; (vii) programmes to improve the welfare of families in the traditional rainfed farming areas; (viii) efficient use of water for irrigation; and (ix) combating desertification by rehabilitating vegetation cover through upgrading of pastures, rehabilitation of forests, reforestation, and the promotion of agro–forestry.

I.33. Taking into consideration both the lessons learned from the STYCNS and the strategic outline of the 25–Year Plan, the I–PRSP was drafted in early 2004. The main elements of this medium–term *Poverty Reduction Strategy* (2004–2006) in the agricultural sector are:

- Intervention in traditional agriculture, which will be the focal sub–sector, to be based on a comprehensive integrated package of rural development programmes. The main elements of the strategy will be: (i) Land tenure reform; (ii) a package of research and extension; (iii) access to rural credit; (iv) provision of basic social services including basic education, primary health care, water and sanitation; (v) improvement of access to markets through investment in basic infrastructure particularly feeder roads, and abolishing marketing monopolies.

- Extensive institutional and management reforms to be undertaken in large irrigated schemes as a major shift away from the existing policy of financially subsidizing these schemes through budgetary resources. These reforms are intended not only to revitalize productivity and enhance farmers' income in the irrigated schemes, but also to release funds needed for the rural programmes in traditional agriculture.
- Land tenure reform and appropriate policies for sustained natural resource management will be the main elements of the strategy for the semi–mechanized agriculture.

I.34. The Council of Ministers adopted the following principles and directives for the PRS:

- Peace and reconciliation are preconditions;
- Macroeconomic policies should include incentives for private investment;
- Agricultural development and Food Security will be given priority;
- Employment opportunities will be created in the agricultural and service sectors;
- Natural resources will be utilized rationally.

*(iii) Major Partners' Strategies*

I.35. The Paris Club of donors has been and continues to be constrained in the provision of development assistance to Sudan by the massive debt arrears, and sanctions imposed by the United States of America and the European Union. As far as debt is concerned, it is generally considered that even allowing for revenues from foreseeable petroleum exports, Sudan will not be able to service all its liabilities and that some form of debt relief (HIPC) will be required. This in turn however calls *inter alia* for agreement on the I–PRSP, transparent public financial management systems, and appropriate public expenditure programmes. There is reason to believe that sanctions will be lifted as and when a sustainable peace treaty is signed. Recent US legislation gives the President more flexibility than heretofore in deciding whether to reimpose annually trade sanctions, and the EU has pursued a policy of critical dialogue since the late 1990s that has led to substantial improvement in bilateral relations. So much that in early 2000, the EU indicated that it was ready to restore financial support with an aid programme worth some €500m. However, this was subsequently delayed by continuing concerns about whether or not Sudan meets the good governance criteria set out in the Cotonou agreement.

I.36. **European Union (EU).** In the 14 years since 1990, when the European Commission's (EC) formal cooperation could no longer be implemented due to human rights abuses and civil conflict, EU assistance to Sudan has taken the form of humanitarian aid. The *European Union Humanitarian Aid Office* (ECHO) has spent over €200m since 1994 and the *EuronAid* programme has distributed €190m in food aid. In addition, various EC budget lines have continued to fund projects in food security, NGO co–funding and human rights (valued at some €45m between 1999 and 2004). From 2000, the EC's approach has become more comprehensive, combining short and medium–term support in the *Humanitarian Plus Programme* (€18m). The key activities under *Humanitarian Plus* interventions are: (i) development planning and long–term structural development assistance; and (ii) building a capacity to switch from short–term humanitarian aid projects to longer term development programmes. By 2003, EC had funded 10 projects implemented by NGOs in the Northern Sector of Sudan under the Programme, including agricultural diversification, animal health care, grain banks, borehole and hand pump interventions in Kassala, Upper Nile, Northern Darfur and Western Kordofan States and the Nuba Mountains. Two other humanitarian plus–type projects, which are funded under Food

Security/Humanitarian budget lines, are pastoral and integrated agricultural development interventions in Red Sea and Western Kordofan States.

I.37. During 2002, the EC, in consultation with GoS, SPLM and Sudanese non–state actors (NSAs), prepared a *Country Strategy Paper (CSP)/National Indicative Programme (NIP) 2002–2007* for the whole of Sudan. The CSP was approved by the EC/EDF Committee in October 2002 and it is now ready for signature once a definite peace agreement has been reached. The CSP earmarks €404m for the whole country — this includes €190m from STABEX resources that covers the €80m allocation for SPCR (see below). The choice of focal sectors for the Country Strategy has taken into account firstly, dialogue with GoS, SPLM and NSAs; secondly, the experience of ECHO in humanitarian affairs; and finally, the following criteria: the sector's potential for contribution to peace building and conflict resolution; its poverty relevance; actual progress and potential for progress in the reform process (openness for reforms); relevance of the sector/area to EU's development policy objectives; actual experience and potential comparative advantage of the EC in Sudan; potential for balanced support to the Northern and Southern Sectors. Based on these criteria, the EC selected two focal sectors: food security and education, while peace building, good governance and capacity building for NSAs will also be addressed.

I.38. ***International Fund for Agricultural Development (IFAD)***. IFAD operations in Sudan have supported GoS strategies for the development of the agricultural sector throughout the period of North–South conflict, with 13 projects implemented, covering almost all regions of the country. During the 1980s, IFAD assisted in the rehabilitation of the irrigation sector in Northern State and new Halfa and continued to support government initiatives for the privatisation of: (i) irrigation pump schemes in White Nile State; and (ii) rural infrastructure along the main stocking routes in Western Sudan (including community–based water yards in Western Kordofan State). In the mid–1980s, with assistance from the World Bank, GoS outlined a strategy for the development of the rainfed sector. Hence, by the early 1990s, IFAD had provided funding for four projects in the rainfed traditional farming systems, including the *En Nahud Cooperative Credit Project* in Western Kordofan State. In 1999, IFAD started the *Northern Kordofan Rural Development Project (NKRDP)* followed in 2000 by the *Southern Kordofan Rural Development Programme (SKRDP)*. Both, NKRDP and SKRDP, which are complementary in many aspects, support the decentralisation policy at the local level and aim to assure the food security of target communities and enhance the resilience of the way of life in the face of natural disaster (drought in Northern Kordofan) or man–made disaster (conflict in Southern Kordofan).

I.39. ***Food and Agriculture Organization of the United Nations (FAO)***. In 2000, FAO assumed coordination of the OLS<sup>14</sup> *Household Security Programme* from UNICEF in both the Northern and Southern sectors and has rapidly developed a portfolio of emergency projects supported by various donors. The signing of a cease–fire agreement between GoS and SPLM/A in 2001 (and its renewal in 2002) allowed better coordination between UN agencies and NGOs to support the populations of conflict affected areas of the Transition Zone with humanitarian assistance and production inputs in the crops, livestock and fisheries subsectors.

I.40. Now, with continued peace, there is still a need for emergency inputs but there are areas that are more stable, offering the opportunity for assistance geared towards the recovery of the agriculture sector and longer term development. In this respect, FAO's Emergency Unit, in collaboration with

<sup>14</sup> *Operation Lifeline Sudan (OLS)* was established in April 1989. It is a consortium of two UN agencies — UNICEF and the World Food Programme — as well as more than 35 NGOs. Operating in southern Sudan after devastating famine — a result of drought and civil war — OLS negotiated with GoS and the SPLM/A to deliver humanitarian assistance to all civilians in need, regardless of their location.

State ministries and local and international NGOs (including PACE and FAO's *Global Rinderpest Eradication Programme*) has assisted with the establishment of private pharmacies and mobile veterinary units in Upper Nile, Southern and Western Kordofan, Unity, Western Bahr al Ghazal and Bahr al Jebel States, and trained some 300 supervisors and supplied drugs and vaccines, and cost recovery arrangements in support of these veterinary services are being successfully introduced. The FAO has also assisted State ministries to conduct a series of interventions and training programmes to build up the capacity of smallholder farmers and local tradesmen in the Nuba Mountains and Western Bahr al Ghazal and Bahr al Jebel States, and has undertaken training programmes in fishing canoe construction, net making and fish processing for prospective fisheries associations in Upper Nile, Western Bahr al Ghazal and Bahr al Jebel States.

I.41. Besides these emergency operations, FAO has since 2001 successfully initiated the *Special Programme for Food Security* (SPFS). An FAO *Technical Cooperation Project*<sup>15</sup> under the framework of the SPFS became operational in March 2001, and closed in May 2003. With a total cost of US\$336,000 this project was designed to demonstrate improved water management and crop production practices in four sites in the north of the country. (For more details on ongoing and pipeline SPFS, see I.51 below.)

