

Post-conflict Development of Agriculture in South Sudan: Perspective on Approaches to Capacity Strengthening

by

Clesensio Tizikara¹ and Loro George Leju Lugor²

Ministry of Agriculture, Forestry, Cooperatives and Rural Development
Directorate of Research, Extension and Training
P.O. Box 126, Ministries Complex, Juba, Republic of South Sudan

Abstract

The South Sudan conflict started in the 17th century when kingdoms based along the Nile River fought against the people of inland Sudan. During the Ottoman-Egyptian rule, (1820 – 1898) invading forces extracted some 2 million slaves from the land of Blacks while the Anglo-Egyptian Condominium era (1899 – 1955) isolated and marginalized the “remote” southern and inland Sudan under the policy of development along “indigenous lines”. The first Sudan civil war started in 1955 as a mutiny by southern army officers in the face of Sudanisation process in the run up to Sudan independence which favoured the better educated northerners over peripheral populations, and was further fuelled by the “Islamisation” policies and failure to implement a federal system that would guarantee autonomy for the South. The Addis Ababa agreement that ended the fighting in 1972 failed to completely dispel the tensions that had originally caused it, and when Sharia law was introduced, the north-south conflict was reignited in 1983. This second Sudan civil war officially ended with the signing of the Comprehensive Peace Agreement (CPA) in January 2005. The 50-year period between 1955 and 2005 is thus sometimes considered to be a single conflict with an eleven-year ceasefire that separates two violent phases. Over 2 million people died during the conflict and 4 - 5 million were displaced. Tribal animosities, proliferation of firearms, perceptions of insecurity, cattle rustling, breakdown of cultural norms and values, and limited economic opportunities continue to build pressures and often erupt into inter-tribal conflict and violence.

The window of peace (1972 – 1983) saw rapid agricultural development and South Sudan became a net exporter of food commodities. The resumption of war in 1983 led to massive destruction of infrastructure and external support switched from development to emergency relief to the many farmers who had been dislodged from their economic bases and herded into camps for internally displaced people or in refugee settlements. With independence, there is broad consensus that a major driver of job creation will be rapid private sector development in key growth sectors such as agriculture and to effectively use the natural resources to accelerate inclusive growth. The oil sector currently contributes 95% of the budget. The value of total agricultural production was estimated at US\$808 million in 2009, with 75% accruing from the crop sector. Development effort is focused on programs that contribute to building credible, functioning and accountable government structures; establishing more appropriate and credible approaches to the transition from relief to development and building core service delivery capacities.

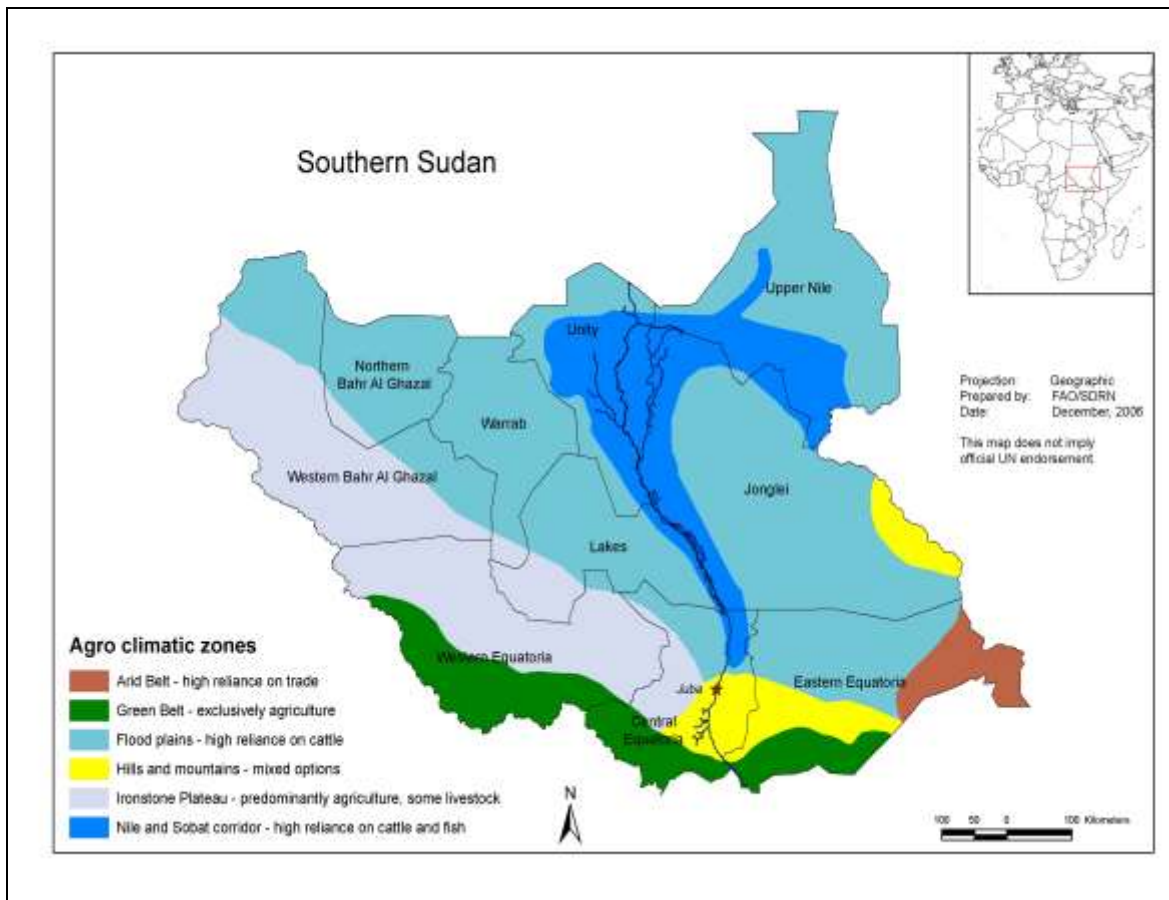
¹ Chief Technical Advisor, Support to Agriculture and Forestry Development & Emergency Food Crisis Response Projects

