



**COUNTRY PROGRAMMING FRAMEWORK FOR THE
REPUBLIC OF SUDAN**

CPF (2012-2016)



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ACRONYMS

ABC	Agricultural Bank of Sudan
ARC	Agricultural Research Corporation
ANC	Animal Resources Bank
ARP	Agricultural Revival Programme
ARRC	Animal Resources Research Corporation
CAADP	Comprehensive African Agricultural Development Programme
CBS	Central Bureau of Statistics
CIDA	Canadian International Development Agency
COSOP	Country Strategic Opportunities Programme
CPA	Comprehensive Peace Agreement
CPF	Country Programme Framework
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EU	European Union
FAO	Food and Agricultural Organization
FAO-SD	Food and Agricultural Organization-Sudan Office
FCB	Farmers' Commercial Bank
FDI	Foreign Domestic Investment
FFS	Farmers' Field School
FRC	Forestry Research Centre
GDP	Gross Domestic Product
GoS	Government of Sudan
HCEANR	Higher Council for Environment and Natural Resources
IDP	Internally Displaced People
IFAD	International Fund for Agricultural Development
IPM	Integrated Pest Management
JFFLS	Junior Farmer Field and Life Schools

M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
NGO	None- Governmental Organization
NIP	National Investment Programme
NMTIFP	National Medium Term Investment Priority Framework Programmes
NSA	National Seed Administration
ODA	Official Development Assistance
PoA	Plan of Action
PPP	Public -Private- Partnership
PRSP	Poverty Reduction Strategy Paper
SIFSIA	Sudan Integrated Food Security for Action Programme
SPCRP	Sudan Productive Capacity Recovery Programme
UN	United Nations
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
USAID	United States Agency for International Development
USD	United States Dollar
WFP	World Food Programme

EXECUTIVE SUMMARY

The Setting

1. Sudan, with an area of 178 million square miles and 32 million people, is an agriculture-based economy. Agriculture underpins food security and rural development in the country: it contributes 30% to the GDP, employs 48% of the labour force, supplies the bulk of basic food for consumers, contributes over 80% of non-petroleum export revenues and provides subsistence and other incomes to the bulk of the population. The strong forward and backward linkages within the rural sector and with other sectors of the economy provide added stimulus for growth and income generation. Thus, significant progress in promoting economic growth, reducing poverty and enhancing food security in Sudan cannot be achieved without developing more fully the potential human and productive capacity of the agricultural sector.
2. The level of poverty in Sudan remains high where 46.5 percent of the population is below poverty line. There is also significant variation in the incidence of poverty between urban and rural areas as well as between states. The incidence of poverty in Khartoum State is 26.0 percent while it is 69.4 percent in North Darfur State.
3. The road to sustainable broad-based development in Sudan has been hampered by a number of country-specific challenges that render Sudan's experience unique from other post-conflict countries in the region. Since its independence in 1956, Sudan has mired in several conflicts, with the exception of 1972-1983; the period after the Comprehensive Peace Agreement (CPA) was signed in Addis Ababa/Ethiopia. These conflicts have led to huge loss of life and have severely debilitated the country's capacity for development. Despite many efforts deployed through international fora with assistance of the African Union, the Arab League, the United Nations with special commitment from some partners like Qatar to **effect** sustainable peace in the country, armed conflict **still** continues in Darfur and in some border states with the **recently newly seceded State of South Sudan**. These past and ongoing conflicts pose human and governance challenges for poverty reduction in Sudan. The people and Government of Sudan will need to build institutions for peace and development and shift resources and attention to investing in the future.
4. Coupled with high unemployment (at 21%) among youth, especially university graduates, and overlap in governance system, economic development in Sudan is facing serious challenges. Sudan has a debt burden estimated at US\$ 38 billion by the end of 2010, consisting of US\$ 16.1 billion principal and US\$ 21.9 billion interest.
5. Thus revitalizing the agriculture sector as a major source of government revenue, employment, foreign reserves and investments is crucial. In the agriculture sector, Sudan is facing a decline in growth rate of the crop and livestock sub-sectors due to fluctuations in rainfall, frequent droughts, credit supply and domestic and export marketing. Fisheries and forestry have a great potential, but have received secondary attention from government and hardly any attention from investors. Support for research and development is almost non-existent with no input from the private sector. Food insecurity, due to conflict, droughts, supply chain bottlenecks and disconnected domestic markets, is rampant in various parts of the country.

6. FAO envisages that the main challenges ahead are in: 1) Development of technical and functional capacity for policy and planning; 2) Enhancement of productivity and production in crops, livestock and fisheries; 3) Increasing public and private sector agricultural R&D; 4) Reforming Land Tenure System; 5) Improvement in data and statistical analysis capacity for food security monitoring and early warning; 6) Investment in infrastructure, irrigation systems and markets ; 7)Rehabilitation of grazing pastures and facilitation of fair land use resources sharing; 8) Increasing monitoring and provision of veterinary services for better disease outbreak management and 9) Expanding disaster risk management to include challenges arising from climate change.

National Priorities in Food and Agriculture

7. The CPF for Sudan includes 4 major priority focus areas: 1) Policy development and strengthening of agricultural statistical systems; 2) Enhancing productivity, production and competitiveness; 3) Conservation and development of natural resources; and 4) Disaster risk management (DRM). Gender, nutrition and other cross cutting issues such as capacity development will be treated as integral parts in all the priority areas identified for the cooperation.
8. **Priority 1 on the consolidation of policy, laws, planning and information and reform of institutions, systems and mechanisms in the agriculture sector** aims at: 1) Improvement of capacity to formulate effective strategies, plans, projects and programs and follow up their implementation; 2) reformation of land tenure system and improvement of regulations ensuring bank security, gender intergeneration and equity access to land and credit; 3) open access to data and information on agriculture production, productivity, prices, costs for better market transparency and better resource utilization for planning and policy decision making ; and 4) rationalization of self-dependence household and community natural resources use and management.
9. **Priority 2 on the enhancement of productivity, production and competitiveness of the agricultural sector** aims at: 1) strengthening and supporting of agricultural research institutions through funding and international cooperation; 2) strengthening of extension services institutions; 3) supply of relevant technological inputs that enhance agricultural productivity and competitiveness of crop production, livestock, forestry; and 4) improvement of productivity of agricultural farming systems, livestock, fisheries, forestry.
10. **Priority 3 on natural resources development and conservation** aims at: 1) development of forest, range land and pasture, and implementation of the Gum Arabic Belt program; and 2) improvement of land use and agricultural practices to maintain soil fertility, prevent soil erosion, and control degradation of natural resources.
11. **Priority 4 on capacity building of disaster risk management institutions, systems and mechanisms in agriculture** aims at: 1) Development of DRM legal and policy framework in food security and capacity for line ministries, partners, and community organizations for implementation; 2) Development of early warning system and monitoring for better response to agricultural threats and emergencies; 3) Improvement of disaster preparedness strategies and capacities for effective response and recovery; 4) Dissemination and application of improved technologies and practices in farming, livestock, fisheries, forestry and natural resources to vulnerable households; and 5) Increase the Monitoring capacity and the Veterinary Services for Better Disease Outbreak Management.

Implementation Arrangements

12. The FAO Representation office in Sudan will assume the leading facilitation role and responsibility for the CPF on behalf of FAO, while the GoS will be represented by the Ministries of Agriculture, Animal Resources and Fisheries and Environment and the Secretariat of the Agricultural Revival Programme (ARP) and other relevant ministries, agencies and stakeholders. The GoS represented by the Ministries of Agriculture and Irrigation, Animal Resources, Fisheries and Rangelands together with other sector ministries will be the sole owners of the CPF. Together with FAO, they will streamline the overall CPF programme implementation for the benefit of all concerned national stakeholders in the country.
13. Partnership and alliances will be forged by the establishment of a Steering Committee consisting of representatives of the relevant ministries and agencies of the GoS, and FAO Sudan and concerned stakeholders, including donors, UN agencies, other international organizations, NGOs, academia and private sector.
14. Resource mobilization strategies or options are by and large determined by the nature of the projects and programmes to be financed, with three main sources envisaged: Official Development Assistance from donors, GoS investment, and Private Public Partnerships (PPP) between the government and the private sector.
15. The implementation of the CPF will be monitored and evaluated regularly, and as a flexible and responsive tool, the CPF document will be reviewed and updated periodically.

I. JOINT STATEMENT

The Government of Sudan (GoS) through its line Ministries of Agriculture and Irrigation , Animal Resources and Fisheries; Water Resources, and Environment, Forests and Physical Development, and **together with** the Food and Agriculture Organization of the United Nations (FAO) took up the initiative of developing a Country Programming Framework (CPF) for the Agricultural Sector in Sudan.

The objective of the initiative is to align the FAO mandate and its comparative advantage in assisting Sudan to promote its agricultural sector through a coherent programming framework. The CPF, among other things, identifies and defines Agricultural and Rural Development priority areas, including Fisheries, Livestock, Forestry and Natural Resources, in which FAO has a lead. The CPF provides the broad commitment and technical assistance strategy of FAO, subject to the availability of required funding, for supporting Sudan efforts of achieving own national development objectives, as identified in the 2nd National Five Year Development Plan (2012-2017), the 2nd Agricultural Revival Programme (ARP) (2012-2016), the Three Years Economic Crash Programme (2012-2015) and the Interim Poverty Reduction Strategy Papers I and II (IPRSP I & II). The CPF also supplements and contributes to the United Nations Development Assistance Framework (UNDAF) (2008-2012) and the successor UNDAF (2013-2016).

The CPF-Sudan (2012-2016) is the result of extensive consultations held with a wide spectrum of national and international stakeholders and partners within the country and the backstopping of the relevant technical units of FAO at the Headquarters in Rome, the Sub- Regional Offices in Cairo and Addis Ababa, and the FAO-Rep office in Khartoum, Sudan. The co-owners of this document, GoS and FAO express their sincere appreciation to all who have so willingly made constructive comments and suggestions through this elaborate and exhaustive consultative process.

The CPF will be pursued in partnerships, as broad as possible, and in alignment with the joint efforts of GoS and the Community of Cooperating Partners for enhanced coordination and donors effectiveness. Therefore, GoS and FAO look forward to the genuine collaboration and support of all concerned partners' to join hands together to ensure the successful implementation of the CPF (2012-2016).

By endorsing the CPF (2012-2016) both FAO and the GoS agree to rise up to the challenges of realizing the priorities of the CPF. The CPF document will constitute the sole framework for cooperation between GoS and FAO represented by its Office in Khartoum, Sudan. FAO-Sudan is committed to provide the leadership and to mobilize the resources needed to implement the CPF. The GoS on its part agreed to collaborate fully to avail all possible resources and capacities for CPF disposal and to facilitate all means that enhance the functioning of the CPF. Moreover, the GoS is also expected to use the CPF as an important

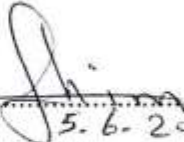


tool to mobilize NGOs, the civil societies and the general public at large to rise in unison for the fight against hunger and poverty.

The GoS, represented by the aforementioned line Ministries, and the FAO, represented by its Representative in the Sudan are, therefore, pleased to jointly launch the FAO/GoS CPF (2012-2016) for Sudan this 5th day of June 2012.

Signed: 

HE. Dr. Abdul-Halim Ismail Al-Mutaa'fi
Federal Minister
Ministry of Agriculture and Irrigation

Signed: 
5.6.2012

HE..Dr. Faisal Hassan Ibrahim
Federal Minister
Ministry of Livestock, Fisheries and
Rangeland

Singed: 

Mr. Mai Moussa Abari
FAO Representative in the Sudan

II. INTRODUCTION

FAO role in the development efforts of Sudan dates back to May, 1977 supporting 539 key projects at a total cost of USD 423 million excluding emergency programmes. FAO supported national objectives of raising agricultural productivity, food security and poverty alleviation, developing and conserving natural resources and promoting rural development. Notwithstanding FAO's efforts the performance of the agriculture sector remained relatively stagnant with low productivity and production. The end result was a poor rural populace suffering from seasonal food shortages and high rates of rural-urban migration.

FAO evaluated its cooperation with countries which have resulted in improved ways of providing support to member countries. Accordingly FAO as of 2011 has modified its modus operandi which resulted in the replacement of the National Medium Term Priority Framework (NMTPF), which guided country programming since 2005, by **COUNTRY PROGRAMMING FRAMEWORK (CPF)**.

The CPF set on the elaboration of **Strategic Objectives** based on its comparative advantage. ***The CPF is the planning and management tool or guide which based, on FAO's comparative advantages, outlines and identifies the areas of cooperation with countries for a period of five years.***

The CPF for a country will, in addition to Technical Cooperation Programmes, include **Disaster Risk Management (DRM)**, **National Investment Programme (NIP)**, and **National Programme for Food Security**. On the whole the change is aimed at enabling FAO to support countries more efficiently and effectively in the combat against hunger and poverty.

The CPF-Sudan was prepared by a team of International and national consultants backstopped by technical officers from FAO Regional and sub regional offices, and supported by the FAO Sudan country office.¹

The team reviewed the First Five Year Plan (2007-2011) and its subsequent evaluation report, The Interim-Poverty Reduction Strategy I and II (2011), The Agricultural Revival Programme, The Three Years Economic Salvation Programme, Sudan Millennium Development Goals Progress Report 2010, United Nations Development Assistance Framework (UNDAF) for Sudan and other important policy documents and reports. Documents reviewed also included NMTPF, FAO Achievements in Sudan, FAO Strategic Framework (2009-2019), FAO Plan of Action (PoA) for North Sudan and the Guide to Country Programming Framework. The team also conducted intensive discussions with the officials and experts of the Ministries of Agriculture, Animal Resources and Fisheries, Environment, Forestry, and Physical Development, the Secretariat of the Supreme Council for Agricultural Revival Programme and the Agricultural Research Corporation. The discussions centered on the development policies and programmes devised to promote the sustained growth of agriculture, challenges and opportunities, contributions of development partners, the value additions of FAO's activities and prioritizations of the areas of cooperation where FAO could make differences in enhancing the future growth of the sector. Consultation with

¹ Team was composed of Fasika Sidelil, Int. TCDC Team Leader, Ali Abdel Aziz Salih, National Principal Consultant, Mirghani Ibnouf, National Livestock Planning Economist, Mohamed A. Ibnouf, National Agric. Economist, Paul Gamba, Int. Policy Consultant FAO Sub-regional Office Addis Ababa. Special consultation was effected with FAO-DRM Programme specialists and staff in Khartoum office.

risk and emergency programme experts located in FAO Khartoum office covered the human aspect of the raised issues.