I.42. The FAO Investment Centre also undertook in late 2001 the preparation of *The Rahad Irrigation Rehabilitation and Modernization Programme: Pilot Project*<sup>16</sup> on behalf of the *Islamic Development Bank* (IsDB). This project had a total cost of US\$9.5m and would have resulted in rehabilitation of some 25 percent of the total command area. A final decision by the IsDB on whether to go ahead with the project is still pending. It is reported that the GoS now wants to add two additional areas to the one originally selected. Once proposals for the two new areas are received from the GoS the IsDB plans a preparation mission to cover all three areas.

I.43. **The World Bank (WB).** On account of the debt arrears, the World Bank has not been active in Sudan for many years. Until activities ceased it had supported a great number of irrigation investments ranging from pump scheme rehabilitation, and the construction of large storage structures and flood irrigation reticulation systems, such as the Rahad scheme. These large, publicly–owned and capital–intensive schemes have not proved to be financially sustainable, however, requiring huge budget subsidies and government secured credit. The World Bank has indicated that its priorities in future are likely to focus on traditional rainfed areas rather than semi or mechanised farming and reform of the management systems of publicly–owned irrigation schemes.

I.44. **JAM – UNDP/WB.** In anticipation of the conclusion of the comprehensive peace accord, the UN and the World Bank are currently assisting the GoS and SPLM in carrying out a *Joint Assessment Mission* (JAM, see also I.5 above), which will provide an assessment of rehabilitation and transitional recovery needs. It will outline a framework for reconstruction and recovery over the full Interim Period based on progressing toward the Millennium Development Goals (MDGs). Through a joint process with Sudanese counterparts and donors, JAM will contribute to capacity building, build bridges with the donor community, and lay the foundations for long–term poverty reduction. The JAM will integrate sectoral work with cross–cutting issues, including absorptive capacity and capacity building, security and human rights, gender, returning populations, policy reform, external debt, and monitoring and evaluation. It will provide estimates of funding requirements for immediate needs and priorities of the interim period and will link all interventions to the macroeconomic framework and the poverty reduction strategy. The JAM is coordinated by the *JAM Core Coordinating Group* (CCG) comprised of representatives from the government, SPLM, WB, UN, IPF, and IGAD. The

<sup>15</sup> TCP/SUD/0170: *Water Control Component of the Special Programme for Food Security*.

<sup>16</sup> Report No. 02/024/IDB–SUD.

participating international teams conducted field visits in August and September 2004, holding consultations with northern and southern counterparts separately (GoS and SPLM). The final document of the JAM is expected to be completed by December 2004, and will be presented at a donor’s conference to be held in Oslo, Norway in the beginning of 2005, subject to the signature of the comprehensive peace agreement and the resolution of the Darfur crises.<sup>17</sup>

**(iv) Ongoing and Pipeline Projects<sup>18</sup>**

I.45. **European Union (EU).** The EC intends to fund a package of activities once a peace accord has been signed. In anticipation the EC has commissioned FAO to undertake the preparation of the *Sudan Productive Capacity Recovery Programme* (SPCRP). It is envisaged that there will in fact be two programmes, one for the North and one for the South. The formulation report is to be finalized and presented at a national workshop for approval in early 2005. The total cost of both five–year programmes is estimated at €80m, and is expected to include the following three components: (i) a safety net package; (ii) rural infrastructure; and (iii) improving rural services, especially veterinary services. The focus of resource allocation under SPCRP is expected to be on both enhancing income generating activities in agriculture and livestock production and off–farm rural activities that primarily benefit poor households, and strengthening the capacity of local administrations and NSAs to maintain and further develop them. In particular, the proposed focal themes for SPCRP are: (a) water and sanitation; (b) roads and transport; (c) agriculture, livestock and fisheries; (d) market, trade, and storage infrastructure; (e) extension and research services and input supply; and (f) access to rural finance. The SPCRP should also identify ‘*priority interventions in road and rural infrastructure*’ for a maximum amount of €10m, including the necessary capacity building to ensure sustainability (e.g. road repairs and maintenance). In addition, detailed terms of reference should be produced for a feasibility study that will identify free–standing four to five years investment programmes in key road and related rural infrastructure. This complementary programme will be funded from additional EDF resources, for an estimated cost of €20m.

I.46. Furthermore, a number of potential activities are earmarked under Stabex funding once a final peace accord has been reached these include:

- **Immediate/Quick–start Interventions** (25 percent of Stabex funds): *Sudan Post–Conflict Community–Based Recovery and Rehabilitation Programme* (SPCCBRRP). This three–year recovery assistance project focuses on quick–start community based agricultural and rural development interventions and, thereby, consolidating peace and increase food security amongst conflict–affected communities. The estimated cost is €50m;
- **Medium/Long–term Interventions** (75 percent of Stabex funds):
  - *Sudan Institutional Capacity Support Programme for an Integrated Food Security, Vulnerability and Market Information System* (SIFSIS), with the following main components: policy planning and development; food security and market information system. The project will have a duration of five years and cost €20m;
  - *Promotion of Export Commodities/Support to Agricultural Marketing Chains*. This programme would run over five years and cost about €10m. It would primarily finance studies of action that are needed to improve market efficiency of major exports;

<sup>17</sup> As mentioned earlier, agriculture is a key sector to be assessed by the JAM, and it is therefore vital that the work of the JAM, and the NEPAD–CAADP NMTIP initiative are coordinated once the preliminary findings of the JAM mission are available.

<sup>18</sup> See also Annex 2, section B.

– SPCR (see above).

I.47. **IFAD.** Ongoing projects are the *North Kordofan Rural Development Project* (NKRDP), which became effective in June 2000, the *South Kordofan Rural Development Programme* (SKRDP), which started in February 2001, and the *Rehabilitation of Gash Sustainable Livelihood Regeneration Project* operational since December 2003.

I.48. The NKRDP, which is financed through a loan of US\$10m, aims at improving the standard of living of the targeted communities, and in particular to assure their food security and enhance the resilience of their way of life to drought and natural disaster. It has components of community development, natural resource utilisation and development, rural financial services, project management and local capacity building.

I.49. The objective of SKRDP is to improve and sustain the living standards of smallholder farming and pastoralist households in South Kordofan by assuring their food security and providing them with social services in a secure environment where they can manage their own affairs. The programme is financed through a loan of US\$18m. It has components of agricultural extension and smallholder services, livestock production and range management, community support services, rural financial services and institutional strengthening. The programme's agricultural services extend to both government and rebel held territories.

I.50. IFAD is at present formulating the US\$25m *Western Sudan Resource Management Project* (WSRMP). The project is expected to be submitted to the IFAD Board for approval in December 2004. The WSRMP is encompassing the States of Northern, Southern and Western Kordofan and is aimed at improving and sustaining the livelihoods of the poorest in the rural communities through enhancement of the Greater Kordofan States' agricultural economy. The Project will have five core components: (i) natural resource management (including environmental conservation plans and range management strategies); (ii) animal production and veterinary services; (iii) farming systems research and extension (including the strengthening of extension services and improvement of seed quality); (iv) financial and marketing services (including market information services, decentralised livestock sales yards, community-based asset creation, and provision of rural financial services); (v) institutional support (community-based organisations, village extension agents, contact farmers, and State ministries).

I.51. **Special Programme for Food Security (SPFS).** Next to the emergency operations mentioned above (see I.39), FAO's ongoing and pipeline projects centre mainly around the SPFS. In September 2001 a Trust Fund Project<sup>19</sup> under the SPFS framework was finalised for support by the Libyan Arab Jamahiriya. This US\$1.9m project aims to demonstrate improved technology for water control and management, and intensification of crop production systems at three selected sites (North Kordofan, Red Sea, and West Omdurman). In October 2001, the FAO Investment Centre prepared a SPFS project for funding by the IsDB. Total project costs including incremental recurrent cost, physical and price contingencies were estimated at US\$9.5m. It was proposed that IsDB would finance 67 percent (US\$6.4m) of the total project cost, including a grant of US\$420,000.<sup>20</sup> OPEC has also expressed interest for SPFS financing. A US\$2m project outline was submitted to OPEC in August 2003 for a project in North Kordofan State which is one of the main food deficit areas in Sudan. The

<sup>19</sup> GCP/SUD/051/LIB *Special Programme for Food Security Phase I in Sudan*. The financing agreement was signed in February 2003, and the project was declared operational on 1 September 2003, with a NTE of 31 August 2006. The official launching took place in December 2003.

<sup>20</sup> The project preparation report was completed in May 2002 and submitted to the IsDB and to GoS in January 2003. An amount of US\$2 million has already been approved by the IsDB, but has not been made available yet.

project's objectives are to enhance food security and livelihoods of the population through a different set of technological interventions in water control and management, crop intensification and diversification, non–farm enterprises and natural resource management.<sup>21</sup>

I.52. **United Nations Development Programme (UNDP).** As mentioned earlier, the JAM focuses on the overall requirements of the Interim Period, the specific immediate priorities, and the requirements to resolve the debt overhang. More specifically, JAM will: (i) describe the current economic, social and institutional situation in Sudan; (ii) in the context of a results–based framework, outline key policy issues, institutional requirements, and reconstruction and rehabilitation priorities in each sector; (iii) present broad estimates of aggregate external financing requirements during the Interim Period; and (iv) describe and cost out priority programmes that need to be initiated urgently (capacity building, DDR process, mines action, support for IDPs and other highly vulnerable groups). The JAM would also build on ongoing processes and present the financial needs related to security and peacekeeping, and those related to the reduction of Sudan's external debt. The JAM will however not include detailed and costed sectoral strategies.