² Director General for Research, Extension and Training

Background

South Sudan, lying between latitudes 3° and 13°N and longitudes 24° and 36°E covers a total area of some 640,000 km². It is covered in tropical forest, swamps, and grassland. The climate is similar to an Equatorial or tropical climate, characterized by a rainy season of high humidity and large amounts of rainfall followed by a drier season. The temperature on average is always high with July being the coolest month with average temperatures falling between 20 and 30 °C and March being the warmest month with average temperatures ranging from 23 to 37 °C. The most rainfall is seen between May and October, but the rainy season can commence in April and extend until November. On average May is the wettest month. The season is influenced by the annual shift of the Inter-Tropical Convergence Zone and the shift to southerly and south-westerly winds leading to slightly lower temperatures, higher humidity, and more cloud coverage. The country is endowed with abundant natural resources including a large amount of fertile rain-fed agricultural land, land which is potentially irrigable, livestock, aquatic and forest resources and significant oil reserves. Agriculturally, the country is classified into 6 distinct agro-ecological zones (Figure 1). In this respect, South Sudan has a major advantage over most emerging post-conflict countries.

Figure 1: Agro Ecological Zones of South Sudan



The country is home to over 60 indigenous ethnic groups among a 2008 (5th Sudan Housing and Population Census) population of 8.3 to 9.3 million, with an annual growth rate of 2.85%. The population is predominantly rural (83%) and the poor constitute 51% (55% in rural areas and 24% in urban areas). About 80% of poor households depend on subsistence agriculture for their livelihood. Like many African countries, South Sudan has a young population with 28% aged between 15 to 29 years. A key feature of the rural economy is the high prevalence of malnutrition and food insecurity despite the existence of abundant natural resources for sustainable livelihoods available to increase agricultural production. While 47% of the population is food deprived, less than 4% of arable land is cultivated and total livestock and fish production are 20% and 10% of their respective potential (WFP, 2011a).

The oil sector currently contributes 95% of the budget. However, there is a strong consensus in the Government of South Sudan (GoSS) that agriculture should be a vehicle for broad-based non-oil growth and economic diversification. The sector consequently, features prominently in South Sudan's 2011-2013 Development Plan (GoSS, 2011a). According to (Diao et al., 2009), the Length of Growing Period (LGP) in more than 70 percent of South Sudan is longer than 180 days and is therefore suitable for crop production. However, land use and land cover data (FAO, 2009) show that most of the land that is suitable for agriculture is still under natural vegetation. Only 3.8 percent (2.5 million ha) of the total land area (64.7 million ha) is currently cultivated, while the largest part of the country (62.6 percent) is under trees and shrubs. This ratio (cropland to total land) is very low in South Sudan compared to Kenya and Uganda, where despite less favourable LGP, cropland accounts for 28.3 percent and 7.8 percent, respectively, of total land area.

Lack of skilled human resources has become a big factor in low absorption capacity as the country transitions from dependence on humanitarian aid to development support. Human resource assessments conducted in 2009 indicated a paucity of professionals (those with post-secondary training – 22 PhD/MSc; 221 BSc or equivalent) and technical personnel (373 who completed one-year certificate level of training or who had received a diploma) directly employed in the public service within the sector. The existing Universities that offer agriculture-related courses and the agriculture training schools offering certificate courses are inadequately staffed and most of the curricula are outdated and inappropriate. Because of the war situation, those who remained in SPLM-controlled areas had neither opportunity to pursue their education further nor access to up-to-date information. The refugees in the neighbouring countries were also exposed to limited education opportunities due to lack of sponsorship. Many who went to the diaspora and got opportunity to study have not returned because of the harsh living conditions and economic and social hardships in most of the areas. The economic development challenge for South Sudan is to translate its abundant resources and workforce potential into better human and development outcomes for all its people and future generations.