Consultations were also conducted with some of the major development partners engaged in FAO mandate areas. These included IFAD, WFP, UNDP from the UN Agencies and EU, USAID, CIDA from bilateral donors.

The CPF was based and governed by the priorities of the country as defined in its development plans, poverty reduction strategy, and other relevant development policies and programmes and lessons learnt. The current strong drive on the part of the Government of Sudan to revive agriculture as the key sector to achieve its development goals is based on profound economic justifications. The strategy is viewed as the most viable and effective alternative to enable the country to move towards the path of sustained economic growth and attainment of the MDGs. The secession of the South with loss of 75 percent of oil revenues to the South also reinforced the emphasis to revitalize agriculture as a key sector to ease the foreign exchange and revenue losses resulting from the secession.

Through these consultations the team tried to identify the areas in which development partners were engaged with the view to ascertain if the proposed areas of cooperation for FAO support complemented the efforts of development partners and provided synergy to further enhance the growth of the sector. Whenever possible the team also tried to pay heed to partners experience with the view to derive lessons that could help to enhance the effectiveness and efficiency of the execution of development programmes.

In the final analysis, **as mentioned above**, the CPF was based and governed by the priorities of the country as defined in its development plans, poverty reduction strategy, and other relevant development policies and programmes and lessons learnt. The CPF was focused, to the extent possible, to give emphasis to areas **where agriculture in Sudan must be developed** with renewed vigour and priority **to be able** to overcome the problems that **evolved** from the secession of the South, and also to lay strong foundations for the sustained growth of its economy.

Finally a word of caution regarding the data employed in the report will be in order. As it is true with studies of such nature the analysis is based on historical and most current data available on the socio-economic conditions of the country. However, the data up to 2011 and before refer to the developments in both North and South Sudan. It is, therefore, important to bear in mind that all the data employed in this study refer to the Sudan before July, 2011 i.e. before the secession.

III. SITUATIONAL ANALYSIS

3.1 NATIONAL CONTEXT

Sudan with an area of 178 million square miles and 32 million people¹ has an agriculturally based economy. Agriculture contributes 30% to the GDP (Bank of Sudan, 2010), employs 48% of the labour force (Census, 2008) and provides 80% of non petroleum exports revenues. Sudan has a debt burden estimated at US\$ 38 billion by the end of 2010, consisting of US\$ 16.1 billion principal and US\$ 21.9 billion interest arrears². Sudan is completely located within arid and semi arid zone being part of the Sudano-Sahlian zone.

The pattern of economic growth in Sudan had always been lopsided between regions and social groups benefiting few areas and limited social groups. The high growth rate attained during the last two decades conceals wide gaps in income equality, employment and incidence of poverty. The incidence of poverty between rural and urban, the centre and the peripheries, and gender was highly skewed.³ In 2009, the population below the poverty line⁴ was estimated at 14.4 million people. The labour market in Sudan is deformed in terms of duality (rural-urban, traditional-modern and formal-informal), legal rights (social security), dynamism and skill (child labour, seasonality of unskilled labour).

Sudan is still suffering from political instability in Blue Nile and South Kordofan States and parts of Darfur region. Given the large size and diversity of the country natural endowment, it is expected with prudent management and carefully crafted adjustments can lead to inclusive and vibrant economic, political and social systems. The prospects for rapid economic and social growth are still very high.

3.2. SITUATION AND OUTLOOK: AGRICULTURE, FOOD SECURITY AND RURAL DEVELOPMENT

AGRICULTURAL DEVELOPMENT IN SUDAN

The performance of crop production in the irrigated, semi-mechanized and traditional rainfed farming systems in Sudan has varied across those farming system⁵. While the growth rate of **crops** has dropped from 8.5% in 1991/92-1999 to 3.6% in 2000-2008, the share of crops in the agricultural GDP remained almost stagnant (about 47-46.3% respectively). **The irrigated and the traditional crop production subsectors** with the highest share in crop GDP contribution had largely been hit. Both subsectors accommodate large numbers of tenants and peasants in the country. One breakthrough for poverty reduction at large should focus on addressing the weaknesses of these two subsectors. The **semi-mechanized farming subsector** with high crop growth rate but extremely low share in the agricultural GDP requires in-depth consideration. The crop mix, varieties, yields, quality and risks in rainfall, credit supply and marketing domestically

¹ Go Sudan, Millennium Development Goals Progress Report 2010, Khartoum, 2011, P.1.

² Go Sudan, P.6

³ Go Sudan, Millennium Development Goals Progress Report 2010, Khartoum, 2011, PP14-16.

⁴ Defined to be the amount of income that will allow consumption level of 1751kc.

⁵ They grow a diversity of food and cash crops for domestic and exports markets. These included cotton, sugarcane, wheat, sorghum and millet, sesame, sunflower, groundnuts, fruits and vegetables, rosella and water melon seeds.

and for exports **are factors responsible for poor performance of the agricultural sector and need revision** (Note that semi-mechanized and traditional farming have almost same size of area under cultivation but different share in the agricultural GDP).

Regarding the **livestock subsector** with a comparable share in the agricultural GDP as that of the crops is experiencing sharp drop in its growth rate. While most of the production of animal husbandry is taking place in the nomadic area the commercial benefits of the livestock is accumulated in the metropolitan areas (some of the big traders are off springs of those nomadic tribes). Furthermore, the conflicts during droughts and civil instabilities affect negatively the normal flow of livestock from production to consumption areas.

Forestry and fisheries are subsectors that are treated as marginal activities. Their growth rates and shares estimates are hypothetically based without concrete data evidence. These two **resources** are receiving more attention from foreign international organizations than from the national authorities and they can make a big difference in improving income level of households in the rural areas and can reduce high cost of living in the country (especially for low income groups).

Research and technology transfer (R&D) are critical prerequisites for agricultural growth, development and enhanced productivity, which have been largely over looked for a long period in Sudan. The government is requested to comply with the Comprehensive Africa Agricultural Development Programme (CAADP) recommended percentage of the national GDP on research and technology transfer, and be patient for bountiful deliveries. The role of the private sector in supporting this R&D is completely absent.

FOOD SECURITY

Generally, Sudan is self sufficient in sorghum and millet, the main staple crops of the majority of the population. The conflict states of South Kordofan, (and to some extent Blue Nile and Kassala), and the drought prone areas of North Kordofan and Red Sea states are the main vulnerable areas to food insecurity in Sudan. In general apart from Darfur, food insecurity is widely spread in fragile areas and among vulnerable groups in the country.

RURAL DEVELOPMENT

The biased economic growth in Sudan had resulted in disparities among regions and social groups benefiting urban and modern agricultural spots at the expense of the largely populated rural area. The proportion of food deprived population was 34 % for the rural population while it was 31% for the urban areas. The IPRSP II indicated a higher poverty rate incidence among rural dwellers with 57.6 % of the household below the poverty line compared to 26.5 % of the urban population in 2009¹. The recurrent cyclical droughts and low priority accorded to the traditional production sector resulted **in** severe deforestation of natural vegetative cover, overgrazing and massive migration from rural to urban and large irrigated sectors. The women and internally displaced people who constitute about 12% of the population were the hardest hit by poverty in the rural areas.

EMPOWERMENT OF WOMEN IN SUDAN

¹ Go Sudan, Interim PRSP, P.12

Despite the significant constitutional rights bestowed on gender equality and empowerment of women, still women access to land and employment is low and difficult. It is in the economic field where more effort is needed to enhance the role of women. Women are still dominant in the informal and agricultural sector. Their participation in the formal sector though on the rise, is still low. Women make up only a third (32.23%) of the labour employed in the formal sector and unemployment of women in the labour force is also quite high.

Employment of youth in Sudan

Sudan rate of unemployment is estimated at 20.7%, with a high percentage among the young fresh graduates and others. The distribution of unemployment by age groups indicates that the highest unemployment is for the age group 15-24 (32.80%), followed by the age group 25-39 (32.44%). Employment of graduates is a pending issue in this country.

AGRICULTURAL DEVELOPMENT POLICIES AND PROGRAMMES

The **policies and the plans** are always based on crash-programs without long term strategies that draw a road map into the future. The existing idle policy analyses and planning institutions and machinery in the different line ministries are not involved in delivering reliable and dependable information for senior decision making.

The implementation of the government plans are always behind target date as being carried out by different non coordinated ministries and institutions. Moreover, resource utilization and transfers may be wasted because of duplicate mandates of those line ministries as those resources transactions are not properly monitored or documented.

Main Challenges

Although Sudan is endowed with rich and diversified natural resources, due to poor management and unsustainable utilization of the resources desertification, land degradation, water pollution, deforestation, violent conflicts and deterioration of biodiversity have emerged as serious threats to its natural resources base. The low priority accorded to agriculture and natural resource conservation and development, the long civil wars and the huge displacements of population caused by droughts, civil conflicts and the land tenure system are among the main challenges facing Sudan. The frequent occurrences of drought and the low productivity of crop and livestock are directly related to poor policy and mismanagement, environmental and climatic changes associated with the deterioration of biodiversity. Unemployment is also caused by the exogenous environmental problems, for instance unemployment figures were affected by the severe drought that spread throughout Sudan in the 1980s and further.

1. Developing technical and functional capacities for agricultural policy and project formulation, planning and implementation,
2. Enhancing the productivity and production of crops, livestock, and fisheries through better access to improved technologies, breeds, finance, markets, and opening new lands for cultivation
3. Increasing public and private sectors support to develop and strengthen agricultural research capacity and technology transfer, and their inter-linkages with the target producers,
4. Reforming the land tenure system to ensure fair and equitable access to land for reducing poverty and food insecurity
5. Developing and strengthen institutional capacities for collection and dissemination of agricultural statistics and information, conducting periodic census on agriculture, livestock,

- fisheries, forestry, natural pasture, and water resources for better policies design, programming and planning
6. Developing the institutional, human and technical capacity to improve the existing irrigation system, and to expand water harvesting systems
 7. Developing improved infrastructure and market facilities,
 8. Rehabilitation and developing of natural pastures and grazing systems,
 9. Improving agricultural and veterinary services, increasing declared disease free lands to improve quality and marketability of livestock resources
 10. Develop technical and functional capacities to protect, conserve and preserve natural resources and to control desertification, land degradation, water pollution, deforestation, soil erosion processes and the expected consequential climatic changes facing the country.
 11. Expanding disaster risk management experiences to vulnerable marginal lands and areas in rural areas of Sudan to mitigate natural, economic and manmade hazards.

ANALYSIS OF GOVERNANCE SYSTEM AND NATIONAL STAKEHOLDERS; DECENTRALIZATION AND TERRITORIAL ASPECTS

The **existing** decentralized governance system shapes the **current** performance of agriculture in Sudan. The federal and states governments mandate and responsibilities overlap and result into non-organized planning and management of the agricultural sector. The stretched governance system is composed of a large number of government institutions. At federal **level**, the main actors and institutions involved included the Federal level line ministries and specialized agencies. The specialized agencies included agricultural research, finance, insurance and disaster evasion, export insurance, statistics.

At State level, each of the 15 States have an executive (Governor and Council of Ministers) and legislative (State Legislature) and judicial branches (State Judiciary).

At locality level, **have** the local governments and the community organizations and associations especially trade unions, village councils, cooperatives, women's groups, youth groups, vocational training centers, market vendors, livestock producer associations, service providers, and underprivileged or marginalized groups.

All these actors have entangled and vested interests in agricultural development, food security and poverty alleviation, which are conflicting to each other and need coordination for efficient utilization of natural, financial and human resources for the development of agriculture of Sudan.

IV. FAO'S COMPARATIVE ADVANTAGE AND CAPACITIES AND PRIORITY AREAS

4.1 ENGAGEMENT OF DEVELOPMENT PARTENERS

Except for the UN agencies, most donors resumed their paused development activities in Sudan after the signing of the Comprehensive Peace Agreement (CPA). The EU resumed its operation in 2005 after 15 years and the World Bank that restarted its activities in 2006. The resumed operations with the exception of the EU and a few others are primarily engaged in emergency works and in the rehabilitation of infrastructure.

The team of this study made consultations with the UN Agencies and the EU, CIDA and USAID as these were the major ones engaged in FAO mandate areas. The aim was to identify and map the activities in which partners were engaged with the view to ascertain no duplication of efforts is taking place, and to ensure complementarities and creation of synergies. Below is a brief resume of the consultation conducted with the partners.

IFAD: started in Sudan in 1979 executing its second Country Strategic Opportunities Programmes (CSOP) extending from 2009-2012. IFAD spent US\$ 257 million to finance agricultural and rural development in rainfed agriculture. It creates cooperatives, women, farmers and pastoralist unions, and provides improved extension services to poor farmers and supports revolving credit **fund** projects, micro finance, feeder road construction, agro-processing, storage to improve the access of the poor to finance and input and output markets.

WFP: delivers emergency food to people in crisis due to manmade or natural causes. It supports recovery activities. About 70% of its total budget of US\$ 500 million went to emergency and 30% to recovery. WFP undertakes two activities related to FAO's mandate; food security analysis, and in recovery work similar to FAO-Disaster Risk Management (DRM) in its emergency wing. The recovery work of WFP includes building of water reservoir, **hafirs**, roads or tracks for animal movement to water points and markets, for restoring the livelihood and resilience of communities. Unlike most UN Agencies WFP's operations are guided by a one year plan.

UNDP: UNDP finances agricultural, food security and rural development activities **which are also generally** executed by FAO. Hence, there is duplication **while** the two Agencies **have to** complement each other. The UNDP opinion is that FAO must have a leading role in the Government Agricultural Revival Programme preparation and implementation. The UNDP perceives FAO as provider of leadership in elaborating relevant strategies that enable the country to utilize its high potentials in both crop and livestock production. FAO has the expertise and the mandate to help the government in devising strategies that enable nomads to benefit from the livestock development. FAO has world wide experience and knowledge in land tenure system reform becoming an obstacle to the growth of agriculture and to the maintenance of peace and harmony to social groups' conflicts in country. In brief UNDP's proposal is that FAO should be prepared to play a major leader role in supporting the government in its agricultural revival programme.