(v) **Lessons Learned**<sup>22</sup>

I.53. With regard to *impact*, IFAD projects have generally been able to increase production and provide some critical infrastructure. Women–oriented activities have been successful despite minimal project resource allocations, such as credit. Projects in the rainfed sector have been able to reach out to a larger number of households compared to irrigation rehabilitation projects and at a more affordable cost. They are less dependent on imports for their equipment and inputs and produce high value crops and livestock for export, making a better contribution to foreign–exchange earnings. Hence, *project experience* demonstrates the responsiveness of agricultural production to proper incentives and *suggests that the social impact and economic profitability of investments in the rainfed sector are no less important than in the irrigated sector.* In this sense, it is reassuring to see the I–PRSP putting emphasis on allocating investments as a matter of priority to the rainfed sector.

I.54. With regard to *credit*, efforts by IFAD to induce the Agricultural Bank of Sudan (ABS) to reorient its operations in favour of traditional small farmers have had no obvious effect on the general pattern of lending. However, ABS has provided significant *rural financial services* to target groups in projects during their implementation, but these services *have not been sustainable* after project completion. The viability of ABS has been undermined by loan repayment defaults and by the fact that it had to bear the foreign–exchange risk of commercial credit lines and supply contracts. Financing staple crop production has proved unsound, not only in marginal low rainfall areas but also in the rainfed sector in general.

I.55. Lessons learned with respect to *institutional and managerial aspects* include: difficulty in attracting and retaining qualified staff in remote and difficult environments; inadequate capacity of line and parastatal agencies to provide technical backstopping and to respond to the priorities of target groups; and inadequate counterpart budgetary resources. Current IFAD projects are presently addressing these constraints through: (i) provision of direct support to the main implementing agency in terms of work systems, equipment, vehicles, allowances; (ii) linking the support with a number of activities/services that are jointly planned and evaluated; and (iii) linking the project planning cycle closely with the State and Federal budgeting cycle.

<sup>21</sup> However, in September 2003, FAO was informed that the amount approved for Sudan had been decreased to US\$200,000; the proposal was reformulated to reflect the lower amount and was endorsed in May 2004, prior to submission to OPEC for approval. A response is still awaited.

<sup>22</sup> Mainly based on recent IFAD experience.

I.56. *Lessons emerging from ongoing projects.* The ongoing projects have a more developed community based and gender mainstreaming approach, and an explicit focus on supporting the decentralization process, especially agricultural extension services. They are implemented in areas that have witnessed severe drought and civil strife, and hence have been affected by population displacement and relief/emergency operations. Ongoing projects in North and South Kordofan are state projects, and their financing arrangements are therefore more complex. A number of *specific insights* are emerging from the ongoing operations, as follows.

I.57. The decentralisation process has been volatile since 1998. Responsibilities were transferred to the state and local governments without an adequate resource base. Further, decentralisation of federal agencies or functions has inflated the salary budget line at state level, and has created *duplication and overlap among a number of agencies* (the water sector is a classic case). IFAD projects have tried to cope with these changes by *investing in community organization capacity*, in establishing cost efficient outreach services at locality level, and negotiating contracts for devolution of water management responsibilities to the communities. This *grassroot level investment focus* has also enabled the SKRDP to reach out to communities in government and rebel held territories. The entry point has been to work with communities that have been split by the conflict boundaries to distribute agricultural inputs (seeds, tools, veterinary care) on both sides of the political divide. *The most successful mediators in this regard have been the NGOs and the locality extension teams.* In addition, the SKRDP outreach has benefited from the ceasefire agreement and the momentum created by the peace negotiations.

I.58. IFAD projects to date have adopted an area based approach that has proved useful for the delivery of agriculture and social services but has proved its limits when it comes to dealing with livestock transhumance, shifting settlements in search of services and good quality land, and preserving the productive base of the open access land and water resources that the population of Kordofan depend on for their livelihoods. It thus became clear that the *results achieved to date by the area-based interventions should be used to leverage necessary reforms in land and water governance.*

I.59. *Introducing self-reliance and gender mainstreaming concepts requires time.* Time is needed for building the staff capacity, for establishing project credibility and timely implementation/response modalities, for understanding community needs/priorities, coping strategies, and for building alliances to promote self-reliance, collective investment and gender equity. In 3–4 years of project operation, the change that occurred in community attitude from dependency on aid to self-reliance is remarkable. However, other processes require further time: although women’s participation in project mainstream activities ranges between 30 to 60 percent, women participation in decision-making on communal affairs is still limited. Most of the women leaders in the community organizations have been nominated by male relatives. In the case of Kordofan, the question of women leadership is linked to accessing a space to voice their needs, be accountable for their performance or lack of and to participate in democratic processes for election.

I.60. Water is a major demand in the arid and semi-arid parts, in North Kordofan. Although at the beginning the community attitude emphasizes a “relief approach to water provision”, *there is a growing awareness that communities are willing to pay for water services and are willing to invest in them.* The issue then is not limited to the physical scarcity of water but to organizational constraints within the State Water Corporation (SWC), which limit comprehensive planning, and investment in water development. NKRDP and SKRDP are both attempting to negotiate with the SWC the devolution of water point management to local communities, and establishing with the banks financing mechanisms for the construction or rehabilitation of water points.

I.61. *The sustainability of projects and their development impact continue to be a source of concern* for the following reasons: (i) the focus on technical packages for crop production and for animal health is not likely to lead to a reliable increase in productivity unless aspects related to usufruct rights over farmland and grazing land, (e.g. incentives to invest in land productivity and land care) are addressed; (ii) water is a basic need and a basic right, hence institutional and organizational barriers to water planning and investment should be removed, and water management should be devolved to users or accountable organizations; (iii) farmers are locked in selling their produce to moneylenders and traders which means that gains in productivity are not totally converted in income gains to the producers; (iv) budgeting processes within the state and local government continue to marginalise investments in the agricultural sector, when paradoxically agriculture — in particular livestock taxes — is the major income earner for the states of North and South Kordofan.

## II. CONSTRAINTS AND OPPORTUNITIES

II.1. **Macro–economic.** Sudan is one of the poorest countries in Africa with a number of social indicators, such as literacy and child mortality, well below those in other parts of Sub–Saharan Africa. The high proportion of the population living in poverty is a major constraint to development. In particular, the capital assets (natural, social, human, physical and financial) of most social communities in the rural areas are almost non–existent, with many groups dependent on social safety nets and humanitarian assistance for survival in most years, and with clear evidence of dependency syndromes in some groups. Other serious macro–economic constraints to rural development include the massive national debt overhang, internal conflicts/war, an uncertain land tenure system, continued state intervention in the marketing of agricultural inputs and outputs, the absence of a functioning rural credit system, and poor infrastructure. The GoS is aware of these constraints and reforms initiated in the 1990s have led to improvements, notably macroeconomic stabilization, but much more has to be done as indicated earlier if the skewed distribution of poverty is to be sustainably addressed.

II.2. **Natural resources.** Sudan is endowed with rich natural resources. These resources however, are fragile and rapidly degrading, as a result of a multiplicity of factors. *Soils are under pressure from poor cropping practices and increased exposure to wind and water.* Rainfall is extremely variable causing periodic droughts and floods, and inducing displacement of millions of rural poor. As a coping mechanism, farmers remove trees to produce wood, to sell to buy grains. Increasing livestock numbers and the absence of effective regulations for controlling grazing result in the *depletion of rangeland.* The situation is further *aggravated by the expansion of semi–mechanized and rainfed farming on fragile areas.* There is an urgent need for sound management of natural resources. The major objectives to be achieved by sound management of natural resources are: avoid resource degradation thorough prior screening and use of environmental assessments, mitigate adverse impacts through environmental management plans and other measures, mainstream environmental issues into broader development programmes for managing natural resources, and establish regulations and laws to protect the environment and build capacity to enforce them. Management of natural resources calls for coordination of a variety of approaches to improve management of forests, grass land, soils and water resources, including policy reforms and decentralization, improved regulatory capacity, and strategies to increase participation and empowerment of communities.