Nature, causes and context of conflict or protracted-crisis situation

The history of South Sudan for almost 500 years is synonymous to suffering. Its resources have been its nemesis – people for slaves; land, water and forests for wealth accumulation, and then oil. Kingdoms based along the Nile River fought against the people of inland Sudan for centuries since the 17th Century. From 1820, when the Ottoman-Egyptian forces conquered Sudan, until 1898 successive invading forces extracted some 2 million slaves from “Bilad Al Sudan” or the “land of Blacks”. The policies of the Anglo-Egyptian Condominium (1899 – 1955) also largely isolated and marginalized the “remote” southern

and inland Sudan under the 'Closed Districts' policy to allow the South to develop along 'indigenous' lines. There was local resistance to all this that was met with massive repression. This history of marginalization produced a complex web of dynamics that often provoke conflict, even up to the present.

The first Sudan civil war, also known as the Anyanya ["snake venom"] rebellion, started in 1955 as a mutiny by southern army officers who anticipated marginalisation by the North, on the basis of the "Sudanisation" process of the period in the run up to Sudan independence on 01 January 1956 which was seen to be favouring the better educated northerners over peripheral populations. The war was further fuelled by the "Islamisation" policies of subsequent post-independence governments and the northern politicians reneging on their pre-independence promise to implement a federal system that would guarantee autonomy for the South. Half a million people, of which only one in five was considered an armed combatant, were killed and hundreds of thousands more were forced to leave their homes.

The Addis Ababa agreement that ended the fighting in 1972 failed to completely dispel the tensions that had originally caused it, and when Sharia law was introduced in 1983, the north-south conflict was reignited. This second Sudan civil war, fought between the central Sudanese government and the Sudan People's Liberation Army (SPLA), officially ended with the signing of the Comprehensive Peace Agreement (CPA) in January 2005. The 50-year period between 1955 and 2005 is thus sometimes considered to be a single conflict with an eleven-year ceasefire that separates two violent phases. Roughly over two million people died as a result of war, famine and disease caused by the conflict. Four to Five million people were displaced at least once (and often repeatedly) during the war. The civilian death toll is one of the highest of any war since World War II.

Many conflict diagnostics have been undertaken in South Sudan and the typology of conflict suggests varying causes of violence. There are some general issues, which relate to all the conflicts and there are specific factors underlying some particular conflicts. It is generally widely accepted that the war was a southern struggle against the northern elite who dominated the political, military structures of the central government and the exploitative northern merchants. Deliberate policies excluded or made it difficult for southerners and other peripheral ethnicities to equitably participate in governance, job placement and business. A key central government's policy, for example, was of taking land from farmers (Muslims and non-Muslims alike) and transferring it to government officials and merchants, which had drastic effects on rural peasant populations eventually creating unrest all over Sudan. The conflict is often painted as racial (Arabs in the central government vs. Africans in the South) or as religious (Muslims vs. Christians and Traditional African Religions). To the majority of South Sudanese, exploitative governance was the main root cause.

Another factor in the second war were the natural resources of the South, where there are significant oil fields and also due to numerous tributaries of the Nile river and heavier precipitation, the south has greater access to water and is therefore much more fertile. The northern desire to control these resources, and the determination of the people of South Sudan to maintain control of the resources where they live, significantly contributed to the war and continues to be a source of conflict between the now Republic of Sudan and the newly independent Republic of South Sudan.

The major pre-occupation of the government in the south during the CPA interim period was managing the transition to independent Statehood. After elections in 2010, a

referendum was held in January 2011 to determine if South Sudan should declare its independence from Sudan, with 98.83% of the population voting for independence. This led to a formal independence on 9 July 2011, although disputes still remain, such as sharing of the oil revenues, the disputed region of Abyei, and support for armed insurgents across both borders. Regional armed insurgencies like Joseph Kony's Lord's Resistance Army (LRA) and widespread inter-ethnic warfare that in some cases predates the war of independence have also caused untold misery to populations over large swathes of South Sudan territory. In general, tribal animosities, proliferation of firearms, perceptions of insecurity, cattle rustling as a function of wealth acquisition, breakdown of cultural norms and values, and limited economic opportunities – still all together continue to build pressures and often erupt into inter-tribal conflict and violence.

The role of agriculture in the economy, post/protracted-crisis reconstruction and development

Experience from other countries has shown that GDP growth from agriculture has been twice as effective at reducing poverty compared to GDP growth originating from other sectors (World Bank, 2007). Greater agricultural production increases demand for related sectors, such as rural transformation and services; infrastructure; agro- business; trade and tourism, and transport and communication. While public revenue and government spending depend primarily on the oil industry in South Sudan, this provides very limited employment opportunities. Household income and employment are generated predominantly by crop production and livestock rearing. As agriculture is the largest sector other than oil, it also has the greatest potential to drive diversified and sustainable economic growth and development (GoSS, 2009; 2011a). Activities within this sector are therefore central to the overall objective of economic development and poverty reduction since 78% of households depend on crop farming or animal husbandry for their primary source of livelihood.