EUROPEAN UNION: It is the major contributor for food security and agricultural development in Sudan. EU's operation in Sudan is focused on three areas. At community levels they work with NGOs and UNDP supporting livelihood development at grass root levels. At the national level they work with government ministries on projects that aim to improve the access of poor farmers in rain fed agriculture to finance, inputs and markets. In these areas EU is cooperating with FAO in the execution of some of its largest projects, namely the **SIFSIA and SPCRP**. SIFSIA aims at developing capacity for food security assessment ending with the establishment of Food Security Secretariat. The objectives of the strengthened secretariat through capacity building programmes are to lend its technical services in the area of food security analysis. The programme generates crop and market trend assessments reports based on information collected from government ministries and regional states and from surveys conducted in representative areas. The study team realized a duplication of mandate between the **SIFSIA** Secretariat and **WFP**. The two organizations have to coordinate their activities to overcome overlapping actions under FAO leadership in areas of agriculture and food production and marketing areas. The EU opinion is that the UN agencies do not coordinate functions and services and therefore waste resources and time effort. The **SPCRP** contributes to the recovery of both human and physical productive capacities in four vulnerable states as a result of the long-lasting civil conflict and droughts. **The Capacity Building (CB)**

Component of the **SPCRP** aims to contribute to **the enhancement of** food security and rural development by providing key public and private support **to the administrative, advisory and capacitating services to the selected localities in the four states.**

The EU opinion is that FAO was not adequately staffed and strengthened to stand up to **the big challenges** mandated to her in Sudan. FAO as the lead UN Agency is expected to engage **with** the government on policy matters and in particular to push the government to elaborate policies in areas where there are no policies or where the existing policies are inadequate. The lack of national food security policy is one example raised in this connection. To be adequately represented and to embrace itself for the tasks ahead, EU recommended that FAO be strengthened and work more actively with donors to mobilize resources and support the agricultural development programme of the country.

CIDA: is currently engaged in humanitarian assistance and is willing to participate in livelihood development and poverty reduction. CIDA first activity was supporting a **recovery/livelihood project** in South Kordofan which did not take off due conflict situation in the area. CIDA is working in consultation with the Government on how best to commence the work as soon as possible. Regarding FAO's role in the country, CIDA is of the opinion that FAO's should not be engaged in executing projects that could be implemented by NGO's. CIDA views FAO playing a lead role in engaging the government on policy matters and also in coordinating the activities of donors in supporting agriculture and food security development in the country.

USAID: is the largest provider of humanitarian assistance to Sudan although it is not engaged in financing development projects. However, they are currently in the process of identifying possible areas of cooperation probably in recovery or livelihood programmes to make a very modest contribution to the development effort.

There are other institutions that collaborate as well, like UNEP, ECHO, etc.... The Arab Organization for Agricultural Development (AOAD) with its engagement in Darfur and in Fisheries resources **development** in Khartoum State is a welcomed new partner.

The big humanitarian donors' efforts are also acknowledged as important in the humanitarian, recovery and development process in Sudan.

Important conclusions on FAO-Partners role the emerged from the consultation:

- Where development partners are engaged in FAO mandated areas must avoid the duplication by getting the projects or programmes executed by FAO or in cooperation with FAO. The actions taken by UNDP, EU, and CIDA are positive examples of cooperation along these lines.
- Where duplication exists discussions are needed to coordinate is in food security information collection and analysis and the recovery work undertaken by both FAO and WFP.
- Except in the cases noted above, projects executed by FAO including the proposed areas of cooperation do not duplicate with the activities carried out by other development partners; on the contrary they complement and add synergy to the overall effort to enhance the development of the sector
- Almost all the partners stressed the need for FAO to strengthen its country office in Sudan so that it is able to rise up to the challenges of supporting the government in implementing the ARP and coordinating donors action in its mandate areas

4.2 FAO COMPARATIVE ADVANTAGE

In principle the comparative advantages of FAO are derived from its mandate as the lead Agency in agriculture, food and nutrition security. To measure up to the challenges the Agency had been devising strategies and objectives that could enable it to effectively and efficiently execute its mandate in the realities of each epoch. As situations changed the Agency also adjusted not only its strategies and objectives but also its organizational structure, philosophy of management and its approach to development. The latest in this series is the Strategic Framework 2010-2019 which it adopted in Rome, 18-23 November 2009. This document has clearly and unambiguously articulated FAO's strategic objectives (11) what it calls functional objectives (2) and 8 core functions which are also the comparative advantage of FAO. To be a more effective partner, FAO's role needs to shift from a technical assistance provider and project implementer towards an up-stream facilitator of country-lead change processes where the national capacity within technical and functional skills is developed across the aforementioned three dimensions. FAO's comparative advantage is therefore to act as a facilitator and neutral partnership broker in providing the Republic of Sudan with technical policy and other capacity development support across the three dimensions such as to assess capacity needs and developing functional and technical capacities.

In measuring the extent to which FAO activities in Sudan has lived up to its comparative advantage, FAO carries out regular review and evaluations for its projects and programmes to assess design, implementation, results, relevance, efficiency, effectiveness, impact, connectivity and sustainability of its activities in Sudan. This is in addition to comprehensive Country Programme Evaluations where the last one for Sudan was carried out in 2009 covering the period (2004-2009). The assessments and evaluations focused on whether the areas in which FAO was engaged in Sudan were consistent with FAO's objectives and the extent to which the projects or programmes were executed effectively and efficiently. It is the outcomes of these assessments and evaluations that should suggest or indicate FAO's comparative advantage in Sudan.

In its more than three decades of operation in Sudan FAO had supported a number of projects and programmes that saved lives and promoted the development of agriculture, livestock, fisheries and natural resources. In direct quantitative terms it has executed 539 projects, costing US\$ 423 million. This is of course the direct cost of the projects and not the benefits which, if estimated, would go into billions of dollars. Moreover, the rich knowledge base of FAO in which pools of expertise exists at HQ level which can be tapped whenever those expertise are required at country level adds to the comparative advantage of FAO.

Areas of FAO Involvement:

The following few areas in which FAO was and is currently engaged together with a long list of activities stated in the FAO's evaluation document, not mentioned here for space limitation, would suffice to make the point very clear.

- **Building the Agricultural Research Corporation (ARC):** although it is not a recent example the technical, institutional and scientific capacity of the Agricultural Research Corporation of the Sudan was developed by FAO. FAO established and equipped the different laboratories. The soil laboratory which FAO helped to build was at one time

regarded as the best laboratory in Africa. It trained large number of young professional in the best universities in USA and United Kingdom who turned out to be the outstanding scientists of the Council.

- **Development of Seed Industry:** The National Seed Administration (NSA) was established with support from FAO. FAO trained the staff, built and equipped the laboratory, seed processing plant and seed production farms. FAO also drafted the seed legislation. As a result of the capacity FAO created, Sudan was able to produce 100% of Sorghum seeds which is the main staple crop and 89 % of the seeds of Millet crop another staple crop. However, following the privatization of the seed industry, the role of NSA has been confined to legislative and quality control matters but the seed production activities were taken over by the private sector. Due to funding constraints, overall seed production has regressed markedly.
- **Introducing Integrated Pest Management (IPM):** Since Sudan endorsed the application of IPM as a pest control method, FAO developed suitable packages to the eco-system for cotton and vegetable crops. The package was successful as it helped to reduce the number of sprays and hence the volume of pesticide imported and the foreign exchange required. The success achieved led the government to encourage the use of IPM in other crops and made IPM one of the accepted tools of the extension system.
- **Establishment of a Forest's National Corporation:** FAO through the establishment of this corporation was able to enhance the production and export of Gum Arabic there by contributing to the improvements of the livelihood of a large number of people who depended on it and also to boost the foreign exchange earnings of the country.
- **Education for Agriculture and Development:** through this project FAO was able to support the development of relevant curricula for the teaching of forestry in post secondary institutes and also to establish the first forestry department in the country, in the University of Khartoum.
- **Improving Access of Farmers to Inputs:** in this project FAO built rural service centers which provided fertilizer to farmers and other inputs and also short term credits. Along with the provision of the inputs the centers also gave advice on the methods of application of the inputs and farm management skills. Since the project was successful in increasing farmers yields other donors also followed suit in spreading the centers to areas where they were needed.
- **Improved Preparedness for, and Effective Response to, Food and Agriculture Threats and Emergencies:** through this programme FAO was able to combine relief and recovery. Its objective is not only to restore lost assets and livelihood but also to build resilience and to enable households to transit into sustained development. The programme is guided by a two year Plan of Action (PoA) 2010-2012 and aims, among others, to improve crop production and productivity, livestock health and production, environmental restoration and protection, livelihood diversification and technology transfer and to build capacities of governments and communities in early warning, preparedness, and mitigation.
- **Preparing National Programme for Food Security Action:** through this Programme FAO developed a food security action programme for both the North and South Sudan. Both governments endorsed the proposals and incorporated them in their national development plans
- **Sudan Integrated Food Security for Action Programme(SIFSIA):** The Programme is executed by a well established secretariat with the prime responsibility of generating food security data and statistics for analysis and policy design through crop assessment and market studies to enhance the governments capacity to formulate relevant food security and nutrition policies and programmes and food security interventions.

- **The Sudan Productive Capacity Recovery Programme (SPCRP):** the program is implemented by FAO through an EU Stabex fund of €80 million over four years (January 2007 to December 2011, extended until 2012) to strengthen human and physical capacities of government and non government actors at locality levels in selected vulnerable states with a key focus on rural extension. The main thrusts of the programme are to (i) stabilize peace, (ii) enhance food security and (iii) improve rural livelihoods. The SPCR complements the EU's new food security strategy and the Food Security Thematic Programme (FSTP) and the Sudan Institutional Capacity Programme: Food Security Information for Action (SIFSIA).
- **Reducing Animal Disease and associated human Health Risks:** FAO's role in controlling animal diseases and in supporting veterinary services in Sudan is referred to as an exemplary work and has been very successful in every way. FAO also provided strong capacity development to agencies involved in animal slaughtering, meat hygiene, and inspection.
- **Disaster Risk Reduction (DRR):** Since 2003 FAO-Sudan, has been providing support in agricultural emergency and rehabilitation programs to vulnerable households in the sub-sectors of crops, livestock, fisheries, forestry, fishery, natural resource management, and other related livelihood resilience building interventions in three regions of the Sudan: Greater Darfur (comprising North, South and West Darfur), the Transitional Areas (Abeyei, Blue Nile and Southern Kordofan) and Eastern Sudan (Gadaref, Kassala, and Red Sea State).

The list of projects and programmes is very long. The descriptions of the projects albeit brief are sufficient to demonstrate the width and breadth of the participation FAOSD in the development process of Sudan. It is involved in monitoring and assessing trends in food security and natural resources, in supporting development of national legal instruments and promoting their implementation, articulating policy and strategy options and advice, in promoting the transfer of technology, developing capacity particularly of rural institutions, and working through strong partnership and alliance. Each of the above mentioned projects are related to one or more of the comparative advantage or areas of competence of FAO.

The size and diversities of the projects and in some cases their complexities suggest the wide experience that FAOSD had accumulated over the years. On top of this the opinion gathered from stakeholders in the process of the consultation was also very supportive of the constructive and effective role FAO had played in the promoting the development efforts of the country. From all accounts FAO is an institution that has earned the confidence and respect of its partners in government and among producers as well. This can only result from the effective work it rendered or accomplished in executing the projects and programmes. In executing the livestock disease control programme, for example, FAOSD was able to operate freely even in territories that were under rebel control. Nothing more can demonstrate the high confidence that stakeholders have in FAO than this incident.

The technical expertise of the Agency is quite evident from the qualities of the work it executed and from the satisfaction of Government and partners that received the benefits and provided the funds for some of the projects. The results of the assessments and evaluation undertaken in the recent past also confirmed the strength and competence of the office in its mandate areas. **Truly,** FAO must be prepared to rise up to the new challenges in Sudan. It should be able play an upfront role in supporting the government in the promotion and implementation the ARP and the renewed emphasis given to the sector. As the lead UN Agency on agriculture and food development FAO has the responsibility to engage the government on policy matters and in coordinating the activities of donors engaged in financing and supporting projects and programmes in agriculture, food security and rural development and in mobilize resources. The conclusion that emerges from the analysis

competences and comparative advantages is that FAOSD has the technical foundation and strength to rise up to the challenges in Sudan.

V. Priority Areas for FAO-CPF

Based on the consultation with Government responsible authorities in agriculture and concerned institutions and the ARP Secretariat, and on analysis findings the following priority areas are identified for the FAO-CPF (20012- 2016):

- 1) Policy Development and strengthening of agricultural statistical systems
- 2) Enhancing Productivity, Production and Competitiveness
- 3) Conservation and Development of Natural Resources
- 4) Disaster Risk Management (DRM)

Gender, nutrition and other cross cutting issues such as capacity development will be treated as integral parts in all the priority areas identified for the cooperation.

5.1 (A) PRIORITY AREAS

PRIORITY AREA 1: Capacity building and consolidation of policy, laws, planning and information institution, systems and mechanisms reforms and development in agriculture, livestock, forestry, and fisheries of Sudan

Outcome: Functional capacity for policy and planning, legal reform and improvement on valid and reliable management information system at federal, states, local and community levels enhanced, developed and sustained.

Output 1: Capacity to formulate policies, plans, projects and programs and follow up implementation improved

Owing to the limited guidelines and financial position of the agricultural policy and planning institutions in Sudan, they base their policy and planning activities on crash programmes with absence of long term strategies. CPF can support formulation and implementation of policies that cover poverty alleviation, food security, land tenure, improving nutritional status, raising productivity, supporting other sector policies. Support a program of National Agricultural Staff “NAS” that can benefit from available experienced and skilled human resources in disciplines of agriculture (planning, management and administration, research, extension , agricultural services in crops, livestock, forestry, fish, natural resources,..); the preliminary estimates of such human resources goes up to 3000 agricultural professionals on pension or outside the official employment circles. Facilitating policy dialogue and to have proper agricultural strategies and policies require enhancing. The problem is observed at all levels of government from the federal down to the local levels. To mitigate the problem and to provide the administration with qualified manpower cooperation CPF will provide technical assistance to:

- Formulate policies for poverty alleviation, achieve food security and improving nutritional status of vulnerable groups (possible EU support), increase productivity and production and improve land tenure policies.