II.3. **Irrigated agriculture.** Conceived and managed originally as private entities with the government being a major shareholder receiving a share of any profits, the irrigation schemes performed well. The main commodities produced were cotton for export, and wheat for domestic consumption. Following independence the schemes were nationalised, and subsequently efficiencies fell, and all schemes now rely heavily on subsidies. Furthermore insufficient maintenance has led to large areas of the irrigation schemes being underutilized or out of commission. Performance problems

in irrigation schemes include *inefficient water management, non–collection of water charges and land use fees, low productivity, and large debt burdens*. Nevertheless the irrigated areas of Sudan still receive the bulk of government support for agriculture in the form of access to credit and operational expenditure. The area sown to the main irrigated crops has fluctuated substantially over the past 20 years in response to a combination of GoS inducements to grow food crops, and technical/marketing problems with cotton. Overall, the main change has been a decrease in the area of cotton and an increase in the area of sorghum. Numerous studies and reports have been written over the years on the management of the irrigation schemes in the Sudan. In general, the conclusions are that *much more private sector involvement in the operation and management of the schemes is needed*, together with major reform of land tenure arrangements. In the absence of such reforms the schemes will continue to require subsidies that the country simply cannot afford, and as the level of subsidy is reduced large areas go out of production.

II.4. **Rainfed agriculture.** In much of the northern half of the country the introduction and expansion of *semi–mechanised rainfed* agriculture (mechanised land preparation and seeding) by private sector operators has led to considerable land degradation as fertility has not been replaced and poor use of heavy machinery has led to loss of soil structure, and in some cases has increased the risk of erosion. During the 1980s yields from semi–mechanised cropping decreased by 2 percent annually. The GoS has nevertheless encouraged this type of farming to ensure the availability of adequate supplies of sorghum for the domestic market, and sesame for export, and has provided substantial amounts of seasonal credit to the operators of such farming enterprises. Given the overall shortage of credit for agriculture, this has limited the amount of finance available to small scale producers. Yields from *traditional rainfed* farming also decreased during the same period but by only 1 percent per annum, attributed mainly to insufficient support services. The sub–sector obtained only between 1 and 5 percent of all formal agricultural credit in 2001 and received few other support services such as research and extension. Public investments in basic infrastructure for rural and agricultural development are also negligible. It is not surprising that yields are low and declining or stagnating for most crops. The pastoralists and small in the traditional sector are the most vulnerable to poverty.

II.5. Overall, the deterioration or wide–spread absence of agricultural services, especially *technical advisory systems (extension) and suitable farmers and market credit*, has contribute to the stagnation of the sector. Establishing or revitalizing such services is urgently recommended. Similarly, *market development and efficient marketing arrangements* need to be enhanced with priority for support to the farming communities. This includes group marketing, post–harvest management, storage structures and rural infrastructure, such as feeder roads connections.

II.6. **Land tenure.** Efficient and sustainable agricultural and pastoral development is severely constrained by current land policy. First, on land not yet demarcated by cadastral surveys, conflicting land rights have been a source of civil strife, especially between nomadic pastoralists and sedentary farmers. Second, the current system does not provide incentives for sustainable land development and capital improvement. Poor yields are linked in part to inappropriate land use as illustrated by the mechanised farming areas. Third, it limits access to credit for the vast majority of farmers, who cannot use land as collateral. Indeed, land reform should lead to the integration of farming and livestock production, and nomadic pastoralism rights should be established for specified common pastoral areas. Finally, the need for land reform is inseparable from the search for a solution to the problems of increasing crop yields significantly and establishing sustainable formal agricultural credit institutions.<sup>23</sup>

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<sup>23</sup> UNHCR and FAO are currently undertaking an assessment of land tenure issues in connection with the potential flow of returnees both in Northern and Southern Sudan with the aim of proposing practical

II.7. **Agricultural credit.** The prospects for improving the availability of credit to small–scale farmers are slim without government guarantees or collateral provided for loans. Group lending has been attempted by the ABS, but has proved to be unsuccessful and costly. Traditional farmers are risky clients for credit because of their uncertain environment, low yields (even in good years), remote location, and inadequate infrastructure for marketing and support services. Nevertheless, the traditional farming sector would have substantial potential if it was possible to increase average farm size, improve technology, and provide better infrastructure such as roads and domestic water supplies. But the most important requirement is the provision of tradable leases to farmers that would allow the purchase and sale of farms and, hence, a structural adjustment in the traditional farming areas resulting in larger and more profitable farms.

II.8. **Livestock.** Several constraints deprive the country from realizing the full potential of this sub–sector. *Grasslands*, which account for the major source of the animal feed, lack a system of grazing entitlements. Being communal, they suffer from deterioration, poor attention and invasion by expanding crop farming. The historic customary livestock corridors between dry and wet season grazing lands are often blocked by crop farming resulting in conflicts between herders and crop farmers. Local authorities in which rangelands organization, management and rehabilitation is vested are short of funds and the stakeholders lack the necessary awareness for resource management. In addition, *water supply* during the dry season is a nightmare to herdsman in most arid areas. It consumes time, effort and a considerable portion of their annual incomes. Some able herders tend to trek their herds for long distances to where water is available. Others transport water by trucks to where pasture is abundant and others build cemented earth tanks for the collection and storage of rain water. Poor herders suffer from water supply shortage since they lack mobility.

II.9. **Livestock marketing** is commonly arranged following the local traditions. The markets are short of infrastructure and lack organization and development. The long chain of middlemen together with numerous levies and taxis imposed on by the local authorities erode most of the producers' market share. The recent monopolistic approach to livestock export is expected to have far reaching negative effects on herders. Furthermore, herders have no access to *capital*. The only assets they have are their animals. In the case of natural disasters (drought, famine, flood, sweeping epidemics, etc.) losses tend to be high and many households become destitute. To overcome the problem, herders resort either to settled crop farming or move elsewhere especially to urban centres.

II.10. **Animal health** services are integral part of any feasible livestock development programme. They are of two types: those provided by the public sector and those provided by the private sector. The former focus mainly on disease control measures through annual vaccination campaigns. They target epidemics of sweeping nature and diseases that have regional dimensions besides those which impede access to international markets (rinderpest and contagious bovine pleuropneumonia, CBPP, in cattle for example). Poor herders have mostly just small ruminants, donkeys and the domestic fowl. Diseases such as *peste de petits ruminants*, sheep pox, lamb dysentery contagious caprine pleuropneumonia (CCPP) and brucellosis in addition to equine and poultry diseases, which affect the stock of the poor, fall outside the attention of the vaccination campaigns. The private sector in its provision of animal health services focuses mainly on drug supply and distribution. The high costs of drugs puts the service out of the reach of poor herders. Veterinary practitioners whether in the private or public domain lack the necessary equipment and tools to carry out their profession properly. In this respect, the *extension system* is not effective in conveying new knowledge to producers and suffers low priority in the agenda of policy–makers. It is short of budgetary allocations, staff training and capacity building. Moreover, it lacks the effective linkages with research institutions.

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mechanisms to mitigate the risks of conflict over land resources and ensure a fair and efficient system of land tenure in the future.

II.11. Tackling the described constraints in a holistic and coordinated approach would open great opportunities to the development of the sub–sector, reducing poverty levels and increasing food security for large segments of the population.

II.12. **Fisheries.** Sudan is endowed with inland and marine fisheries resources. The potential sustainable yield of fin–fish is estimated as 110,000 tons per annum. By virtue of its basic characteristics, Sudan fisheries is of small scale dimensions, and only meets subsistence requirements, although it provides a good margin for investment, particularly aquaculture, off–shore fisheries, land based fisheries and supplies. The greatest part of it is contributed by inland waters, which are effectively restricted to the five manmade lakes on the river Nile and its tributaries. Currently, the level of exploitation is approximately 55 percent of the estimated potential. Fresh water pond fish culture is playing an insignificant role despite the availability of the prerequisites for its success. The present magnitude and trend of resource utilization has various explanations. The civil war in the south has deprived the country of effectively utilizing the huge fish resources in the southern region (potential 75 thousands tons/year). Important fishing sites in the north are either suffering from overfishing (e.g. Jebel Awliya Reservoir) or are virtually unexploited (e.g. Lake Nuba and Red Sea). No attention is paid to the development of culture–based fisheries in the numerous small water bodies (hafir) in different parts of the country to augment fish production from traditional sites and contribute to rural development. The low fin–fish production is also linked with high post harvest losses resulting from improper handling, preservation and processing. Involvement of private sector in aquaculture is presently at a very low key. Resources other than fin fish are either untapped or fragmentary exploited. Under funding, inadequate infrastructural facilities and limited trained and skilled manpower are major constraints facing rational management and development of fisheries resources and fishing communities, and despite the aforementioned opportunities of the sub–sector.

II.13. **Institutions.** The *Ministry of Agriculture and Forestry* (MoAF) has been undergoing institutional and structural capacity reforms in its respective policy and planning/programming departments. These reforms were carried out in close coordination with the respective state ministries. Similarly, the institutional capacity of the other two line Ministries of Irrigation and of Animal Resources and Fisheries are also undertaking similar reforms. These are in addition to the networking process, which has been established to develop effective institutional linkages among the three line ministries and the respective stakeholders. Though the current structure of the federal system entails decentralization of policy design roles throughout the country, this might lead at times to conflicting policies and programmers between the centre and the states.