As reported in a recent study (World Bank, 2012), the value (realized agricultural potential) of total agricultural production in South Sudan was estimated at US\$808 million in 2009. Seventy-five percent (US\$608 million) of this value accrues from the crop sector, while the rest is attributed to the livestock and fisheries sectors. The average value of household production is US\$628, of which US\$473 is realized from crops. Average value of production per ha is US\$299 compared to US\$665 in Uganda, US\$917 in Ethiopia, and \$1,405 in Kenya in 2009. Production is primarily rain-fed, subsistence in nature, characterized by primordial technology, high input costs, and low productivity. Farm production costs are generally much higher than in neighbouring countries due to higher labour requirements for land clearing, higher labour costs, lower yields, and higher prices of tradable inputs and lower efficiency of their use (WFP, 2011b; USAID South Sudan, 2011; Sebit, 2011; World Bank, 2012). Where opportunities for surplus production exist, local producers have little or no incentive to produce for the markets because the poor status of roads limits connection to the centres of consumption. Retail markets in urban areas are hence mainly served by imports at very high prices, and with little secondary economic benefit to the rural areas that should otherwise be their natural supply.

The potential agricultural value that would accrue from expanding cropland area and increasing crop productivity only, assuming the value of other subsectors, e.g., livestock and fisheries, remains constant is immense. The World Bank (2012) estimates that increasing cropland from the current 4 percent of total land area (2.7 million ha) to 10 percent of total land area (6.3 million ha) under a modest cropland expansion scenario would lead to a 2.4-

fold increase in the value of total agricultural output relative to the current level (i.e., to approximately US\$2 billion versus the current US\$808 million). If coupled with a 50% increase in per capita yields, this cropland expansion would lead to a 3.5-fold increase in the value of total agriculture output (i.e., to US\$2.8 billion) and would also increase the value of crop production per ha from US\$227 to US\$340. If per capita yields double, the value of total agriculture production under a modest cropland expansion scenario would increase to US\$3.7 billion, and would outstrip the current value of agricultural production in neighbouring Uganda. Increasing productivity threefold would increase the value of agricultural production to US\$5.5 billion.

At present, 53% of food consumed comes from own production, market purchase accounts for 32% and the remaining 15% constitutes non-monetary, informal exchange with friends and family members, often in return for labour, which is very common in rural societies (SSCCSE, 2006; SSCCSE, 2009; GoSS, 2011a; WFP, 2011). There is also some gathering of indigenous wild foods and fishing, hunting, gifts and food aid. Only about 4% of the potential agricultural land is presently utilised in South Sudan - mostly applying traditional low-input/low-output production systems. The country has an enormous potential for highly diversified agricultural economic development from crop production (through increases in cropped area and per capita yield improvements), livestock, fisheries, forestry, and related processing and commerce (GoSS, 2007; World Bank, 2012). The sustainable use of natural resources through environmentally sound management and protection is pivotal for near-term growth. Investment in agriculture should bring with it the ability to innovate and adopt new technologies. This innovation will be vital to move beyond the traditional techniques used at present towards higher productivity farming.

The longer term vision for the new Republic of South Sudan is guided by Vision 2040 (GoSS, 2011b), which sets out a comprehensive agenda to build a nation that is educated and informed; prosperous, productive and innovative; compassionate and tolerant; free, just and peaceful; democratic and accountable; safe, secure and healthy; and united and proud. Based on this, a post-independence South Sudan Development Plan (SSDP) 2011-13 (GoSS, 2011a), the nation's response to core development and state-building challenges during the first three years of independence, identifies developing the country's agricultural and livestock potential as the most feasible way to enable broad-based economic growth and food security in the short- to medium- term.

The broad economic development strategy in the SSDP is premised on rural development supported by infrastructure improvements through creation of a diversified private sector-led economic growth and sustainable development, which improves livelihoods and reduces poverty. The stated objective for the natural resources sector - which is recognised to include agriculture, livestock, fisheries, forests and wildlife - is to ensure food security and improve livelihoods and income generation for the people of South Sudan, through sustainable use of natural resources and land management. The plan recognises that South Sudan is endowed with abundant natural resources including a large amount of fertile rain-fed agricultural land, land that is potentially irrigable, aquatic and forest resources as well as mineral resources. It asserts that given these natural resources, a youthful but low capacity labour force, and the current low productivity and investment levels, the greatest potential for initial new growth is likely to be from the small-scale private, predominantly family, agriculture and livestock sectors.

However, much rural sector activity is currently focused on low input - low output subsistence agriculture instead of production for markets. Limited use of productivity-

enhancing technologies, capacity constraints, non-tariff barriers, high labour costs and poor infrastructure hinder progress and also constrain production, productivity and the competitiveness of South Sudan's agriculture relative to its neighbours (GoSS, 2007; 2011a; World Bank, 2012). The rural and agriculture sector will need to absorb high numbers of returnees and ex-combatants and provide opportunities for women and youth. This will be a significant challenge as people who are not settled may be reluctant to make investments and to cultivate land. Constraints on access to land and unclear property rights are likely to be a key impediment to these groups. Existing inequalities between men and women - such as over-control of resources, access to land and credit, extension services and basic education - need to be removed to avoid them constraining development.