- Provide practical measures for effective management and networking of vertical and horizontal linkages and interactions among key players for agriculture policy making and planning in Sudan at federal, state, locality and community levels.
- Strengthen the institutional and human resources capacities of formulating and implementing policies, plans, strategies and projects in agriculture and food security, and associated services and domestic and export markets.
- Identify the policy and planning training requirements of the ministries and specialized agencies at federal, **state** and local levels.
- Establish a Policy and Planning Training Centre in the Ministry of Agriculture for capacity building,
- Support a program of National Agricultural Staff “NAS” that can benefit from available experienced and skilled human resources in agriculture policy and planning.
- Provide opportunities for young professionals to get education in advanced universities and institutions of excellence in agricultural economics, livestock, marketing, project formulation, value chain analysis, etc and monitoring and evaluation

Output 2: Capacity to reform land tenure system **achieved and proposals for improved regulations ensuring bank security, gender and intergeneration equity access to land and credit drafted; land impediment to private sector investment removed; and instituted LAND COMMISSION implemented**

The present usufruct land tenure system practiced in Sudan created conflicts among crop producers and between crop and animal producers, and evolved into environmental degradation in the country. The specific land tenure practices in the irrigated, semi- mechanized rainfed and traditional rainfed farming systems have their own specific shortcomings and on top lack unified land administration. Because of the key role of land tenure in equal and fair access to land and investment on farm assets and infrastructure, and use as collateral for accessing short, medium and long term credit and finance, the CPF identified this area as a top priority for consideration. The CPF can support the review of the existing land tenure system and develop a policy that enhances growth and develops harmony among the different tribes and groups of the population and contributes to the conservation of the ecosystems and biodiversity. To this effect **FAO-CPF** is expected to

- Develop the capacity of the government to design elaborate policy and draft a text which will adequately address the complex issues associated with equity access to land especially for women and youth,
- Develop practical measures for effecting and implementing the Land Commission for agriculture under a uniform land administration
- Develop the technical and functional capacities of the institution that will be responsible to implement the proposed land policy

Output 3: Capacity of collection of data and information on agriculture production, productivity, prices, **and costs are enabled.**

All the development plans and policies point out the state of agricultural statistics in Sudan is pathetic. It is well over twenty years since the last agricultural census was carried out. To be more precise the latest livestock census was conducted in 1978 and of agriculture in 1983. To ensure the relevance and quality of policy formulation and planning **FAO-CPF** will:

- Develop the technical and functional capacities across the individual, organizational and policy level to collect the required agricultural information on vital statistics such as household income and expenditures, cost of production and returns, price of inputs and

output in local and international markets, etc on crops, livestock, forestry, fisheries on a regular basis

- Plan and conduct agricultural census on crop, livestock, fisheries, water resources, forestry, natural pastures, etc.

PRIORITY AREA 2: Capacity building of agricultural research, technology and knowledge development and transfer for enhanced productivity, production and **competitive institutions, systems and mechanisms in agriculture, **livestock**, forestry, fisheries of Sudan.**

Outcome 1: Agricultural research and technology transfer policy and implementing capacities and institutions developed and sustained

Output1.1: Agricultural research institutions strengthened and supported sustainably

Agriculture Research in Sudan lacks the human and institutional capacity to support new innovations in crop, livestock, forestry and fisheries of Sudan. The main bottleneck is related to lack of qualified personnel, poor training of research staff, ill-equipped laboratories and inadequate financial support for research programs. The ARP and the MDGs and IPRSP I and II cannot be satisfactorily realized without the support of the Research Corporation to provide the producers with improved technologies to and inputs that enhance the presently low level of productivity. The CPF intervention will:

- Develop demand driven and site specific adaptive research programs with diverse producers and extension services linkages.
- Qualify researchers in advanced universities **and** training centers and exchange visits for gaining on field experiences.
- Rehabilitate, upgrade and modernize the technological basis of research facilities and laboratories
- Enable research link up with advanced research institutions to monitor developments in the different fields of agriculture and to continuously upgrade the researchers experience through exchange programmes.
- Promote association of research and extension with the Private sector.
- Promote "Save and Grow" concept.

Output 1.2: Extension services institutions strengthened and supported sustainably, Extension law endorsed

The low productivity of agriculture in Sudan is partly due to the inadequacy of the extension system. The weak linkage between the extension services, research findings and producers demands have been responsible for the low productivity and the traditional production systems. The effective extension system depends on available relevant knowledge, skills and information on technological package to be transferred to the agricultural producers in the different parts of the country. The transformation of a subsistent agriculture into a modern, commercialized agriculture depends to a great extent on adoption of producers to appropriate technology packages with the advice of effective and efficient extension service system. To provide rural advisory services, extension services have to adopt multidisciplinary approaches and modalities that accommodate social, economic, and technical spectrum with an objective of attaining adoption and dissemination of better technologies and practices. FAO-CPF will:

- Develop and rehabilitate a qualified extension services system that creates strong linkages with research and producers organizations and enhances the dissemination of knowledge,

skills and attitudinal changes essential to improve the productivity of agriculture and the quality of life of the producers.

- Endorse extension law that ensures a legal framework of extension services responsibilities and activities.
- Develop appropriate methodology/approach of the extension system for all the farming systems, livestock and forestry, and marketing.
- Develop the technical and functional human capacity of the responsible extension services that implements the extension policy. FAO can provide back-stopping to developed and monitored policies,
- Adopt gender responsive approaches to extension such as mobilizing women farmers to make **a difference** to food and livelihood.
- Adopt FAO recommendation that 1-2% of the national budget to be spent on extension and advisory services.
- Strengthen the role of media in extension – to train extension personnel in media and broadcast profession; to promote private delivery of extension services and public funding; and to move information to farmers through e- education such as SMS, Websites and other media.
- Invest in extension services related to climate change.
- Build extension services in the farmer's association and organization system.

Outcome 2: Productivity and production of agricultural, livestock, fisheries and forest products significantly increased, cost of production reduced and competitiveness of products gained, livelihood of small producers and pastoralists improved, efficiency of existing irrigation system enhanced and through water harvesting and exploitation of underground and surface water additional ones developed and effect of weather changes on production and producers income reduced

Output 2.1: Adequate and timely supply of agricultural inputs and services to producers ensured

As the available data show there is a big gap in productivity levels between what is achieved by research and actual levels of productivity on farms. To cite one example while the productivity of wheat on research fields is 2.5 tons/fed the highest achieved by farmers on irrigated farms is 2 tons/fed while the average farmer productivity is only 0.6 ton/fed. It is through the increased introduction of improved technologies and modern farm management techniques that the low productivity of the farming systems can be **raised**. Technologies such as improved seeds for crops and pastures, soil-moisture **increasing and conserving** methods (mulching- zero tillage), organic manure, effective veterinary services, and development of balanced feed formula for animal are indispensable for achieving the objectives of increasing productivity of crops and animals. The proposed FAO-CPF cooperation in this regard shall be to:

- Verify a key role for micro-finance being a new alternative strategy adopted and under promotion by the government for revitalization of the agricultural sector in Sudan,
- Accommodate the concept of small and medium farming size as a crucial value addition system in the agricultural sector revival efforts of the Sudan,
- **Upgrade furthermore** the capacity of the National Seed Production Centre to increase the production and distribution of improved seeds
- Provide institutional capacity building for livestock services (input supply, laboratories, and vaccine breeding and extension),
- Save and grow and conserve agricultural resources and products,
- Support in establishing farmers' field schools (FFS) to train farmers in modern farm management skills, rural marketing, post harvest loss minimization methods, etc

- Support in establishing Junior Farmer' Field and Life Schools (JFFLS) to train youth farmers' in agro-business, farm management skills, rural marketing, post harvest loss minimization methods, etc
- Enhance the capacities of community based organizations to produce seeds, provide animal veterinary services (training of Para-vets, kits, medicines and drugs)
- Support the control of campaigns against national and trans-boundary pests and diseases of major crops, livestock, poultry, and fisheries.
- Develop further the capacity of the National Seed Administration.
- Mobilize resources and technical assistance for aquaculture and artisanal fisheries development.

Output 2.2: Rural infrastructure improved and expanded

Output 2.3: Marketing cost through improved road and marketing facilities reduced

Output 2.4: Storage facilities for crops, livestock and fishery products developed and waste and income losses due to price volatilities reduced

The inadequacy or poor development of rural infrastructure such as roads, market facilities, storage, etc and their negative impact on marketing cost with high physical losses and reduced competitiveness of commodities in Sudan is well known. Suffice to note that one of the reasons why livestock export was greatly reduced was due to the high cost of transport. To revive agriculture Sudan must make significant progress in developing rural infrastructure. CPF cooperation in this regard is required to:

- Train skilled manpower and build the capacities of institutions engaged in planning, designing, construction and maintenance of rural infrastructure such as roads, storage, market facilities
- Elaborate rural infrastructure development programmes for economizing on cost and mobilizing resources
- Studying the possibility of developing Public-Private - Partnerships in infrastructure development

Output 2.5: Existing irrigation system enhanced, water harvesting, underground and surface water sources are developed and tapped

The irrigation farming system in Sudan is faced with inefficiencies that have decreased productivity and output of the farms. Inefficiency in the distribution of water and high cost of water due to rising costs of operations and maintenances have led to low intensity in the use of water and hence low productivity of the farms. Removing the inefficiencies through the introduction of efficient management systems and cost reducing measures can significantly enhance the productivity of the farms and increase the foreign exchange earnings and saving capacity of the economy. Sudan also needs to increase irrigation schemes as the bulk of **the agricultural production falls under rainfall, which** is exposed to the dangers of climatic changes that are becoming more and more frequent in recent years. Thus to reduce risks and increase the productivity of land, expansion of irrigation facilities through water harvesting and the exploitation of underground and surface water is accorded high priority in the ARP. CPF cooperation in this regard will be to:

- Undertake a comprehensive study of the factors contributing to high operating and maintenance costs including the appropriateness of technologies employed in the irrigation systems and elaborate policies and strategies needed to enhance the efficiency of the irrigation system, reduce costs and enhance competitiveness of the producers
- Develop the functional capacities of the executing agency

- Facilitate the development of design and construction capacity to expand new irrigation schemes through water harvesting and other alternatives

PRIORITY AREA 3: Capacity building of natural resources development and conservation institutions, systems and mechanisms supporting agriculture, livestock, forestry and fisheries of Sudan

Outcome: Existing laws, policies and programs on environmental sustainability effectively implemented and protected; Biological resource rich areas identified and protected and biodiversity conserved; and ecologically fragile and sensitive areas identified and protected

Output1: Forest, range land and pasture developed, Gum Arabic Belt program implemented and progress on biodiversity conservation and development achieved

The environmental challenges that Sudan faces require sustained efforts to reverse the situation. At a macro level twin track approach is required to conserve the biodiversity of the country. The first approach would be to implement strategies that control and gradually replace agricultural practices (crop, livestock, forestry, etc) that contribute to degradation of resources and deterioration of biodiversity. In principle this approach should be implemented through the development and implementation of the extension policy. The proposed land reform should also contribute to reverse the degradation of natural resources. The second approach aims to directly develop natural resources through afforestation, pasture and range land development and re-establishment of the vegetation cover of the country. The development of the Gum Arabic Belt is also a programme that could be included in this approach. CPF-FAO cooperation in this regard is required to:

- Develop the technical and functional capacity of the government's organizations responsible for natural resources protection so as to enhance their ability to formulate policies and projects, implement and monitor developments
- Draw an action plan that will allow the country to put into practice the laws and regulations it enacted and international conventions it adopted on natural resource protection, conservation and preservation

Output 2: Improved land use and agricultural practices to maintain soil fertility, prevent soil erosion, and control degradation of natural resources implemented

Sudan has been subjected to serious environmental challenges in form of desertification, land degradation, water pollution, deforestation, soil erosion and deterioration of bio-diversity, getting critical in Sudan. The effect of these environmental problems on agriculture - crops and livestock- is becoming critical. The endeavour to mitigate environmental challenges includes

- Developing special status areas that are rich in biological resources and declaring them as national parks, wildlife sanctuaries, etc in order to give them full protection
- Identifying ecologically fragile and sensitive areas and protecting them from human interventions to create favourable condition for the rejuvenation of the areas through time.
- FAO cooperation in this respect will be to:
 - ✓Devise a national strategy for the conservation and sustainable utilization of biodiversity or biological resources
 - ✓Develop functional capacity for the management of protected areas

Priority Area 4: Capacity building of disaster risk management institutions, systems and mechanisms in agriculture, forestry, and fisheries of Sudan

Sudan is suffering from natural and manmade hazards such as drought, flood, conflict, epidemics, pests, and desertification. Both small and large producers are subjected to these hazards and risks. Due to increased vulnerability and weakened capacity of the affected communities, the latter hazards were easily converted into disasters and caused severe food insecurity and livelihood impoverishment. The ongoing FAO emergency program seeks to protect livelihoods from shocks, to make food production systems more resilient, more capable of absorbing the impact of, and recovering from, such disruptive events. On the whole, the aim of DRM is to enhance the resilience of livelihoods against threats and emergencies to ensure the food security of vulnerable farmers, agro-pastoralists, pastoralists, fishermen, foresters and other at risk groups.

Outcome: Improved environment for DRM in agriculture with appropriate legislation, policies and institutional framework and capacity enabled; improved information and early warning systems with capacity to monitor, **preparedness and response** to agricultural threats and emergencies enhanced; disaster preparedness at all levels improved and risks to agricultural threats reduced

Output 1: DRM legal and policy framework in food security and livelihood developed and capacity for line ministries, partners, and community organizations for implementation of DRM policy and programme improved

- Interventions to: Support DRM Legal and Policy Frameworks in Food security and livelihoods.
- Strengthen DRM Institutional and Coordination Structure.
- Develop the capacity of line ministries, partners and community organizations for the implementation of DRM policies and programs in and across agricultural Sectors.