II.14. **Implementation capacity, delivery systems, participation and group formation.** Decentralization in Sudan has accorded several responsibilities to the lower level of government. Many of the agriculture and poverty reduction programmes will be implemented at lower levels of government. Therefore, planning and organization of the delivery system at the lower levels of government should not be overlooked in light of the weak implementation capacities at these levels. Bodies responsible for the delivery system, grass–roots communities in particular, should be supported by a strong programme of capacity building, particularly in areas of implementation/delivery mechanisms, planning, auditing and monitoring. The goal of participatory development approach is to strengthen the capacity of communities and the local governments to distribute funds to beneficiaries and oversee their use. For this approach to succeed the provision of training, technical and managerial support to communities, and creation of accountability and incentive mechanisms are needed to assure that communities have used funds as intended. Agricultural cooperatives, water and other resource user associations are also vital for rural development. They reduce the cost of marketing of inputs and outputs and facilitate access to resources. In this respect, capacities of nomadic communities should be facilitated through the provision of technical assistance to enhance pastoralists skills in forming community–based organizations, assessing environmental conditions, negotiating and resolving

conflict, developing and implementing community–based land use maps, and monitoring and evaluating results. Any development programme should strengthen those groups/organizations through creating an enabling policy and legal environment and provision of technical advice and training. Furthermore, formal and popular institutions to clarify land rights and establish mechanisms for resolving disputes over access to land, water and other natural resources will have to be developed and empowered. Finally, there is a need to develop and maintain early warning systems for drought, and to strengthen drought management capabilities building on customary coping strategies.

II.15. **Public investments.** Most of the adjustment reform took place through reduced allocations to development projects negatively affecting the pro–poor sectors. However, it is not the adjustment *per se* that is to be blamed for these cuts in public expenditure, but rather the inability to allocate the available resource efficiently that is the root cause behind depriving the pro–poor sectors from needed resources. As mentioned earlier, total public expenditures (2004) constitute about 16 percent of GDP, of which agriculture receives only 0.9 percent, i.e. about 5 percent of total expenditures. This figure clearly indicates the meagre resources available for agriculture. Moreover, imbalance in resources allocation for development is also apparent where for example about five projects, namely *Merowe Dam, Wheat, Geili Power Station, and Development of Services for Higher Education* projects receive 30 percent of total domestic resources allocated for development. The inappropriate allocations are also apparent not only between agriculture and other sectors, or among the sub–sectors of agriculture but also within the sub–sector itself. For example, out of the meagre resources allocated to agricultural research (0.05 percent of GDP or 10 percent of allocations to agriculture) about 65 percent are allocated for wages and salaries, leaving only 35 percent for running cost and development programmes. To achieve the objectives of the agricultural investment programme the above situation has to be re–addressed. A major step in the right direction is to restructure the budget within a medium–term framework through a package of reforms, chief among which would be to reduce military and security expenditures in favour of agriculture and other social sectors especially the pro–poor sectors.

II.16. **Conclusions.** The pattern of development and investment in Sudan has in the past been sharply skewed towards the modern irrigated and mechanized rainfed sub–sectors. The dominant traditional rainfed sub–sector has been marginalized, especially where policies in favour of agropastoralism and the socio–economic setting have been neglected. This has not only led to lower returns on investment and lower growth rates in the economy, but also magnified regional disparities and created social tensions and civil strifes which further drained the country’s scarce financial, human and material natural resources needed for development, in addition to the negative environmental impact.

II.17. Agricultural development and food security in Sudan is challenged by the large size of the country, poor transport and storage facilities, and deficient institutional structures (research, extension, credit, land tenure, etc.) which, coupled with environmental factors, increase instability of food production and household food supplies, specially in remote areas. Expanded production and import capacities are also frustrated by the low and declining foreign exchange earnings, which hamper utilization of abundant productive resources, purchase of food imports, and procurement of agricultural inputs required to increase productivity. Other challenges to food security include occurrence of drought and encroaching desertification, and the social conflicts during the last two decades, which are causing the mass movement of segments of the rural population and worsening the agricultural labour shortage. The increased urbanization also led to reduced food production, increased consumption and changed consumption patterns with wheat replacing coarse grains. Political stability is therefore a key antidote for an effective national economic and social reform with agriculture as its fundamental base taking into account the agro–sectoral socio–economic context of the rural Sudan..

### III. INVESTMENT PROGRAMME OUTLINE

#### A. Priority Areas for Investment

III.1. The proposed investment programme outline attempts to convert some of the identified constraints into opportunities for sustainable development. Since the strategies and programmes of the *Interim Poverty Reduction Strategy* and the current *Five–Year Agricultural Development Plan* cover basically all CAADP pillars, the proposed *National Medium–Term Investment Programme* (NMTIP) has in addition to contribute to the overall objectives of supporting the peace process and restoring the enabling capacity of the people, the public and the private enterprises. With respect to the specific interventions proposed for the NMTIP, the priority areas of investment agreed at the *National Stakeholder Workshop* held in October 2004 are as follows:<sup>24</sup>

III.2. ***Priority #1: Improved and Efficient Use of Irrigation Water Systems in Dry Land Areas (CAADP Pillar 1, Links to Pillar 3).*** Water resources for irrigation and drinking for both the human and livestock populations are either scarce or undeveloped in most parts of Sudan. Especially in those extensive areas of the country which do not have permanent irrigation systems. In these areas, irrigated crop production depends on access to seasonal surface water supplies, open wells, deep boreholes, hafirs or similar structures. These parts of the country have been neglected in the past by the Government and donors, aggravating food insecurity and poverty for vast segments of the rural population.

III.3. Therefore, a high priority to encourage investment in water harvesting, by constructing water dykes across wadis to store water, enhancing smallholders' capacity to engage more effectively in agricultural activities. This priority area of investment would promote the *introduction of new irrigation water technologies and management*, and the *development of water users associations*, as well as assisting the fight against health hazards associated with water borne diseases. Furthermore, such programmes would require the introduction of *new crop varieties*, *the supply of improved seeds and other inputs*, and the introduction of *improved cultural practices such as integrated pest and disease control (IPM)*, and *timely availability of credit*. In addition, *improved input and commodity marketing* coupled with related development in *rural infrastructure, including storage structures* will be essential.

III.4. ***Priority #2: Integrated Traditional Farming Systems and Pastoralism (CAADP Pillars 3 and 5, Links to Pillar 1).*** In large areas of the country, *crop production and livestock compete for land and water resources*. Conflicts arise in areas where crop production is located across traditional livestock routes. Therefore, it is important to invest in programmes that *resolve such conflict*, and thereby *optimize sustainable utilizations of land and water resources* through successful introduction of integrated crop–livestock approaches. This is likely to include measures to *address land tenure issues*. The integrated approach would also have to consider the social and economic aspects of labour employment versus the use of machines in crop production. The programme would *increase crop productivity through adoption of appropriate adaptive technology tapping on indigenous knowledge, improved marketing services, and technology transfer linkages*, to finally transform traditional subsistence farming systems into commercial production systems.

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<sup>24</sup> The thematic priority areas of interventions, as well as its ranking, were defined during the “NMTIP/BIPPs Stakeholder Workshop”. The workshop was attended by representatives of a series of government ministries and departments as well as donor agencies (IFAD, EU, FAO/SPFS and the JAM counterpart for the agriculture sector/productive cluster).

III.5. It is important to strike a balance between the numbers of livestock and the carrying capacity of pastures. In this respect, it is essential to *regulate nomadic movement and to arrest the continued increasing expansion of mechanized crop production schemes over forests and natural grazing lands*. In order to *integrate the traditional livestock pasture activities into the overall farming systems*, it will be important to maintain the existing water supply services from water bore holes and hafirs. In this respect, it is recommended that the area north of latitude 14 degrees be assigned to pastures activities and that they are supported with drinking water, marketing and veterinary services; and to assign the area south of that latitude to crop production, with limited livestock raising. The programme has, in addition, to consider the national feed security situation for livestock through the *demarcation of grasslands to be protected by legal means*, and by *mapping livestock routes*. These animal production corridors act as ranches and have to be large enough to accommodate livestock for grazing supported with *drinking water, marketing and social services including mobile health and veterinary services and community awareness initiatives*. Therefore, the programme has to *establish and strengthen community-based organizations (CBO) and encourage site-specific credit systems* and financial institutions that serve the needs of small farmers and animal producers in the rural areas. Construction of *feeder roads*, promotion of *efficient post harvest handling*, as well as *extension services to improve quality and quantity of products* are also important.