A recent study on Sub-Saharan Africa shows that the realization of agricultural potential depends on access to markets (Dorosh et al., 2008). An area that is nine hours away from the market, for example, realizes only 8 percent of its agricultural potential, compared to 46 percent for an area only four hours away from the market. Thus, to realize agricultural potential in South Sudan, it is imperative that public investments are made to "reduce the distance" between production and consumption areas. There are about 15,764 km of roads in South Sudan, most of which are in poor condition. The road network consists 2,696 km of "interstate primary roads" (connecting all state capitals plus major cross-border corridors); 4,475 km of "other primary roads"; 6,292 km of secondary roads; and 2,301 km of tertiary roads. About 10,200 km, or 65 percent of the total road network, are located in areas with high agricultural potential. Less than 5 percent of the existing 7,171 km of primary roads are in good condition, and with the exception of the newly constructed urban paved roads and the Juba-Nimule road, the entire network is gravel, dilapidated, and mainly inaccessible during the rainy season World Bank (2011a). Freight tariffs in South Sudan are very high and at least twice those found in the main African corridors and even in Sudan (World Bank, 2011b; 2011c).

There is a lot of room for progress, not only with the expansion of the roads network, but also river transportation. High agricultural potential/high-medium population density areas (HH), high agricultural potential/low population density areas (HL), and medium agricultural potential/high-medium population density areas (MH) (Figure 2) are best positioned to generate quick wins and development benefits from public and private investments, and are likely become the springboard for agricultural development programs. It would yield the highest payoff to investments in rural roads (secondary and tertiary roads, as well as some primary roads) (Figure 3), especially in these areas, allowing farmers to compete with food imports in the short run and to also conquer cross-border markets in the medium to long run.

Occasional and unpredictable closing down of transport corridors due to armed insurrection, inter-tribal clashes and floods not only imposes huge costs on traders, especially if they are carrying perishable agricultural products, but also hampers improvement of roads and agricultural infrastructure like irrigation schemes that are needed to upscale production and increase efficiency. It is a major disincentive to investment in general as it generates uncertainty and increased costs, in addition to unreliable power as an input to the agricultural value-chain in agro-processing operations, better storage of produce in urban centres, powering irrigation water pumping operations.

The clear, consistent enforcement of existing and new policies and laws to underpin good governance and transparency remains a significant challenge. A clear well-functioning regulatory framework will be essential if the market is to work efficiently with enhanced

predictability and lessen risk, thus creating an environment where the private sector has growing confidence in investment opportunities. This will be especially important for ensuring freedom of entry, for avoiding monopolies, and for reducing the cost of doing business in South Sudan. For instance, young men and women entrepreneurs often face barriers in accessing land, loan capital, business skills and know-how and in gaining access to markets. Linked to the above, the issue of multiple taxation and/or administrative fees is evident. Widespread official and unofficial road checkpoints collecting taxes, fees and charges are a big disincentive to those trying to get their produce to market (Selassie, 2009; Asebe, 2010; World Bank, 2011b). So are instances of double and multiple taxation of the same item. By increasing the cost of getting goods to market they inhibit investment and renewed growth.

Figure 2: Spatial patterns of agricultural potential and population density

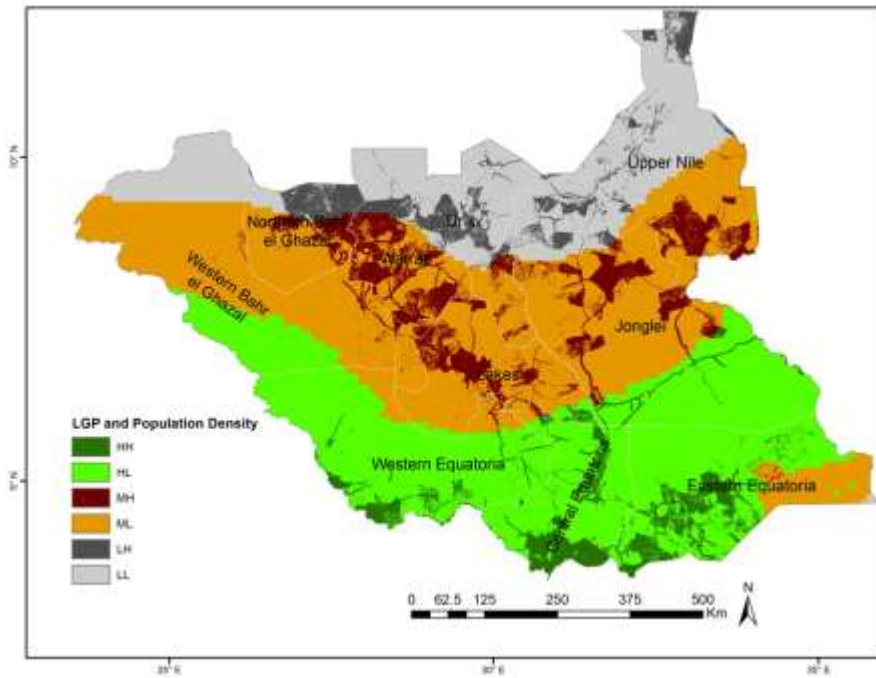
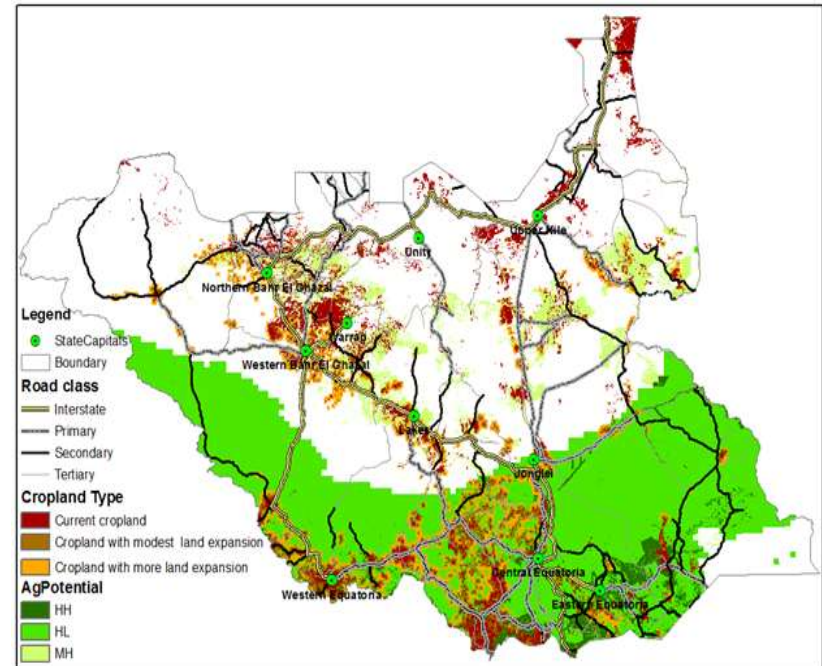