Output 2 : Early warning system improved and capacity to monitor, prepare and respond to agricultural threats and emergencies enhanced

Interventions to: strengthen baseline information through statistical baselines, mapping risks to agricultural livelihoods, and conducting vulnerability and risk assessment and analysis.

- Strengthen food security monitoring and early warning for threats through weather/seasonal forecasting, market analysis, food prices, livestock production trends, plant pests and diseases, animal diseases, fish diseases, wild fire, etc. with improved analysis
- Strengthen communication of early warning and food security information by ensuring the 'right messages reach the right people/institutions at the right time' at all levels.

Output 3: Disaster preparedness strategies and capacities for effective response and recovery improved

Intervention to:

- Provide support to national and local preparedness planning in agricultural sectors, including contingency planning, simulation exercises, capacity development, etc.

- Strengthen technical and stockpiling capacities of essential supplies for agricultural **inputs and practices** [such as seed banks/facilities, stockpiling agricultural tools, grazing fodder reserves, vaccine banks, livestock watering points, protection of food processing facilities, etc.]
- Strengthen the effectiveness of response capacities to agricultural threats and emergencies through improved facilitation of inter-agency coordination; joint humanitarian situation assessments **by different organizations and assistance provided**; community level participatory planning and action; and application of tools, standards and guidelines at these levels.

Output 4: : Dissemination and application of improved technologies and practices in farming, livestock, fisheries, forestry and natural resources to vulnerable households enhanced and risks to agricultural threats and emergencies reduced

Intervention to:

- Strengthen crop production and productivity of vulnerable households through crop diversification, selection of drought/flood resistant crops, improved seed systems, conservation agriculture, post harvest management, livelihood diversification, integrated pest management, promoting vegetable gardening, micro-irrigation, agro-forestry, etc.
- Strengthen livestock health and production of vulnerable agro-pastoralists and pastoralists through improved grazing and pasture resource management, resilient animal breeding, fodder conservation, pasture and water **resources** improvement, animal pest **control** management, vaccination and treatment, surveillance of disease epidemics, etc.
- Strengthen natural resource management with special emphasis on forest, land and water resources
- Provide support to livelihood diversification through on- off-farm Income Generating Schemes and improved technology transfer systems
- Support fishermen communities in improved production, preservation and marketing

Output 5: Improved gender-sensitive capacity of all actors and partners at all levels with evidence-based knowledge management and effective communication on DRM in agricultural sectors

Interventions to:

- Provide capacity development support at national and local levels based on needs, which includes functional and technical expertise / know how, such as technology transfer, services, practical tools, methodologies, extension, training, policy advice, advocacy, education and awareness-raising.
- Strengthen knowledge management and communication by supporting the generation, documentation, sharing and application of information and knowledge.
- Strengthen strategic partnerships by working through partnerships and forging alliances at local, national, regional and global levels.
- Promote gender equity as a cross cutting priority by ensuring the integration of gender concerns, needs and capacities in the DRM priority area.

5.1. B. CPF contribution in alignment with UNDAF

The CPF contribution is expected to align with UNDAF Pillar one and partially with Pillar two and Pillar four. UNDAF Pillar one is concerned with concerned with poverty reduction, growth, and sustainable livelihoods. Pillar two is concerned with public services while Pillar four is concerned with governance and peace.

The proposed CPF priority areas would contribute specifically to the two outcomes of pillar one of UNDAF which emphasize: (i) improvement of the employment opportunities of the youth and women for reducing poverty, and (ii) protection of the vulnerable people against environmental risks and climate change.

With respect to UNDAF Pillar one, the CPF would support the proposed areas of UNDAF interventions in:

- a) Strengthening public, private and community organizations institutional capacity for policy analysis and reform (**CPF- priority area one**),
- b) Upgrading research and technology transfer methods and institutions to introduce innovative practices thereby increasing productivity, production and income (**CPF - Priority area two -outcomes one and two**).
- c) Development of environmentally friendly approaches for agriculture and natural resources activities (**CPF - priority area three**),
- d) Establishment of farmer field schools for small-scale producers to increase production and productivity, expanding farmers' technical knowledge on rain-fed agricultural production and Disaster Risk Reduction and Management as key factors (**CPF - priority areas two and four**),
- e) Support UNDAF proposal for the development of a National Adaptation Plan for Climate Change, as well as a National Disaster Risk Management Strategy that embraces climate change adaptation and the National All Hazard Emergency Preparedness Programme (**CPF - priority area four**),
- f) Training on Disaster Risk Reduction (DRR)/Disaster Risk Management (DRM), covers drought mitigation and risks in disasters (**CPF- priority areas three and four**).

With respect to **UNDAF Pillar two**, the **CPF-priority areas two, three and four** would contribute to the education and awareness of the people in agricultural knowledge and environmental awareness and risk management and disaster mitigation and management.

With respect to **UNDAF Pillar four**, the **CPF priority areas one, three and four** would contribute to conflict resolution through planning and implementation of land tenure policies and laws, and management of pastures and forests in a friendly approach with the environment and climate change.

The **CPF priority areas one and three and four** would also contribute to **UNDAF governance concern** by strengthening the planning and policy institutional capacity at locality and community organizational level.

5.2 IMPLEMENTATION ARRANGEMENTS

The CPF is jointly owned by the Government of Sudan and FAO and hence the facilitation of the implementation process must also be undertaken in close consultation and partnership between the GoS and FAO, and the stakeholders including the development partners. Such an implementation modality which brings together donors, UN agencies, other international organizations, NGOs, and private companies is required to generate the strong collaboration schemes necessary to provide support to government offices and local communities.

The joint commitment of FAO, the partners and the GoS and the other stakeholders to work together for a development process that will lead to the emergence of a population which is “free of hunger and malnutrition” will be guided by the spirit of strong partnerships and alliances.

The FAOSD will assume the leading facilitation role and responsibility for the CPF on behalf of FAO while the GoS will be represented by the Ministries of Agriculture, Animal Resources and Fisheries and Environment, Physical and the secretariat of the ARP and other relevant ministries and agencies and stakeholders. Institutionally the partnership will be forged by the establishment of a Steering Committee consisting of representatives of the relevant ministries and agencies of the GoS, and FAOSD and concerned stakeholders. The Steering Committee which will be entrusted to guide and oversee the implementation of the CPF must be chaired and led by high level government representative with macro and intersectoral responsibilities. As an interim arrangement the ongoing projects and programs of FAO after the launching of the CPF should be continued until expiry dates. However, if the projects and programmes are selected to continue they can be extended and integrated into the newly proposed CPF programs implementation modality.

5.3 MONITORING AND EVALUATION

Monitoring and Evaluation (M&E) is an indispensable tool of management to ensure if the implementation of a programme is on track and bottlenecks are identified on time before hindering progress. Put simply and succinctly it helps to improve performance and achieve the outcomes of the programme. A good M&E is continuous, participatory, focused on making progress towards the programmes outcomes and generates information that will help to evaluate the relevance, effectiveness, efficiency and impact of the programme. A good M&E must benefit from lessons learnt and experiences derived from the evaluation of the past and present FAO-Donors projects and programs in Sudan. The M&E system that should be instituted to follow-up the implementation of the CPF in the Sudan must be based on these principles of a good M&E.

Institutionally it must be guided and directed by the Steering Committee which is responsible for the implementation of the CPF. The tools employed to generate the information required to monitor the performance of the programme shall consist of:

- a) Reports/Analysis: These include work plans, quarterly, biannual and annual reports. The reports should generate information on continuous basis to assess whether progress and success are achieved and to identify corrective measures that should be taken to improve performance.
- b) Validation: the M&E system should enable the management and the Steering Committee of the programme to verify if the progress reported is accurate. This could be achieved through field visits, reviews and evaluations.
- c) Participatory: the M&E system should provide opportunities to stakeholders and in particular to beneficiaries to express their views on the progress made and to forward proposals that will help to improve the performance and impact of the programme

5.4 RESOURCE MOBILIZATION

Strategy for the implementation of the CPF

Resource mobilization strategies or options are by and large determined by the nature of the projects and programmes to be financed. The CPF essentially consists of projects and programmes that develop technical and functional capacities across the individual, **institutional** and organizational level in terms of policy formulation, manpower and institutional **capacity** development. It also endeavours to develop the technical capacities in areas such as research, extension etc that have key role in enhancing the growth of productivity across the whole sector.

There are also areas where direct financing might be necessary such as data collection, animal disease control, and in of infrastructure development such as feeder road, storage, irrigation schemes etc. On the whole, however, the nature of the projects and programmes that the CPF promotes are not the type that could be financed through FDI, venture capital, private investment, etc.

The most relevant mechanism or source to finance such programmes is the Official Development Assistance (ODA). Globally ODA is shrinking as it is being more and more replaced by FDI. However, ODA is still one of the main sources of financing development in the Sub-Sahara- African Countries. For well known reasons Sudan has not been benefiting much from such sources of financing. The CPF could be one opportunity to turn around events in this respect. The international community seems to be resolved in financing projects that tackle the root causes of poverty and hunger. The CPF being a programme that aims to reduce poverty and food insecurity and achieve the MDGs, it should qualify for ODA financing. In light of this the resource mobilization strategy should be focused to devise effective ways to increase the flow of ODA into the country to finance the CPF.

The second important area that should be looked into to contribute to the financing of the CPF is to see what the country can on its own strive to achieve. While the areas that should be examined to mobilize resources internally include businesses and households the focus here will be on the public sector. While the GoS has gone into a great length in reducing deficits and achieving financial stabilization this has been made possible mainly by reducing expenditures and not through increasing taxes **revenue**. As a result tax revenue as a proportion of GDP was only 5.8 % in 2002 which is much lower than the average of 14-18 % of GDP **collected** in many developing countries. The tax system targets small and commercial crop and animal producers and people working in gum Arabic collection and wood products, and could not cover large segments of tax evaders due to limitation of tax laws and regulations. This not only shows that the tax efforts are much below the potential but also indicates the existence of considerable room to increase government revenue through taxes. This may require increasing the **base rather than introducing** new taxes; but more importantly is to improve the tax administration and strict enforcement of the tax laws as well as building the capacity of the tax authorities **to collect taxes from tax evaders**. Although the magnitude cannot be expected to be high, it remains one **of the sources** of financing strategy that should be examined in **depth**.

The third possibility of financing the CPF can be Public-Private Partnership (PPP). Although PPPs were initiated in the 1970's they have gained large grounds and have become one of the important mechanisms for developing infrastructure and delivering services to the public in many parts of the world. The areas in which the PPPs are involved are wide ranging. Of late PPPs have been also involved in financing research, extension services, transfer of technologies, farmers' education; in brief **PPP was involved** in areas that could make differences in enhancing rural productivity and reducing poverty. Among the countries which adopted this modality of delivering services to the rural population Brazil, India, Kenya and South Africa are the leading ones. As empirical evidences show the record of PPPs is mixed and need to be examined carefully. In the realm of considering possibilities, however, it is certainly one of the areas that should be considered.

ANNEX 1: PRIORITY MATRIX: FAO-CPF COOPERATION PRIORITY AREAS

National sector: Agricultural and Food Development

- 1) Policy Development and strengthening of agricultural statistics,
- 2) Enhancing Productivity, Production and Competitiveness
- 3) Conservation and Development of Natural Resources
- 4) Disaster Risk Management

Table 1: CPF Priority Matrix

CPF Priority	Relevant National Sector Priorities	FAO Regional/Sub-regional Priorities	Relevant UNDAF Priorities	Other national/regional and international frameworks commitments
<p>CPF Priority 1: Capacity building and consolidation of policy, laws and information institution, systems and mechanisms reforms and development in agriculture, livestock, forestry, fisheries of Sudan (women and youth)</p>	<p>The Agricultural Revival program (ARP); The Interim- PRSP (IPRSP); The First Five Year Plan (2007-2011) (FFYP); Economic Salvation Programme (ESP);</p>	<p>Priority C: Natural resources management Developing comprehensive plan for land use; Priority B – Good information systems for agriculture and food (4)</p>	<p>Pillar one: Poverty Reduction, inclusive Growth and Sustainable Livelihood;</p> <p>Outcome 1: People in Sudan, with special attention to youth, women and needy populations,¹ have improved opportunities for decent work and sustainable livelihoods and are better protected from external shocks, thereby reducing poverty</p> <p>Area of Intervention: (a) Provide <u>policy advisory services for poverty analysis and evidence-based poverty reduction, economic and livelihoods policies and planning</u></p> <p>(b) <u>Strengthen the capacity of public and private sector institutions and SMEs</u>, for a focus on inclusive economic growth</p> <p>(e) Enhance access to <u>land, credit, markets, productive resources and reliable transport</u></p>	<p>Capacity Development (e); Articulating policy and strategy options and advice (d); Stimulating the generation, dissemination and application of information and knowledge, including statistics (b)</p>

¹ To be defined in consultation with Government. [Earlier defined by (1) National Poverty Index; (2) Human Development Index; (3) MDG achievement.]