III.6. **Priority #3: Marketing and Rural Infrastructure (CAADP Pillar 2)**. The virtual non-existence of markets and marketing systems (with the exception of the traditional livestock and fish trades that have survived the period of conflict) has resulted in a situation where commercialisation of farm produce is limited and the rural economy to a great extent is neither market-oriented, nor even monetised. The reform of marketing and trade arrangements has received minimal attention from government and donors to date, despite their critical key role in the structural adjustment reform programme. Investments in this priority area would facilitate the easy flow of agricultural inputs and commodities and result in lowering cost of production and consumption. It will have to be community based, cost effective and sustainable in the long run. The investments in the area of marketing, trade and rural infrastructure would consist of:

- The revision of investment laws, land tenure systems and, trade policy regulations.
- The establishment of organized market places; promotion of transparency in transactions; development of market intelligence networks for all stakeholders; provision of production and market information systems (agricultural census, data on production and prices, supply and demand by commodity); development and strengthening of management information systems to include the government, private sector and other stakeholders.
- The provision storage structures (on-farm and group based); adequate marketing services, quality control facilities.
- The promotion of marketing associations, and cooperatives; establishment of group marketing for fish, milk, fruits, and for the production of cheese.
- The provision of a revolving funds and of market credit to address financing requirements for marketing services such as packaging, processing, consumers goods and local transport; suggested revolving funds to target crops, forest products and livestock producers in Kordofan, Darfur, Bahr El Ghazal, Upper Nile and White Nile areas.
- The development of appropriate transportation services (feeder and rural roads, efficient railway system, airfreight services); development of rural transport modes from local material that should be socially acceptable — animal drawn carts using donkeys and other animals.

- The encouragement of agro–industry linkages between agriculture, small to medium size enterprises, and industrial entities with respect to provision of raw materials and food.

III.7. **Priority #4: Strengthen Institutional Capacity Building (CAADP Pillar 4).** Agriculture production is marked by relatively high costs due, in particular, to low crop yields. Moreover, low quality of produce results in low prices and consequently low income to farmers. Well–programmed and well–financed research could help develop *new crop varieties with better yield potential* and reduce crop deterioration due to pests, diseases and environmental hazards. However, this activity has to be supported with *proper planning and extension services*, otherwise such efforts will be ineffective. Therefore, it is a priority to support the *institutional capacity–build up of the research and extension* staff and facilities. Research and technology transfer has to focus in particular on the following areas of investment: crops, livestock, fisheries, forestry, pastures, pests and diseases, irrigation and soil management. The investment in this priority area would centre around the *rehabilitation of research and extension services and training programmes*, and would include the following points:

- Enhancing efficient extension advisory systems, including the Farmers Field School.
- Expansion of research coverage geographically and crop wise (staff training, introduction of participatory on–farm research).
- Rehabilitation and upgrading research centres for excellence with trained staff and needed equipments and materials to provide services to the private sector (Food Processing Research Centre and Kuku for livestock processing centre).
- Encouragement of private sector research activities in food and other related activities.
- Research into natural resources management.
- Agricultural Census and land use mapping for planning.
- Encouragement of graduates to enter into natural resources management.

III.8. **Priority #5: Recovery Initiatives for Vulnerable Groups, Rehabilitation and Resettlement in Most Disadvantaged States (CAADP Pillar 3).**

#### **B. Project Selection Criteria**

III.9. The identification and selection of bankable projects under the NMTIP focus on the above priority areas, supporting the government’s development framework comprising the I–PRSP and the *25–year Strategic Quarter Centennial Plan*. The principal criteria for selecting specific projects is their potential to contribute to improved food security and sustained poverty reduction, while protecting the environment and natural resource base. The main selection criteria for bankable projects are:

- considering the two main CAADP priorities: ‘water control’ and ‘rural infrastructure’;
- coherence with the overall five CAADP pillars;<sup>25</sup>
- focus on poverty alleviation and food security;
- coherence with National Poverty Reduction Strategy;

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<sup>25</sup> See *Preface*.

- contribution to conflict resolution (i.e. pastoralism versus crop farming; South Sudan);
- donor preference and geographical area selection with no overlap with ongoing/pipeline activities;
- synergy with ongoing programmes and projects;
- implementation capacity within anticipated time frame;
- environmental sustainability;
- income and employment generation;
- community participation and stakeholder ownership;
- potential benefits to large community segments;
- contribution to equitable distribution of wealth;
- potential scope for replication and expansion;
- five–year duration of project activities.

### C. Identification of Projects for Development with FAO Assistance

III.10. Based on the above priority areas for investment and applying the defined selection criteria, four distinct *Bankable Investment Project Profiles* (BIPPs)<sup>26</sup> were identified during the aforementioned *National Stakeholder Workshop*. The four profiles were later elaborated by a team of four national consultants (they are presented in separate documents). The team was asked not only to determine the scope and dimension of the projects, propose specific technical interventions and organizational aspects of programme execution, but also to provide indications on the most appropriate geographical locations, and to make sure that resources are allocated at optimum avoiding duplication with ongoing/pipeline projects of other donors. In this respect, it should be noted that representatives of the major donor agencies actively participated in the selection of the proposed BIPPs. The preliminary project ideas, as indicated during the workshop, are as follows:

- ***Priority Ranking of Identified Project Proposals:***
  1. Smallholder Water–Harvesting and Productivity Enhancement
  2. Integrated Traditional Farming and Pastoralism
  3. Marketing and Rural Infrastructure Development
  4. Institutional Capacity Building Project (Research and Extension)
- ***Possible Components and Activities of Identified Project Proposals:***
  1. Smallholder Water–Harvesting and Productivity Enhancement Project  
*Potential project area: Red Sea*
    - improving irrigation technology, i.e. development of water yards, reduction of water losses/waste;
    - improving on–farm/community irrigation management and combat of waterborne diseases;
    - improving irrigation crop and animal production technology;

<sup>26</sup> See *Preface*.

- food security, including reasonable staple crop mix and vegetable crops;
- formation of farmer associations;
- support services/extension and health care for settlers and livestock;
- research in cropping systems;
- suitable credit system;
- enhancement of efficiency for input and commodity marketing.

2. Integrated Traditional Farming and Pastoralism Project

*Potential project areas: Western Savannah, Northern Part of South Sudan, Eastern Region, Blue Nile*

Component A: Traditional Farming Systems

Component B: Pastoralism

- land tenure arrangements (pilot) catering for livestock routes and property rights;
- introduction of adaptive research, extension and training;
- integrated, innovative, sustainable production/grazing systems;
- water harvesting;
- food security (FAO–SPFS);
- participatory approach and community empowerment;
- support services/extension;
- on/off farm income and job creation;
- development of market structures/services, encouraging of group marketing/producer associations;
- suitable credit system.

3. Marketing and Rural Infrastructure Development Project

*Potential project areas: South Sudan, Darfur and Kordofan*

- policy and legislation;
- market/traders credit;
- market information;
- processing/packaging/quality control;
- market and storage structures;
- livestock holding grounds;
- producers associations/cooperatives;
- transportation;
- rural/feeder roads.

4. Institutional Capacity Building Project (Research and Extension)

*Potential project areas: Khartoum and State capitals, North Sudan, South Sudan*

- agronomic research (adaptive, commodity, agro–ecological zone specific);
- socio–economic research (land tenure, credit systems, marketing, social/conflict impact);
- human resources development, training;
- extension, Farmer Field Schools;
- agricultural census/capacity for statistical analysis;
- land use mapping;
- agriculture/agro–business investment promotion capacity;
- strengthening of early warning system;
- establish effective monitoring and evaluation (M&E) system at federal and states levels.

#### IV. FINANCING GAP

IV.1. The recent *Declaration on Agriculture and Food Security in Africa* ratified by the African Union Assembly of Heads of State and Government during its Second Ordinary Session, held in Maputo in July 2003, provided strong political support to the CAADP. The Assembly resolved, *inter alia*, to implement, as a matter of urgency, the CAADP and evolving Action Plans for agricultural development, at the national, regional and continental levels. To this end, the Heads of State and Government agreed to adopt sound policies for agricultural and rural development, and committed themselves to allocating at least 10 percent of national budgetary resources for their implementation over the five years period. Within the context of the NMTIP, the concept of “financing gap” is used to describe the shortfall between the amount of resources equivalent to said 10 percent and secured funding. Part of the gap will be met by the BIPPs described in the previous section; other, still unidentified projects and/or programmes will make up the rest of the financing gap.

IV.2. For NMTIP planning purposes it is convenient to have a five–year projection of the financing gap. However, in the case of Sudan this is not possible to calculate as there is insufficient data available. Using the available official data, it is possible to make a projection of the financing gap for the five–year period from 2003/04 to 2007/08. However, it needs to be borne in mind that as far as expenditure is concerned this refers only to the northern part of the country, as no data is available for the south.

IV.3. The Sudan *Five–Year Agricultural Plan (2003–2007)* estimates the total required financing for the five years period to be SD509,145m. Using data from the Bank of Sudan (Report No. 43) issued in 2003, and assuming an annual increase in budget revenues of 20 percent, the total fiscal revenue in 2007/08 is estimated to be SD5,235,910m. Using projections of known donor funding (equivalent to 1.8 percent of total requirements), and a GoS allocation of 5 percent of the national budget to agriculture, the estimated overall financing gap is considerable, at SD151,470m (US\$582m).