Figure 3: Combination of roads, agricultural potential zones, and cropland areas



Source: World Bank (2012)

Note: **HH**: LGP >220 days per year and population density ≥ 10 per km²; **HL**: LGP >220 days per year and population density <10 per km²; **MH**: LGP between 180 and 220 days per year and population density ≥ 10 per km²; **ML**: LGP between 180 and 220 days per year and population density < 10 per km²; **LH**: LGP < 180 days per year and population density ≥ 10 per km²; **LL**: LGP < 180 days per year and population density < 10 per km².

Phases in the post/protracted-crisis reconstruction and development of agriculture; key milestones and projections in agricultural development

After the Addis Ababa agreement of March 1972, the then High Executive Council Government established the Ministry of Agriculture and Animal Resources (MAAR) with six Directorates. The World Bank/International Development Association (IDA) in collaboration with the then Overseas Development Administration (ODA) of the United Kingdom (UK) (now the Department for International Development – DfID) and the German Agency for Technical Cooperation (GTZ) approved US Dollars 12.5 million for the rehabilitation of agriculture, forestry and animal resources through the Project Development Unit (PDU). The PDU was run as a semi autonomous unit, but working very closely with the Ministry of Agriculture and Animal Resources.

The GTZ in particular funded the livestock vaccination program and the rehabilitation of Kagelu Forestry Training Institute. The PDU on the other hand partially rehabilitated the Yei, Yambio, Halima and other agricultural research centres; carried out a baseline on the socio-economic status of the farmers in Southern Sudan; collected farm labour data to ascertain the use of available farm resources on various enterprises; and undertook an extensive socio-economic survey to establish the basic economic indicators. A Dutch Agronomic consulting firm (ILACO) carried out crop trials in the Penko plains east of Bor town while the Norwegian Church Aid (NCA) conducted variety trials in various parts of the region. Juba University carried out wheat trials in Chukudum and Gilo. The MAAR with assistance of the FAO and UNDP rehabilitated Aweil Rice Scheme, Yambio Institute of Agriculture and other training centers. MAAR with help of the Government in Khartoum rehabilitated Nzara Industrial Project, which was started in 1948 by the Anglo-Egyptian colonial administration.

After four years, in 1976, most of the rehabilitation activities were replaced by development projects. The second phase of the PDU witnessed an expansion of the project components from the six during the rehabilitation period to eighteen under the Southern Region Agricultural Development Programme (SRADP). The program components included feeder roads, Marial Bai Dairy farm, Malakal Stockmen's Training School, Rumbek Oxen Training School, Juba Veterinary Laboratories for the production of vaccines and Yei Agriculture Training Institute. The SRADP also established Palotaka sub-research station. The coffee activities in Maridi and Yambio were expanded and soil surveys conducted by Halima Soil Laboratories. Working closely with the Project Formulation Unit (PFU), a land use planning and classification exercise was initiated to prepare District Development Plans for Yei, Mundri, Maridi, Yambio, Yirol, Wau, Aweil and Gogrial. During this period, the South attained a high degree of food self-sufficiency. The Juba and Billinyang farms supplied Juba town with milk, eggs, poultry and steers; Aweil Rice Scheme supplied the Southern market with good quality rice while the Marial Bai farm supplied Wau with fresh milk. Large grain surpluses were purchased from the rural areas and sold in the urban areas of Juba, Malakal and Wau, leading to increased farmers and household income and standards of living. In the 1980s-, South Sudan was a net exporter of food commodities.