<p>CPF Priority 2: Capacity building of agricultural research, technology and knowledge development and transfer for enhanced productivity, production and competitiveness institutions, systems and mechanisms in agriculture, livestock, forestry, fisheries of Sudan</p>	<p>The ARP; IPRSP; The FFYP (2007-2011); The Second Five Year Plan (2007-2011) (SFP)</p>	<p>Priority A: Food and Nutrition: Improving Research and extension(4); Harnessing potential of rainfed agriculture(3); Promoting investment for enhancing agricultural productivity (4) Priority B: Role of agriculture in poverty reduction and food security ; Promoting agricultural investment via improvements of markets and rural finance and credits (3); Priority C: Natural resources management : Appropriate policies for effective land and water management(1)</p>	<p>3.1.4 Appropriate development technology and transfer established for agricultural production and productivity in all farming systems -Increases agricultural services and Inputs for women, youth, IDPs, etc and other needy groups</p> <p>(e) Enhance access to <u>land, credit, markets, productive resources and reliable transport</u></p>	<p>CAADP-Pillar 4 Agricultural Research, Technology Dissemination and adoption; Pillar 3: increasing food supply and reducing hunger; Pillar 2: rural infrastructure & traded needed capacity for improved markets</p>
<p>CPF Priority 3: Capacity building of natural resources development and conservation institutions, systems and mechanisms in agriculture, livestock, forestry and fisheries of Sudan ,</p>	<p>The ARP; IPRSP; The FFYP (2007-2011)</p>	<p>Priority C: Natural resource management</p>	<p>Pillar One: Poverty Reduction, inclusive Growth and Sustainable Livelihood;</p> <p>Outcome 2: Populations vulnerable to environmental risks and climate change become more resilient and relevant institutions are more effective in the sustainable management of natural resources</p> <p>Area of intervention:</p> <p>(a) Develop/improve <u>evidence-based frameworks, policies and strategies</u> for environmental governance</p> <p>(b) <u>Improve capacities for NRM</u>, including water, forests, biodiversity and land</p>	

<p>CPF Priority 4: Capacity building of disaster risk management institutions, systems and mechanisms in agriculture, livestock, forestry, and fisheries of Sudan</p>	<p>The ARP; IPRSP; The FFYP (2007-2011)</p>	<p>Protection, recovery and community based management of rangeland (10)</p> <p>Priority E: preparedness for, and response to emergencies</p> <p>-Forecasting and providing early warning of adverse conditions in the food and agriculture sector (1)</p> <p>-Enhancing capacity for monitoring, detection, prevention and mitigation of disaster including transboundary plant and animal disease, and pest infestation(3)</p> <p>Need assessments and formulation and implementation of programme for relief and rehabilitation(2)</p>	<p>UNDAF Pillar Four: Social Cohesion, Peace, Consolidation and Peace Dividends;</p> <p>Outcome 7: Government and civil society initiatives that promote social cohesion, peace consolidation and pluralism are strengthened</p> <p>Outcome 8: Peace dividends are delivered for sustainable return, reintegration and recovery</p>	<p>Pillar 3 Increased food supply and reducing hunger</p>
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Table 2: CPF Results Matrix (Part A)

FAO-CPF Priority Area 1: Capacity building and consolidation of policy, laws, planning and information institution, systems and mechanisms reforms and development in agriculture, livestock , forestry, fisheries of Sudan				
FAO-CPF Impact: Peace building, regional and gender equity, food security, agricultural commercialization and export earnings and poverty alleviation and environmentally safe natural resources achieved				
Outcome 1: Functional capacity for policy and planning, legal reform and improvement on valid and reliable management information system at Federal, State , local and community levels enhanced, developed and sustained.				
CPF Results	Indicators		Means of verification	Risks and Assumptions
	Baseline	Target		
Output 1: Capacity to formulate plans, projects and programs and follow up implementation improved	Planning networking in and across sectors Number of monitoring and evaluation reports Number of policies, plans and projects issued and implemented Number of projects by sector Area under crops, forestry and pastures Productivity of crops, animal products, forests products, fisheries products Level of employment in agriculture, livestock , forests and fisheries and rural areas by gender and age ad type	Number of policies and formulated plans and projects increased Number of effective planning and policy networks established and operative Number of qualified policy and planning staff trained in Agriculture, Livestock , Natural Resources and Environment by discipline Policies, plans, and projects for the poor prepared Production and productivity increased Exports and revenue increased Food security gap reduced by locality, Level of income in agriculture, forests and	Policies issued Plans formulated M&E reports Government reports -Trainees reports	Risk: lack of adequate financial support Intergeneration gap Assumption : Very strong government support FAO comparative strength in policy analysis and design, and planning formulation

	Level of exports by crop, animals, forestry products Food security gap	fisheries increased		
Output 2: Capacity to reform land tenure system and proposals for improved regulations ensuring bank security, gender and intergeneration equity access to land and credit drafted; land impediment to private sector investment removed; and instituted LAND COMMISSION implemented	Land under usufruct tenure Number of crop animal owners conflicts Number of stock-routes Land administration fragmented Land ownership registered	Land law and regulation drafted and executed Access to credit increased Crop - animal conflict reduced Unified land administration instituted and implemented land registration in Land Commission commenced Private sector investment increased	Legislation -records on civil conflicts -M&E reports - Report on legally acquired land areas under crops, livestock and forestry - growth of private investment and output in agriculture	Risks: Traditions and norms opposition Government/ the legislative body fails to adopt the proposal Assumption: Desire to resolve sources of tension and conflict on the part of the government strong Pressure from the signatories of CPA high
Output 3: Data and information on agriculture production, productivity, prices, costs are enabled	agricultural census coverage by sector and region and people and animals type Annual agricultural statistics campaigns Type and coverage of data	Regular collection of data on agriculture, livestock, fisheries and natural resources determined and institutionalized Data on agricultural potential updated	M&E reports -Government reports -Published periodical agricultural statistical bulletins	Risk: lack of adequate financial support Assumption : Very strong government support
Output 4: Rational household and community natural resources use and management is developed, conserved and sustained	Quantity of wood for furniture and firewood Area under desert encroachment Area under forests and range land and pastures	Quantity of wood for furniture and firewood increased under organized management, Area under crops retrieved from the desert Area under forests and natural range land and pastures increased	Reports Prices of wood for furniture and firewood and charcoal	Risks: Traditions and norms opposition Government/ the legislative body fails to adopt the proposal Assumption: desire to resolve sources of tension and conflict on the part of the government strong Pressure from the signatories of CPA high

UNDAF Outcome	Capacity of policy and planning for agriculture and rural development and employment supported			
FAO Regional/Organizational Results	Capacity Development; Articulating policy and strategy options and advice; Stimulating the generation, dissemination and application of information and knowledge, including statistics			
FAO-CPF Priority Area 2: Capacity building of agricultural research, technology and knowledge development and transfer for enhanced productivity, production and competitiveness institutions, systems and mechanisms in agriculture, forestry, fisheries of Sudan				
FAO-CPF Impact: Enhancing productivity, production and competitiveness of agricultural, forestry and fisheries commodities competitiveness				
Outcome 1: Agricultural research and technology transfer policy and implementing capacities and institutions developed and sustained				
CPF Results	Indicators		Means of verification	Risks and Assumptions
	Baseline	Target		
Output 1: Agricultural research institutions strengthened and supported sustainably	<p>Number of qualified staff</p> <p>Number of research output</p> <p>New technology introduced to agricultural community</p> <p>Adoption rate of innovations</p> <p>Research (laboratories) and technology transfer facilities</p> <p>Budget allocation</p>	<p>Improved crop and fodder seeds, breeds and farming practices produced</p> <p>Number of scientific staff trained significantly increased</p> <p>Labs modernized and well equipped to measure up to the standard</p> <p>Safe agricultural practices for natural resources protection achieved</p>	<p>Periodical review reports</p> <p>M&E reports</p> <p>Scientific publications</p> <p>Government report</p> <p>Improvement in food supply and poverty reduction</p>	<p>Risks:</p> <p>Lack of adequate financing to implement the extension policy</p> <p>limited access to technology from abroad</p> <p>Assumptions:</p> <p>Strong Government commitment to develop agricultural research</p> <p>Strong commitment to reduce food insecurity and poverty and achieve MDGs</p>
Output 2: Extension services institutions strengthened and supported sustainably, Extension law endorsed	<p>Low productivity per unit resource use (yield per hectare, yield per cubic meter of irrigation water, and yield per animal head)</p> <p>developed inputs and methods of farming and livestock raising</p>	<p>Number of and type of research output increased and diversified</p> <p>Productivity and farm management skills significantly improved</p> <p>Farmers schools increased</p>	<p>Periodical review reports</p> <p>M&E reports</p> <p>Scientific publications</p> <p>Government report</p> <p>Improvement in food supply and poverty reduction</p>	<p>Risks:</p> <p>Lack of adequate financing to implement the extension policy</p> <p>Assumptions:</p> <p>Strong commitment to reduce food insecurity and poverty and achieve MDGs</p> <p>Strong Government commitment to</p>

		Adoption of farm and livestock management skills improved More utilization of improved inputs and land achieved		develop agricultural research
Output 3: Supply of relevant technological inputs that enhance agricultural productivity and competitiveness of crop production, livestock, forestry are developed, transferred, increased and sustained	Current extension system and delivery method and institutional capacity inadequate Linkage of extension with research and producers	Number of and type of research output transferred and adopted Productivity and farm management skills significantly improved Farmers schools increased Adoption of farm and livestock management skills improved More utilization of improved inputs and land achieved	Periodical review reports M&E reports Scientific publications Government report Improvement in food supply and poverty reduction	Risks: Lack of adequate finance limited access to technology from abroad Assumptions: Strong Government commitment to develop agricultural research Strong commitment to reduce food insecurity and poverty and achieve MDGs
Output 4: Improved productivity of agricultural in all farming systems, livestock, fisheries, forestry, etc achieved	Number of and type of research output increased and diversified Productivity and farm management skills significantly improved Farmers schools increased Adoption of farm and livestock management skills improved More utilization of improved inputs and land achieved	Number of and type of research output increased and diversified Productivity and farm management skills significantly improved Farmers schools increased Adoption of farm and livestock management skills improved More utilization of improved inputs and land achieved	Periodical review reports M&E reports Scientific publications Government report Improvement in food supply and poverty reduction	Risks: Lack of adequate finance limited access to technology from abroad Assumptions: Strong Government commitment to develop agricultural research Strong commitment to reduce food insecurity and poverty and achieve MDGs

UNDAF Outcome	Appropriate development technology and transfer established for agricultural production and productivity in all farming systems
FAO Regional/Organizational Results	Improving Research and extension; harnessing potential of rainfed agriculture; promoting investment for enhancing agricultural productivity ; and natural resources management through appropriate technology for effective land and water management

FAO-CPF Priority Area 2: Capacity building of agricultural research, technology and knowledge development and transfer for enhanced productivity, production and competitive institutions, systems and mechanisms in agriculture, **livestock**, forestry, and fisheries of Sudan

FAO-CPF Impact:

Outcome 2: productivity and production of agricultural, livestock, fisheries and forest products significantly increased, cost of production reduced and competitiveness of products gained, livelihood of small producers and pastoralists improved, efficiency of existing irrigation system enhanced and through water harvesting and exploitation of underground and surface water additional ones developed and effect of weather changes on production and producers income reduced

CPF Results	Indicators		Means of verification	Risks and Assumptions
	Baseline	Target		
Output 1: Adequate and timely supply of agricultural inputs and services ensured to producers	<p>Quantity of inputs, including machineries used limited due to high cost and in availability</p> <p>- Low productivity leading to high crop prices, increased food insecurity, malnutrition and increased incidence of poverty</p> <p>-Impact of drought becoming more and more sever on both crop and livestock producers</p>	<p>-Increased production of crops (productivity and area cultivated)</p> <p>-Supply and use of improved inputs increased & intensified</p> <p>Number of agricultural machinery services increased</p> <p>-crop production increased</p> <p>- Technical efficiency of existing irrigation improved</p> <p>-Increase in productivity leading to increases in export earning</p> <p>impact of weather on rain fed agriculture reduced and productivity increased and production stabilized</p>	<p>Government reports</p> <p>Periodical review reports</p> <p>M&E reports</p>	<p>Risks:</p> <p>high dependence on rainfall</p> <p>delayed and inadequate response of financiers</p> <p>weakness in the timely delivery of inputs</p> <p>poor infrastructure and costly delivery of inputs and outputs</p> <p>Assumptions:</p> <p>commitment to increase agricultural production and productivity</p> <p>Increased recognition of the key role of intensive production to increase agricultural production</p>

<p>Output 2: Rural infrastructure improved and expanded</p>	<p>Current cost of transport both for crops and animals in particular very high reducing competitiveness and impact on living conditions of the urban population</p>	<p>-marketing and transaction cost reduced -Competitiveness of products both in domestic and international market enhanced</p>	<p>Government reports Periodical review reports M&E reports</p>	<p>Risks: In adequate funding Implementation weakness Assumption: Strong Government commitment to transform the agricultural sector</p>
<p>Output 3: Marketing cost through improved road and marketing facilities reduced</p>	<p>Post harvest loss and loss due to price fluctuation very high</p>	<p>Post harvest loss and loss due market volatility reduced</p>	<p>Government reports Periodical review reports M&E reports</p>	<p>Risks: In adequate funding Implementation weakness Assumption : Strong Government commitment to transform the agricultural sector</p>
<p>Output 4: Storage facilities for crops, livestock and fishery products developed and waste and income losses due price volatilities reduced</p>		<p>- Poultry production increased -Quantity of fish catch increased - Number of animal off-take increased -Quantity of animal products and by-products increased -Areas under rehabilitated forestry and pastures increased</p>	<p>Government reports Periodical review reports M&E reports</p>	<p>Risks: In adequate funding Implementation weakness Assumption: Strong Government commitment to transform the agricultural sector</p>
<p>Output 5. Existing irrigation system enhanced, water harvesting, underground and surface water sources are developed and tapped</p>	<p>Low productivity per unit resource use (yield per hectare, yield per cubic meter of irrigation water, and yield per animal head) -Cost of water use very high due to high cost of</p>	<p>Management and efficiency of water distribution improved</p>	<p>Government reports Periodical review reports M&E reports</p>	<p>Risks: In adequate funding Implementation weakness Assumptions: Strong Government commitment to transform the agricultural sector</p>

	maintenance and operation			
Output 6. Cost of irrigated crop production reduced	Low productivity per unit resource use (yield per hectare, yield per cubic meter of irrigation water, and yield per animal head)	Management and efficiency of water distribution improved	Government reports Periodical review reports M&E reports	Risks: In adequate funding Implementation weakness Assumptions: Strong Government commitment to transform the agricultural sector
UNDAF Outcome	Increases agricultural services and Inputs for women, youth, IDPs, etc and other needy groups			
FAO Regional/Organizational Results	harnessing potential of rainfed agriculture, poverty reduction and achieving food security ; improvements of markets and rural finance and credits ;			