Sudan: Agriculture Sector and National Budget – Financing Gap Forecast (2007/08)		
Item	SD million	US\$ million (**)
1. National Budget	5,235,910	20,140.00
2. Agriculture Programme Requirements (9.7%)	509,145	1,960.00
3. Government allocation (5% of National Budget)	261,735	1,007.00
4. Agriculture Programme Funding Forecast (secured) (*)	95,940	370.00
<b>Financing Gap [2–(3+4)]</b>	<b>151,470</b>	<b>582.50</b>
(*) Based on funding from: IFAD, including NKRDP (US\$10m, ongoing), SKRDP (US\$18m, ongoing), Gash project (US\$25m, ongoing), WSRMP (phase 1) for Greater Kordofan (US\$25m, pipeline); EU proposed projects tentative funding conditioned by inception of peace in the country (€160m); Libya's SPFS (US\$1.9m, ongoing); IsDB's Water Harvesting Project for Darfur (US\$25m, ongoing but not progressing due to instability in the area); IsDB's SPFS (US\$9.5m, pipeline); IsDB's Rahad Irrigation Programme (US\$9.5m, pipeline); Qatar Fund's Merowe Dam (US\$50m). The yearly break down of foreseen expenditure of these projects is not available. Please note that these projects have different duration periods, some of which extend beyond the five years term. Hence, these figures were used hypothetically to give a rough indicator of the funding status of the agricultural projects in Sudan, even if they extend beyond the five years span of the <i>Five Year Agricultural Plan (2003–2007)</i> requirements. (**) US\$1 = SD260; €1 = SD318.		

IV.4. The accurate determination of the resources (existing and additional) needed to meet the Maputo targets for the whole of Sudan is extremely difficult in the absence of reliable GDP data for the whole country. In particular, there is virtually no statistical data on the population and the economy of the southern half of the country. Furthermore, given the rundown state of much of the national infrastructure, and the agricultural services sector, the allocation of 10 percent of national budgetary resources may not even be sufficient in the short to medium term. It is envisaged that the forthcoming JAM will provide some reliable estimates of the total financing needed by the sector, and also of the financing gap.

## V. MONITORING AND EVALUATION

V.1. It will be vital that progress of CAADP in Sudan is closely monitored and adjustments are made to the investment programme as a result of monitoring observations. However, given that effective M&E systems need to be closely tailored to the investments themselves it would not be sensible at this stage to develop detailed proposals for M&E systems. Furthermore, effective M&E systems need to be designed for local conditions, and cannot be proscribed from outside. Key indicators are likely to include, *inter alia*:

- Changes in irrigated and rainfed cropping patterns
- Increased livestock offtake
- Changes in uptake and use of agricultural credit
- Extent of Irrigation scheme rehabilitation
- Extent of rural infrastructure constructed and rehabilitated
- Number of service organizations registered and operational in rural areas

V.2. In addition, effective monitoring and evaluation will assist in early warning of problems such as climatic anomaly, food shortage, and local conflicts over the exploitation of the natural resource base including rangelands, environmental degradation, and gender and other forms of discrimination — such as bias towards pastoralists or agriculturalists — with respect to target group participation. M&E will keep the Programme on course and provide the basis for achievement and impact assessment.

V.3. Currently, the mandate of the *Ministry of Agriculture and Forestry* (MoAF), as stipulated by the Presidential–decree No. 378 of 18 June 2001, is to manage the agricultural sector policy and planning process. Therefore, the MoAF, in collaboration with the *Ministry of Irrigation and Water Resources* (MoIWR), and the *Ministry of Animal Resources and Fisheries* (MoARF), is responsible for the design, monitoring and evaluation of strategies and national indicative plans that enhance production of food and cash crops, animal products and forest products for domestic and export markets, and to conserve the natural resource base. The MoAF might have to establish a specific desk to follow up on the NEPAD/CAADP programme and to extend its outreach to the rest of the economy through joint committees at ministerial levels. The ministry would also have to organize focal points networks between the Federal and the State ministries to promote monitoring, coordination and evaluation process of the programme. Currently, the Planning Department of the MoAF is receiving institutional capacity building support from FAO that would strengthen its role in the follow up and monitoring of the implementation of agricultural and rural development initiatives.

## **ANNEXES**

- Annex 1: Macroeconomic and Sector Indicators**
- Annex 2: Linkages to CAADP of Sector Policies and Initiatives**
- Annex 3: List of References**



### Annex 1: Macroeconomic and Sector Indicators

Indicator	1990	1992	1994	1996	1998	2000	2002
GDP at Constant 1982 Prices (SD million)	747.1	844.5	914.8	1,027.9	1,211.0	1,365.8	1,564.8
Per Capita GDP (SD)	31.536	33.74	34.54	36.72	41.06	44.55	47.77
Export/GDP (%)	1.9	2.2	2.2	8.4	8.4	16.1	–
Import/GDP (%)	4.0	4.4	4.4	14.0	14.0	11.8	–
Trade/GDP (%)	-2.6	-2.2	-2.2	-5.6	-5.6	3.9	–
Budget Expenditure/GDP (%)	22.3	29.3	9.6	7.4	8.5	12.2	16.5
Government Debt/GDP (%)	197	282	282	204	204	179	–

Source: Government of Sudan.

Indicator	1990	1992	1994	1996	1998	2000	2002
Agriculture/GDP (%)	31.0	33.6	30.4	34.2	37.8	39.7	39.1
Agricultural Exports (SDD million)	338.1	2,175.3	89,124.0	43,096.1	76,281.3	89,874.9	–
Agricultural Imports (SDD million)	195.9	2,394.4	8,485.0	31,152.6	67,732.8	5,729.3	–
Ag. Exports/GDP (%)	3.2	5.4	4.9	4.2	3.6	3.2	–
Rural Population (million)	–	–	18.592	19.263	19.933	–	–
Urban Population (million)	–	–	7.894	8.728	9.562	–	–
Total Population (million)	23.690	25.030	26.486	27.991	29.495	30.657	32.752
Government Debt/GDP (%)	–	–	71.5	68.8	67.6	–	–

Source: Government of Sudan.

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**Table 3. Sudan: Area, Yield and Production Forecast by Crop and Region for 2003/04, Compared with Previous Years**

	Harvested area ('000 ha)						Yield (t/ha)						Production ('000 t)					
	98/99	99/00	00/01	01/02	02/03	03/04	98/99	99/00	00/01	01/02	02/03	03/04	98/99	99/00	00/01	01/02	02/03	03/04
<b>Sorghum</b>																		
Northern	64	107	58	171	70	120	1.45	1.74	2.52	2.16	1.51	1.31	93	186	146	369	121	157
Central	2,027	1,348	1,084	1,749	1,256	2,208	0.86	0.66	0.85	0.99	0.83	0.94	1,738	886	920	1,732	1,010	2,065
Eastern	2,377	1,355	1,431	1,407	1,429	2,365	0.78	0.34	0.5	0.49	0.42	0.64	1,860	456	734	687	691	1,509
Kordofan	627	813	1,003	1,046	1,026	971	0.65	0.32	0.20	0.50	0.36	0.38	406	261	196	528	365	366
Darfur*	299	462	193	753	591	448	0.67	0.53	1.22	0.64	0.47	0.58	200	245	236	480	241	260
South**	917	550	768	799	631	969	0.58	0.57	0.57	1.20	1.20	0.84	535	400	529	673	503	824
<b>Sub-total</b>	<b>6,311</b>	<b>4,635</b>	<b>4,537</b>	<b>5,925</b>	<b>5,003</b>	<b>7,081</b>	<b>0.77</b>	<b>0.51</b>	<b>0.59</b>	<b>0.77</b>	<b>0.61</b>	<b>0.73</b>	<b>4,832</b>	<b>2,434</b>	<b>2,761</b>	<b>4,469</b>	<b>2,931</b>	<b>5,188</b>
<b>Millet</b>																		
Northern																		
Central	92	125	76	84	91	180	0.46	0.4	0.36	0.30	0.35	0.42	42	50	27	25	33	75
Eastern	19	35	34	32	23	160	0.68	0.4	0.47	0.47	0.39	0.61	13	14	16	15	9	97
Kordofan	1,061	1,079	775	1,146	863	1,049	0.13	0.11	0.16	0.15	0.19	0.18	140	123	123	177	165	189
Darfur*	1,571	1,138	1,197	1,660	1,460	1,182	0.30	0.27	0.27	0.22	0.28	0.36	468	309	328	363	374	423
South	20	6	5				0.35	0.50	0.6				7	3	3	10	0	0
<b>Sub-total</b>	<b>2,763</b>	<b>2,383</b>	<b>2,087</b>	<b>2,922</b>	<b>2,437</b>	<b>2,570</b>	<b>0.24</b>	<b>0.21</b>	<b>0.24</b>	<b>0.20</b>	<b>0.25</b>	<b>0.30</b>	<b>670</b>	<b>499</b>	<b>497</b>	<b>590</b>	<b>581</b>	<b>784</b>
<b>Wheat</b>																		
Northern	55	63	92	60	67	77	2.00	2.87	2.85	2.70	2.31	2.40	108	181	262	162	197	185
Central	55	19	31	38	37	82	0.65	1.21	1.65	1.74	1.89	1.88	36	23	51	66	159	154
Eastern	28	6	11	2	2	8	0.75	1.17	1.55	7.50	1.50	1.75	21	7	17	15	4	14
Kordofan																		
Darfur	3	3	4	3	3	2	1.00	1.00	1.00	1.33	1.33	1.00	3	3	4	4	4	2
South																		
<b>Sub-total</b>	<b>141</b>	<b>91</b>	<b>138</b>	<b>103</b>	<b>109</b>	<b>169</b>	<b>2.10</b>	<b>2.35</b>	<b>2.42</b>	<b>2.40</b>	<b>2.13</b>	<b>2.11</b>	<b>168</b>	<b>214</b>	<b>334</b>	<b>247</b>	<b>364</b>	<b>356</b>
<b>TOTAL</b>	<b>9,215</b>	<b>7,109</b>	<b>6,762</b>	<b>8,950</b>	<b>7,549</b>	<b>9,821</b>							<b>5,670</b>	<b>3,147</b>	<b>3,592</b>	<b>5,306</b>	<b>3,876</b>	<b>6,328</b>