Most of these initiatives were disrupted with the resumption of war in 1983. By the time the SPLM/A intensified its activities, the South had been split into three autonomous regions - Bahr el Ghazal, Equatoria and Upper Nile by the "Kokora Presidential Decree". This disrupted the momentum for agricultural development in Southern Sudan under MAAR as its movable assets and personnel had to be split into three in line with the decree. The PDU

Research station in Yei, the NCA headquarters in Torit, the ILACO Bor Research Centre and many other facilities were occupied by the warring armies and in the process were either destroyed or looted. Research information that had been generated from Yei, Yambio, Palotaka, NCA and ILACO Bor and Halima was virtually wiped out.

Most of the development NGOs evacuated their personnel out of Southern Sudan. A few however remained. ILACO, NCA, FAO and GTZ continued their support to the agricultural sector until the intensification of the war in the late 1980s and early 1990s. Similarly, EC continued support to the tea program in Upper Talanga, Kabengere and Iwatoka, and FAO also continued to support Aweil Rice Scheme. However, most NGOs switched from development to emergency relief with activities largely confined to giving relief food, temporary shelter, medicines and other assistance to the many farmers who had been dislodged from their economic bases and were looking for support to enable them survive in camps for internally displaced people (IDPs) in the South and North or in refugee settlements and camps in neighbouring countries.

The CPA came with a co-federal system of Government between South and North Sudan – one country two systems. The GoSS also operated a federal system of the Government with 10 states, an arrangement that has been maintained with independence on 9th July 2011 and declaration of the new country of the Republic of South Sudan (RSS). The State Governments are semi autonomous with their own Executive, Legislature and Judiciary. The federal constitution of Southern Sudan stipulated that the states constitutions should be in conformity to that of GoSS. Like in many other countries, there are often problems of interpretation of these decentralisation arrangements that create practical complications in implementation of programmes. In many instances, the relationship takes the nature of GoSS/RSS acting big sister to the States Governments. The States on the other hand feel they are autonomous and often want to act independent of the RSS structures. Consequently, when it comes to the coordination of rehabilitation/development activities, misunderstandings often develop on who owns, who has a right, or who should take leadership.

The CPA opened a new chapter in which the GoSS got opportunity and obligation to establish a capacity to serve the people of South Sudan, retaining the important contribution of the NGO sector, but shifting the locus of control away from external parties. This was particularly important in the livestock and fisheries sector and crop agriculture sectors, on which a majority of the people base the recovery of their livelihoods. Development planning for the agriculture sector, started with the New Sudan Food and Agriculture Policy Framework prepared by the Secretariat for Agriculture and Animal Resources (SAAR) of the Sudan Peoples Liberation Movement (SPLM) in 2004. After the CPA, the former SAAR and the former GoSS Ministry of Agriculture, Livestock, Forestry and Fisheries (split into the Ministry of Animal Resources and Fisheries (MARF) and the Ministry of Agriculture and Forestry (MAF) in late October 2005. A roundtable meeting with key stakeholders including representatives of FAO and the World Bank was held in October 2005 to discuss the vision for agriculture and other natural resources sectors, and identify main investment priorities.

After the CPA, a Joint Assessment Mission (JAM) for Sudan, comprising the World Bank, United Nations, Government of Sudan and Sudan Peoples Liberation Movement, provided an assessment of rehabilitation and transitional recovery needs and an outline framework for reconstruction and recovery through 2010, oriented toward the Millennium

Development Goals (United Nations, 2005). Building institutional capacity was high on the agenda. Following the 2005 Oslo Donor meeting, the World Bank was mandated to manage a Multi-Donor Trust Fund for Southern Sudan (MDTF-SS). When the Government of Southern Sudan (GoSS) was formed and the various Ministries were created, the immediate task was to identify rehabilitation and development projects. International Cooperating Partners (ICPs) have focused on supporting government efforts to increase agricultural production with the objective of improving food security by building the capacities of Ministries of Agriculture and Animal Resources both at National and at State level, providing direct investment to productive initiatives and developing export-oriented commercial agriculture in the areas with greater potential. Funding has been channelled either through bilateral projects or through contributions to multilateral instruments such as the multi-donor trust fund for South Sudan (MDTF-SS).

Several projects³ aimed at improving data collection and communication, capacity building and rehabilitation of specific development schemes, boosting of food production at the household level through support services, micro credit for farmer groups and farmers and training, rapidly increasing agricultural productivity in selected commodities, increasing trade, and improving the capacity of producers, private sector and public sector actors in to develop commercial smallholder agriculture, have been implemented since 2005, in addition to several other direct interventions by NGOs. These interventions have led (among other achievements) to cereal area cultivated and harvested increasing by 36% from 677,000 hectares in 2004 to 921,000 hectares in 2010.