FAO-CPF Priority Area 3: Capacity building of natural resources development and conservation institutions, systems and mechanisms in agriculture, livestock, forestry and fisheries of Sudan				
FAO-CPF Impact: Natural resources developed and conserved				
Outcome 1: Existing laws, policies and programs on environmental sustainability effectively implemented and protected; Biological resource rich areas identified and protected and biodiversity conserved; and ecologically fragile and sensitive areas identified and protected				
CPF Results	Indicators		Means of verification	Risks and Assumptions
	Baseline	Target		
Output 1: Forest, range land and pasture developed, Gum Arabic Belt program implemented and progress on biodiversity conservation and development achieved	Environmental challenges such as desertification, land degradation, water pollution, deforestation, soil erosion and deterioration of bio-diversity getting critical in Sudan -Effect of environmental problems on agriculture in particular on livestock very serious	-Animal production increased -Quantity of fish catch increased - Number of animal off-take increased -Quantity of animal products and by-products increased -Areas under rehabilitated forestry and pastures increased	M&E reports - Government plan implementation reports -Observed changes in environment and climatic conditions	Risks: Lack of resources to implement the program Breakdown of the peace process and resumption of conflicts lack of general awareness of environmental dangers Assumptions: Active community participation in natural resource management government commitment to combat the environmental danger facing the country high
Output 2: Improved land use and agricultural practices to maintain soil	Environmental challenges such as desertification,	Animal production	M&E reports	Risks:

fertility, prevent soil erosion, and control degradation of natural resources implemented	land degradation, water pollution, deforestation, soil erosion and deterioration of bio-diversity getting critical in Sudan -Effect of environmental problems on agriculture in particular on livestock very serious	increased -Quantity of fish catch increased - Number of animal off-take increased -Quantity of animal products and by-products increased -Areas under rehabilitated forestry and pastures increased	- Government plan implementation reports -Observed changes in environment and climatic conditions	Lack of resources to implement the program Breakdown of the peace process and resumption of conflicts lack of general awareness of environmental dangers Assumptions: Active community participation in natural resource management government commitment to combat the environmental danger facing the country high
UNDAF Outcome	Sustainable forestry practices , including measures to combat desertification developed and implemented			
FAO Regional/Organizational Results	Natural resource management			

FAO-CPF Priority Area 4: Capacity building of disaster risk management institutions, systems and mechanisms in agriculture, livestock , forestry, and fisheries of Sudan				
FAO-CPF Impact: Agricultural disaster and risk management improved				
Outcome 1: Improved environment for DRM in agriculture with appropriate legislation, policies and institutional framework and capacity enabled; improved information and early warning systems with capacity to monitor, prepare and respond to agricultural threats and emergencies enhanced; disaster preparedness at all levels improved and risks to agricultural threats reduced				
CPF Results	Indicators		Means of verification	Risks and Assumptions
	Baseline	Target		
Output 1: DRM legal and policy framework in food security and livelihood developed and capacity for line ministries, partners, and community organizations for implementation of DRM policy and programme strengthened	Sudan had suffered from natural and manmade hazards which due to inadequate preparation and capacity led to disaster Indicators and targets: Draft legislations and policies for DRM prepared capacities of line ministries, partners and community organization	Through statistical survey, mapping risks of agricultural livelihood and conducting of vulnerability and risk assessment and analysis baseline information system on food security strengthened	M&E and progress reports Assessment reports Training reports	Risks: failure of the executive legislative bodies to approve the policies and legal drafts Assumptions: A conducive environment to engage in policy and legal provisions in DRM Funds secured for the programme Government favourable towards the

	<p>for implementing RDM policies and programmes strengthened</p> <p>Capacities across the individual, organizational and institutional level to respond to disaster and implement recovery programmes at all levels inadequate</p>			development of capacities
<p>Output 2: Early warning system improved and capacity to monitor, prepare and respond to agricultural threats and emergencies enhanced</p>	<p>Early warning information collection, analysis and communication system not adequately developed</p> <p>Response capacities to agricultural and emergency threats enhanced</p>	<p>Weather/seasonal forecasting, market analysis, food prices, livelihood production, plant pest and disease, and animal disease etc regularly conducted and communicated and food security monitoring and early warning systems developed and strengthened</p>	<p>M&E and progress reports</p> <p>assessment reports</p> <p>training reports</p>	<p>Risks:</p> <p>failure of the executive legislative bodies to approve the policies and legal drafts</p> <p>Assumption:</p> <p>Government favourable towards the development of capacities Funds secured for the programme</p>
<p>Output 3: Disaster preparedness strategies and capacities for effective response and recovery improved</p>	<p>Disaster preparedness strategy situation</p> <p>Existence of improved technologies, post harvest management, Integrated Pest Management, livelihood diversification schemes, etc provided to vulnerable households and food security situation and resilience of the households</p>	<p>Disaster preparedness strategy and planning capacity at national and local levels developed and provided</p> <p>Technical capacities for stockpiling essential agricultural inputs such as seeds, tools, fodder, vaccines, etc strengthened</p> <p>Response capacities to agricultural and emergency threats enhanced</p> <p>Livestock health and production, grazing and pasture management, vaccination treatment and disease surveillances strengthened and livelihood of the vulnerable agro-</p>	<p>agricultural statistical bulletins</p> <p>M&E and progress reports</p> <p>assessment reports</p> <p>training reports</p>	<p>Risk:</p> <p>failure of the executive legislative bodies to approve the policies and legal drafts</p> <p>Assumption:</p> <p>Government favourable towards the development of capacities</p> <p>Funds secured for the programme</p>

		<p>pastoralists enhanced</p> <p>Natural resource management strengthened</p>		
<p>Output 4: Dissemination and application of improved technologies and practices in farming, livestock, fisheries, forestry and natural resources to vulnerable households enhanced and risks to agricultural threats and emergencies reduced</p>	<p>Weak food security and resilience of households in the fragile and drought prone areas</p> <p>Existence of improved technologies, post harvest management, Integrated Pest Management, livelihood diversification schemes, etc provided to vulnerable households and food security situation and resilience of the households</p>	<p>Technical capacities for stockpiling essential agricultural inputs such as seeds, tools, fodder, vaccines, etc strengthened</p> <p>Response capacities to agricultural and emergency threats enhanced</p> <p>Livestock health and production, grazing and pasture management, vaccination treatment and disease surveillances strengthened and livelihood of the vulnerable agro-pastoralists enhanced</p> <p>Natural resource management strengthened</p>	<p>agricultural statistical bulletins</p> <p>M&E and progress reports</p> <p>assessment reports</p> <p>training reports</p>	<p>Risks:</p> <p>failure of the executive legislative bodies to approve the policies and legal drafts</p> <p>Assumption:</p> <p>Government favourable towards the development of capacities</p> <p>Funds secured for the programme</p>
<p>UNDAF Outcome</p>	<p>Strategy for adaptation and risk management in response to long term structural change ,including climate change developed; improved policies and capacities for disaster coordination, mitigation, and management, including early warning capacity developed and strengthened</p>			
<p>FAO Regional/Organizational Results</p>	<p>Protection, recovery and community based management of rangeland; preparedness for, and response to emergencies; Forecasting and providing early warning of adverse conditions in the food and agriculture sector; Enhancing capacity for monitoring, detection, prevention and mitigation of disaster including trans-boundary plant and animal disease, and pest infestation; Need assessments and formulation and implementation of programme for relief and rehabilitation</p>			

Table 3: CPF Results Matrix (Part B)

CPF Results	Indicative Resource Requirements (US\$)			Implementing Partners		Resource Partners
	Estimates of total resources required (US\$ million)	Available funding	Resource mobilization target (gap)	National	International	
CPF Priority Area 1						
Outcome 1: Functional capacity for policy and planning, legal reform and improvement on valid and reliable management information system at Federal, Regional, local and community levels enhanced, developed and sustained.						
Output 1: Capacity to formulate plans, projects and programs and follow up implementation improved	15			Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Ministry of Environment, Forestry and Physical Planning, Agricultural Revival Plan, Agricultural Bank of Sudan, Ministry of Finance	FAO, EU, WB, IGAD,	
Output 2: Capacity to reform land tenure system and proposals for improved regulations ensuring bank security, gender and intergeneration equity access to land and credit drafted; land impediment to private sector investment removed; and instituted LAND COMMISSION implemented	15			Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry General Attorney , Ministry of Environment and Forestry and Physical Planning, Agricultural Revival Plan, Ministry of Finance	FAO, IFAD, WB, EU	
Output 3: Data and information on agriculture production, productivity, prices, costs are enabled	35			Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry General Attorney , Ministry of Environment and Forestry and Physical Planning, Central Bureau for Statistics , Agricultural Revival Plan, Ministry of Finance	FAO, IFAD, WB, EU	
Output 4: Rational household and community natural resources use and management is developed, conserved and sustained	10			Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry General Attorney , Ministry of Environment and Forestry and Physical planning, Agricultural Revival Plan, Ministry of Finance	FAO, IFAD, WB, EU	

CPF Results	Indicative Resource Requirements (US\$)			Implementing Partners		Resource Partners
	Estimates of total resources required (US\$ million)	Available funding	Resource mobilization target (gap)	National	International	
CPF Priority Area 2						
Outcome 1: Developing agricultural research and extension services supported and sustained, Technical and Functional capabilities of agricultural research developed, appropriate technological transfer/extension services/ policy developed, relevant dissemination and transfer approaches adopted and implementation capacity strengthened , sustained use of natural resources at household and community levels enhanced and Food insecurity and poverty reductions and MDGs made achievable						
Output 1: Agricultural research institutions strengthened and supported sustainably	15			Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry of Environment, Forestry, and Physical Planning, Agricultural Research Corporation, Extension , Services, Agricultural Revival Plan, Ministry of Finance	FAO, IFAD, WB, EU	
Output 2: Extension services institutions strengthened and supported sustainably	15			Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry of Environment, Forestry and Physical Planning, Extension Services, Agricultural Revival Plan, Ministry of Finance.	FAO, IFAD, WB, EU	

<p>Output 3: Supply of relevant technological inputs that enhance agricultural productivity and competitiveness of crop production, livestock, forestry are developed, transferred, increased and sustained</p>	35			<p>Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry of Environment, Forestry and Physical Planning, Agricultural Revival Plan, Ministry of Finance</p>	<p>FAO, IFAD, WB, EU</p>	
<p>Output 4: Improved productivity of agricultural in all farming systems, livestock, fisheries, forestry, etc achieved</p>	10			<p>Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry of Environment, Forestry and Physical Planning, Agricultural Revival Plan, ministry of Finance</p>	<p>FAO, IFAD, WB, EU</p>	

CPF Results	Indicative Resource Requirements (US\$)			Implementing Partners		Resource Partners
	Estimates of total resources required (US\$ million)	Available funding	Resource mobilization target (gap)	National	International	
CPF Priority Area 2						
Outcome 2: productivity and production of agricultural, livestock, fisheries and forest products significantly increased , cost of production reduced and competitiveness of products gained, livelihood of small producers and pastoralists improved , Efficiency of existing irrigation system enhanced and through water harvesting and exploitation of underground and surface water additional ones developed and effect of weather changes on production and producers income reduced						
Output 1: Adequate and timely supply of agricultural inputs and services ensured to producers	15			Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry General Attorney , Ministry of Environment-Forestry, Agricultural Revival Plan, ministry of Finance	FAO, IFAD, WB, EU	

Output 2: Rural infrastructure improved and expanded	15			Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry General Attorney , Ministry of Environment-Forestry, Agricultural Revival Plan, Ministry of Finance	FAO, IFAD, WB, EU	
Output 3: Marketing cost through improved road and marketing facilities reduced	35			Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry General Attorney , Ministry of Environment-Forestry, Agricultural Revival Plan, Ministry of Finance	FAO, IFAD, WB, EU	
Output 4: Storage facilities for crops, livestock and fishery products developed and waste and income losses due price volatilities reduced Output 5: Existing irrigation system enhanced, water harvesting, underground and surface water sources are developed and tapped Output 6: Cost of irrigated crop production reduced	10			Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry General Attorney , Ministry of Environment-Forestry, Agricultural Revival Plan, Ministry of Finance	FAO, IFAD, WB, EU	

CPF Results	Indicative Resource Requirements (US\$)			Implementing Partners		Resource Partners
	Estimates of total resources required (US\$ million)	Available funding	Resource mobilization target (gap)	National	International	
CPF Priority Area 3						
Outcome 1: Existing laws, policies and programs on environmental sustainability effectively implemented and protected; Biological resource rich areas identified and protected and biodiversity conserved; and ecologically fragile and sensitive areas identified and protected						
Output 1: Forest, range land and pasture developed, Gum Arabic Belt program implemented and progress on biodiversity conservation and development achieved				Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry General Attorney , Ministry of Environment-Forestry, Agricultural Revival Plan, Ministry of Finance	FAO, IFAD, WB, EU	
Output 2: Improved land use and agricultural practices to maintain soil fertility, prevent soil erosion, and control degradation of natural resources implemented				Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry General Attorney , Ministry of Environment-Forestry, Agricultural Revival Plan, Ministry of Finance	FAO, IFAD, WB, EU	

CPF Results	Indicative Resource Requirements (US\$)			Implementing Partners		Resource Partners
	Estimates of total resources required (US\$ million)	Available funding	Resource mobilization target (gap)	National	International	
CPF Priority Area 4						
Outcome 1: Improved environment for DRM in agriculture with appropriate legislation, policies and institutional framework and capacity enabled; improved information and early warning systems with capacity to monitor, prepare and respond to agricultural threats and emergencies enhanced; disaster preparedness at all levels improved and risks to agricultural threats reduced						
Output 1: DRM legal and policy framework in food security and livelihood developed and capacity for line ministries, partners, and community organizations for implementation of DRM policy and programme strengthened	15			Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry General Attorney , Ministry of Environment-Forestry, Agricultural Revival Plan, Ministry of Finance	FAO, IFAD, WB, EU	
Output 2: Early warning system improved and capacity to monitor, prepare and respond to agricultural threats and emergencies enhanced	15			Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry of Environment-Forestry, Agricultural Revival Plan, Ministry of Finance	FAO, IFAD, WB, EU	