(\*) Caution is warranted with Darfur estimates, particularly western Darfur, as they are mainly based on discussion with provincial Ministry of Agriculture staff and were difficult to verify due to insecurity.

(\*\*) The sorghum data for southern Sudan includes maize.

Source: FAO/WFP Crop and Food Supply Assessment Mission to Sudan, FAO, February 2004.

## Annex 2: Linkages to CAADP of Sector Policies and Initiatives

### A. Government Investment Programme

- **Sudan Interim Poverty Reduction Strategy (2004–2006)**

Sector/Policy/Activity	Potential Relevance to CAADP Pillars				
	1	2	3	4	5
<b>Agriculture</b>					
Restructure and rationalize agricultural research				X	
Implement National Agricultural Extension policy				X	
Carrying out seed propagation programme for staple crops and vegetable crops			X		
Strengthen crop protection services against national pests			X		
Strengthening agricultural credit services of the Agricultural Bank of Sudan and extend them into the small producers cropping and livestock raising activities. This includes rural micro credit		X	X		
Expand food security projects over vulnerable areas in Sudan	X	X	X	X	X
Rehabilitation of irrigated schemes	X		X		
Establish a management information system and monitoring of crops, livestock, forestry products data and market information data on supply, purchases of these commodities		X	X		
Increasing yields of wheat and high value crops in the main Nile areas	X		X	X	
Sustainable livelihood in Tokar and Gash	X	X	X	X	X
Carry out the agricultural census in the country (crops, livestock, forestry)				X	X
Carry out the Land Use Map for Sudan		X			
Forestry conservation and development		X	X		X
<b>Livestock</b>					
Combating endemic diseases in animals			X	X	X
Rehabilitation of quarantine infrastructure and services		X		X	X
Carry out animal health services programmes including national vaccination			X	X	X
Carry out livestock breeding programmes to improve meat quality and increase milk productivity of animals (cattle, sheep, goats and camels)		X	X	X	X
Pasture improvement and management			X	X	X
Control of illegal fishing					X

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• **The Agricultural Five–Year Plan for Sudan (2003–2007)**

Sector/Policy/Activity	Potential Relevance to CAADP Pillars				
	1	2	3	4	5
<b>Agriculture</b>					
Development and promotion of wheat production	X	X	X	X	
Rehabilitation of Blue Nile pump schemes	X	X	X	X	
Rehabilitation of White Nile pump schemes	X	X	X	X	
Rehabilitation of the Gezira scheme	X	X	X	X	
Rehabilitation of the Rahad Agricultural scheme	X	X	X	X	
Rehabilitation of the New Halfa Agriculture scheme	X	X	X	X	
Establishment of Argeen pilot farm for crop production	X	X	X	X	
Development of Tokar Delta project	X	X	X	X	X
Development of Gash Delta project	X	X	X	X	X
Development of greater Darfur water project	X	X	X	X	X
Development of Khor Abu Habil project	X	X	X	X	X
Development of River Atbara project	X	X	X	X	
Development of flood irrigation schemes project	X	X	X	X	
Rehabilitation and development of rural development schemes in White Nile	X	X	X	X	
Rehabilitation and development of Rain fed cotton production in Nuba Mountains	X	X		X	
Rehabilitation and development of rural development schemes in Blue Nile	X	X	X		X
Rehabilitation and development of rural development schemes in Gedarif area	X	X	X		X
Rehabilitation and development of rural development schemes in North, and West Kordofan	X	X	X		X
Rehabilitation and development of rural development schemes in Jebel Marra in Darfur and south Darfur	X	X	X		X
Rehabilitation and development of rural development schemes in North Darfur	X	X	X		X
Special Programme for Food Security (SPFS)	X	X	X	X	X
Rural credit services for small producers		X	X		
Rehabilitation of Research and Extension services programme:				X	
• Rehabilitation of infrastructure					
• Reactivation of technology transfer activities					
Strengthen the crop protection services programmes:			X	X	
• Integrated protection against fruit flies					
• Strengthen pest and disease control					
• Scale insect combat programme					
• Combat of mesquite tree					
Strengthening of horticultural nurseries in States, establishment of information system on horticultural crops in Sudan, improvement of tropical fruits and onion crops for exports		X	X		
Institutional capacity programme for planning and statistics, bilateral relations of the Ministry of Agriculture and Forestry				X	
Rehabilitation and development of rice production in the South	X	X	X		
Introduction of potential crops in the Southern Region	X	X	X		
Encouraging private sector investment on Tea in the Southern Region		X			
Development of Malut Sugar production and processing factory	X	X			
Institutional capacity building programme for the Southern Region				X	
Establishment of agricultural services and technology transfer				X	
Establishment of agricultural machinery and equipments manufacturing industry		X		X	

**NEPAD – Comprehensive Africa Agriculture Development Programme**  
**Sudan: National Medium–Term Investment Programme (NMTIP)**

Sector/Policy/Activity	Potential Relevance to CAADP Pillars				
	1	2	3	4	5
<b>Livestock</b>					
Animal production projects			X		X
Animal food security projects			X		X
Export promotion for livestock and animal products		X	X		X
Expansion of veterinary services and combating contagious diseases		X	X	X	X
Establishment of animal extension services				X	X
Development of fish and aquiculture resources projects			X		X
Animal drug making projects		X	X		X
Development of animal products (milk, poultry and fish) in the Southern Region			X		X
Livestock statistics and management information system projects		X			X
<b>Land Resources</b>					
Rehabilitation of one million feddans of forest land					X
Rehabilitation of one million feddans of natural pastures					X
Establishment of 5 ranches in Gezira, White Nile, Sennar, River Nile, Blue Nile States		X	X		X
Rehabilitation of Saw mills in the Southern Region		X			X
Land Use Map		X			
Note: 1 feddan = 0.44 ha					

**B. Activities/Interest of Major Donors**

Donor	Area of Interest/Project	Total Budget (secured)	Relevance to CAADP Pillars				
			1	2	3	4	5
IFAD	Rehabilitation of the Gash Sustainable Livelihood Regeneration Project	US\$25m (ongoing)	x	x	x	X	X
	Western Sudan Resources Management Project (WSRMP), covering the Northern, Southern and Western States of Kordofan	US\$25m (pipeline)	x	x	x	X	X
	South Kordofan Rural Development Programme	US\$18m (ongoing)	x	x	x	X	X
	North Kordofan Rural Development Project	US\$10m (ongoing)	x	x	x	X	X
EU	Sudan Post Conflict Community–Based Rehabilitation Programme (SPCCBRRP)	€50m (pipeline)	x	x	x		X
	Sudan Productive Capacity Recovery Programmes (SPCRP)	€80m (pipeline)	x	x	x		X
	Institutional capacity building to support policy planning and development, food security, vulnerability and market information system, or integrated food security and information systems (SFSIS)	€20m (pipeline)		X	X		
	Promotion of Export Commodities/Support for Agricultural Marketing Chains	€10 (pipeline)		X			
IsDB	Water Harvesting Project in Darfur	US\$25m (not operational)	X		X		
	FAO–SPFS	US\$9.5m (pipeline)	X	X	X	X	X
	Rahad Irrigation Programme	US\$9.5m (pipeline)	X	X	X		
Libya	FAO–SPFS	US\$1.9m (pipeline)	X	X	X	X	X
Qatar	Qatar project for Merowe Dam	US\$50m	X	X			
Exchange Rates: US\$1= SD 260; Euro 1= SD 318.							



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