Output 3: Disaster preparedness strategies and capacities for effective response and recovery improved	35			Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry of Environment-Forestry, Agricultural Revival Plan, Ministry of Finance	FAO, IFAD, WB, EU	
Output 4: Dissemination and application of improved technologies and practices in farming, livestock, fisheries, forestry and natural resources to vulnerable households enhanced and risks to agricultural threats and emergencies reduced	10			Ministry of Agriculture and Irrigation, Ministry of Animal Resources and Fisheries, Land Registration, Ministry General Attorney, Ministry of Environment-Forestry, Extension Services, Agricultural Revival Plan, Ministry of Finance	FAO, IFAD, WFP, EU, WB, UNDP,	

ANNEX 3: CPF MONITORING FRAMEWORK

Table 4: Monitoring Framework

CPF Priority Area 1							
CPF results	Indicators/baseline/targets	Means and Sources of Verifications	Methods/frequencies/responsibilities	Reporting			
Outcome 1: Functional capacity for policy and planning, legal reform and improvement on valid and reliable management information system at Federal, Regional, local and community levels enhanced, developed and sustained	Policies coverage, pro poor policies, Price policy, Inputs control regulations, land registration, administration, Private sector access to land, Grazing rights Forestry areas and boundaries secured	By : Legislations -records on civil - conflicts -M&E reports -Report on legally acquired land areas under crops, livestock and forestry -growth of private investment and output in agriculture -Government reports -Trainees reports	Monitoring and evaluation regular programs, Evaluation missions, Midterm and terminal program reports Responsibility of the FAO and the Ministry of Agriculture and irrigation	Progress and challenges to date	G	Y	R
Output 1: Capacity to formulate plans,	Policy formulation,	Legislation	Monitoring and evaluation				

<p>projects and programs and follow up implementation improved</p>	<p>planning and project formulation</p> <p>M&E documents</p>	<p>-records on civil conflicts</p> <p>-M&E reports</p> <p>-Report on legally acquired land areas under crops, livestock and forestry</p> <p>-growth of private investment and output in agriculture</p> <p>-M&E reports</p> <p>-Government reports</p> <p>-Trainees reports</p>	<p>regular programs,</p> <p>Evaluation missions,</p> <p>Midterm and terminal program reports</p> <p>Responsibility of the FAO and the Ministry of Agriculture and irrigation</p>				
<p>Output 2: Capacity to reform land tenure system and proposals for improved regulations ensuring bank security, gender and intergeneration equity access to land and credit drafted; land impediment to private sector investment removed; and instituted LAND COMMISSION implemented</p>	<p>Land law and regulation drafted</p> <p>-Unified land admin. Instituted implementation capacity</p> <p>- land registration</p> <p>-conflict cases reduced</p> <p>-private investment in agriculture increased</p>	<p>Legislation</p> <p>-records on civil conflicts</p> <p>-M&E reports</p> <p>-Report on legally acquired land areas under crops, livestock and forestry</p> <p>-growth of private investment and output in agriculture</p> <p>M&E reports</p> <p>-Government reports</p> <p>-Trainees reports</p>	<p>Monitoring and evaluation regular programs,</p> <p>Evaluation missions,</p> <p>Midterm and terminal program reports</p> <p>Responsibility of the FAO and the Ministry of Agriculture and irrigation</p>				

<p>Output 3: Data and information on agriculture production, productivity, prices, costs are enabled</p>	<p>census under use ;</p> <p>periodical collection of agricultural statistics</p> <p>institutional capacity increased</p> <p>Regular collection of data on agriculture, livestock, fisheries and natural resources reports</p> <p>Data on agricultural potential updated</p>	<ul style="list-style-type: none"> - M&E reports -Government reports -Published periodical agricultural statistical bulletins 	<p>Monitoring and evaluation regular programs,</p> <p>Evaluation missions,</p> <p>Midterm and terminal program reports</p> <p>Responsibility of the FAO and the Ministry of Agriculture and irrigation</p>				
<p>Output 4: Rational household and community natural resources use and management is developed, conserved and sustained</p>	<p>Training area covered at local and community base levels in policy and project formulation and M&E</p>	<p>Legislation</p> <ul style="list-style-type: none"> - records on civil conflicts - M&E reports - Report on legally acquired land areas under crops, livestock and forestry - growth of private investment and output in agriculture - Government reports - Trainees reports 	<p>Monitoring and evaluation regular programs,</p> <p>Evaluation missions,</p> <p>Midterm and terminal program reports</p> <p>Responsibility of the FAO and the Ministry of Agriculture and irrigation</p>				

CPF results	Indicators/baseline/targets	Means and Sources of Verifications	Methods/frequencies/responsibilities	Reporting			
<p>Outcome 1: Developing agricultural research and extension services supported and sustained, Technical and Functional capabilities of agricultural research developed, appropriate technological transfer/extension services/ policy developed, relevant dissemination and transfer approaches adopted and implementation capacity strengthened , sustained use of natural resources at household and community levels enhanced and Food insecurity and poverty reductions and MDGs made achievable</p>			<p>Monitoring and evaluation regular programs, Evaluation missions, Midterm and terminal program reports Responsibility of the FAO and the Ministry of Agriculture and irrigation</p>	Progress and challenges to date	G	Y	R
<p>Output 1: Agricultural research institutions strengthened and supported sustainably</p>	<ul style="list-style-type: none"> - Quality crops and fodder seeds, breeds and farming practices produced - Number of scientific staff trained increased - Labs modernized and well equipped to measure up to the standard - Number and type of research output increased and diversified - productivity increased 	<p>Periodical review reports</p> <ul style="list-style-type: none"> -M&E reports -scientific publications -Government report 	<p>Monitoring and evaluation regular programs, Evaluation missions, Midterm and terminal program reports Responsibility of the FAO and the Ministry of Agriculture and irrigation</p>				
<p>Output 2: Extension services institutions strengthened and supported sustainably</p>	<p>Extension staff presence in needed areas, Number of demonstration farms</p>	<p>Periodical review reports</p> <ul style="list-style-type: none"> -M&E reports -scientific publications 	<p>Monitoring and evaluation regular programs, Evaluation missions, Midterm and terminal</p>				

	Organizational capacity -Linkage of extension with research and producers& private sector	-Government report -Improvement in food supply	program reports Responsibility of the FAO and the Ministry of Agriculture and irrigation				
Output 3: Supply of relevant technological inputs that enhance agricultural productivity and competitiveness of crop production, livestock, forestry are developed, transferred, increased and sustained	<ul style="list-style-type: none"> - Trained in Farm and livestock management - introduced technology for better use of inputs and land - Environment friendly practices used and are under use 	<ul style="list-style-type: none"> - Periodical review reports - M&E reports - scientific publications - Government report - Improvement in food supply and income 	Monitoring and evaluation regular programs, Evaluation missions, Midterm and terminal program reports Responsibility of the FAO and the Ministry of Agriculture and irrigation				
Output 4: Improved productivity of agricultural in all farming systems, livestock, fisheries, forestry, etc achieved	<p>Number trained in Farm and livestock management</p> <p>-quantity of utilized improved inputs</p> <p>Safe agricultural practices enumerated</p> <p>Improved water technology practices introduced</p>	<ul style="list-style-type: none"> -Periodical review reports -M&E reports -scientific publications --Government report -Improvement in food supply and income level 	Monitoring and evaluation regular programs, Evaluation missions, Midterm and terminal program reports Responsibility of the FAO, Ministry of Agriculture and irrigation				

CPF Priority Area 2

CPF results	Indicators/baseline/targets	Means and Sources of Verifications	Methods/frequencies/responsibilities	Reporting
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<p>Outcome 2: Productivity and production of agricultural, livestock, fisheries and forest products significantly increased , cost of production reduced and competitiveness of products gained, livelihood of small producers and pastoralists improved , Efficiency of existing irrigation system enhanced and through water harvesting and exploitation of underground and surface water additional ones developed and effect of weather changes on production and producers income reduced</p>	<p>Quantity of inputs, machineries used</p> <ul style="list-style-type: none"> - productivity per unit resource use (yield per hectare, yield per cubic meter of irrigation water, and yield per animal head) - crop prices, <p>Animal prices, Inputs prices</p> <p>Transportation cost</p> <ul style="list-style-type: none"> - Post harvest loss 			<p>Progress and challenges to date</p>	<p>G</p>	<p>Y</p>	<p>R</p>
<p>Output 1: Adequate and timely supply of agricultural inputs and services ensured to producers</p>							
<p>Output 2: Rural infrastructure improved and expanded</p>	<ul style="list-style-type: none"> -Supply of improved inputs -Number of agricultural machinery services -Number of trained producers -Production of crops (productivity and area cultivated) -Number of animal off-take -Quantity of animal products and by-products -Quantity of fish catch increased -Areas under rehabilitated 	<ul style="list-style-type: none"> -Gov reports -Periodical review reports -M&E reports -Gov reports -M&E reports 					

	forestry and pastures -Irrigation technology under use -water distribution coverage by area -export earnings	-Gov reports -M&E reports					
Output 3: Marketing cost through improved road and marketing facilities reduced	-marketing and transaction cost reduced -post harvest loss -Competitiveness of products both in domestic and international market enhanced - export earnings	-Gov reports -Periodical review reports -M&E reports					
Output 4: Storage facilities for crops, livestock and fishery products developed and waste and income losses due price volatilities reduced Output 5: Existing irrigation system enhanced, water harvesting, underground and surface water sources are developed and tapped Output 6: Cost of irrigated crop production reduced	Same as above						

CPF Priority Area 3							
CPF results	Indicators/baseline/targets	Means and Sources of Verifications	Methods/frequencies/responsibilities	Reporting			
Outcome 1: Existing laws, policies and programs on environmental sustainability effectively	Environmental challenges: , land degradation, deforestation, deterioration of	M&E reports -Government plan	Monitoring and evaluation regular programs,	Progress and challenges to date	G	Y	R

implemented and protected; Biological resource rich areas identified and protected and biodiversity conserved; and ecologically fragile and sensitive areas identified and protected	bio-diversity -Effect of drought on livestock -Frequency of droughts	implementation reports -Observed changes in environment and climatic conditions	Evaluation missions, Midterm and terminal program reports Responsibility of the FAO and the Ministry of Agriculture and irrigation				
Output 1: Forest, range land and pasture developed, Gum Arabic Belt program implemented and progress on biodiversity conservation and development achieved	-number of awareness programs reforestation area, area of rehabilitated pastures - parks, animal sanctuaries established -ecologically fragile areas conserved	M&E reports -Government plan implementation reports -Observed changes in environment and climatic conditions Gov reports -Periodical review reports -M&E reports	Monitoring and evaluation regular programs, Evaluation missions, Midterm and terminal program reports Responsibility of the FAO and the Ministry of Agriculture and irrigation				
Output 2: Improved land use and agricultural practices to maintain soil fertility, prevent soil erosion, and control degradation of natural resources implemented	- ditto	M&E reports -Government plan implementation reports -Observed changes in environment and climatic conditions Gov reports -Periodical review reports -M&E reports	Monitoring and evaluation regular programs, Evaluation missions, Midterm and terminal program reports Responsibility of the FAO and the Ministry of Agriculture and irrigation				

CPF Priority Area 4

CPF results	Indicators/baseline/targets	Means and Sources of Verifications	Methods/ frequencies/ responsibilities	Reporting			
<p>Outcome 1: Improved environment for DRM in agriculture with appropriate legislation, policies and institutional framework and capacity enabled; improved information and early warning systems with capacity to monitor, prepare and respond to agricultural threats and emergencies enhanced; disaster preparedness at all levels improved and risks to agricultural threats reduced</p>	<ul style="list-style-type: none"> -Food supply situation in fragile ecosystem areas under conflict -applied appropriate DRM legal provisions and policies -capacity to implement DRM -Early warning system service - data banks on food security of conflict and drought prone regions 		<p>Monitoring and evaluation regular programs, Evaluation missions, Midterm and terminal program reports Responsibility of the FAO and the Ministry of Agriculture and irrigation</p>	Progress and challenges to date	G	Y	R
<p>Output 1: DRM legal and policy framework in food security and livelihood developed and capacity for line ministries, partners, and community organizations for implementation of DRM policy and programme strengthened</p>	<ul style="list-style-type: none"> -Draft legislation prepared -DRM policies formulated -capacities of line ministries, partners and community organization implementing -DRM programmes strengthened 	<ul style="list-style-type: none"> -M&E reports -Government reports - Field visit reports 	<p>Monitoring and evaluation regular programs, Evaluation missions, Midterm and terminal program reports Responsibility of the FAO and the Ministry of Agriculture and irrigation</p>				

<p>Output 2: Early warning system improved and capacity to monitor, prepare and respond to agricultural threats and emergencies enhanced</p>	<p>Early warning system strengthened</p> <p>-Early warning and food security information communication system improved and enhanced</p>	<p>M&E reports</p> <p>-Government reports</p> <p>- Field visit reports</p>	<p>Monitoring and evaluation regular programs,</p> <p>Evaluation missions,</p> <p>Midterm and terminal program reports</p> <p>Responsibility of the FAO and the Ministry of Agriculture and irrigation</p>				
<p>Output 3: Disaster preparedness strategies and capacities for effective response and recovery improved</p>	<p>-Support to build national and local preparedness planning provided</p> <p>-capacities to stockpile agricultural inputs and vaccines to resume action after hazards strikes</p>	<p>M&E reports</p> <p>-Government reports</p> <p>- Field visit reports</p>	<p>Monitoring and evaluation regular programs,</p> <p>Evaluation missions,</p> <p>Midterm and terminal program reports</p> <p>Responsibility of the FAO and the Ministry of Agriculture and irrigation</p>				
<p>Output 4: Dissemination and application of improved technologies and practices in farming, livestock, fisheries, forestry and natural resources to vulnerable households enhanced and risks to agricultural threats and emergencies reduced</p>	<p>-Capacity to effectively respond to agricultural threats and emergencies through timely assessment of situations, developing mechanism for inter agency coordination, and guidelines elaborated and enhanced</p>	<p>M&E reports</p> <p>-Government reports</p> <p>- Field visit reports</p>	<p>Monitoring and evaluation regular programs,</p> <p>Evaluation missions,</p> <p>Midterm and terminal program reports</p> <p>Responsibility of the FAO and the Ministry of Agriculture and irrigation</p>				

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