A core target for economic development is to sharply increase food security by lifting cereal production from 0.7 million Mt per year to 1.0 million Mt and meat, milk and fish production similarly and cultivable area covered with irrigation facilities from a baseline of 2,000 feddan to a target of 10,000 feddan by 2013 (GoSS, 2011a). An integrated set of mutually reinforcing initiatives is planned and being implemented to remove impediments and achieve the economic development objective by initially focusing on renewed rural development and diversifying into broader private sector development. These include:

- Extending and upgrading transport infrastructure, especially roads. This is critical to connect farmers to markets and includes plans to asphalt 700km of trunk roads and 1,000km linking major towns; expand the feeder road network, and strengthen maintenance for all roads.
- Clarifying issues pertaining to land to ensure access and tenure. A revised Land Act is being prepared to create an appropriate policy environment for peace, successful conflict resolution and private investment especially in agriculture and natural resources but also in urbanisation. During the 3-year period, implementing regulations will be drafted and pilot-tested to clarify and define the roles and responsibilities of land governance in rural areas. Access to land for returnees is to be secured to lessen related pressure for conflict and help rural growth. Returnees

³ Examples: SIFISIA - Sudan Institutional Capacity Program Food Security Information for Action; SPCRP - Sudan Productive Capacity Recovery Project; SSARP - Southern Sudan Agriculture Revitalization Project; SSLDP - Southern Sudan Livelihoods Development Project; SAFDP - Support to Agriculture and Forestry Development Project; LFDP - Livestock and Fisheries Development Project; EFCRP - Emergency Food Crisis Response Project; FARM - Food, Agribusiness and Rural Markets Project.

and former combatants, and women and young people, must have access to land in order to participate in this renewed rural growth.

- Improving access to extension and veterinary services, basic farming tools and inputs, and markets. The National Agriculture and Livestock Extension Policy (NALEP) (GoSS, 2011c) the management and organisational principles for a pluralistic extension system with both public and private extension service providers. The policy offers guidance for these service providers and other stakeholders on matters of standards and approaches and on how to strengthen coordination among all actors. Support to know-how transmission - through agricultural extension/advisory services, research and training (capacity-building) will be indispensable instruments for creating sustainability. Improving access to agricultural inputs and advisory services is fundamental for ensuring food security and poverty alleviation by increasing farmers' food crops, livestock and fisheries production and productivity. This entails, among other things, access to sub-sector production inputs and technology (and information), including improved seeds and tools, irrigation and water-harvesting techniques, mechanisation and post-harvest handling. Support to the formation and strengthening of cooperatives and farmers' groups is considered an important catalyst, including for the promotion of agriculture trade and reducing cost of production and marketing. The provision of advisory services is therefore essential and the strategy is to have unified service at the local level (agricultural, forestry, livestock and fisheries extension). The MAF and MARF are working with counterparts at state level to ensure that the implementation of the NALEP is consistent and responsive to needs at the local level. In parallel, support is vital for the elaboration, on a sound technical basis of a long-term development plan for future investment in the agricultural sector. In this regard the MAF is developing a new 5-year Strategic Plan that will supersede the 2005-11 Strategic Plan.
- Support reintegration of returnees in the agriculture sector - pivotal for peace and security and for sustained stabilisation of the new nation will be the support for the successful social and economic reintegration of the large numbers of returnees, ex-combatants and related groups in particular, into the agriculture sector (contributing to food security and income generation of beneficiaries). Fundamental in this context will be the technical support for ensuring land tenure security and related conflict prevention and mitigation. Contribution from wage labour in agriculture and rural non-farm employment will be significantly important.
- Building capacity of key institutions - by enhancing capabilities in policy design, project formulation and implementation and for the effective coordination of development support provided by international partners; ensuring that there is a stable, transparent and supportive policy and regulatory environment for private sector development; deepening and broadening financial services; and promoting environmental sustainability - through wildlife protection, reforestation, developing forest plantations and eco-tourism - to secure the natural resources of South Sudan, for the present and the generations to come and creating income in the immediate term.
- Strengthening disaster-preparedness - South Sudan is prone to recurrent crisis (droughts and floods, crop and animal pests and diseases, soaring food prices and

insecurity) affecting critical food and income security of large segments of the population. Support is indispensable for improving preparedness for and effective response to food and agricultural threats and emergencies.

Post/protracted-crisis capacity strengthening interventions and their consequences on agricultural development

The CPA granted semi-autonomous status to a government with few formal institutional structures, a human resource base severely negatively impacted by generations of war, and weak capabilities to provide public security and services to its people. The Government has a leadership role in promoting economic growth across sectors. This requires the strengthening of capacities for conducting research, undertaking planning, and facilitating coordination between a wide-range of stakeholders, in particular improving the ability of institutions to conduct strategic analysis, develop draft laws, policies and strategies, and coordinate review and approval processes. This ensures oversight over the implementation of policies and strategies, while addressing evolving conditions and priorities; and ensures that clear legal and regulatory frameworks exist for Government functions at all levels. To ensure policy and legal frameworks are implemented, it is necessary to strengthen the ability of Government agencies to translate policies and strategies into organizational work plans, to develop and manage core implementation and operational systems and functions on this basis, and to monitor and enforce compliance with core policies and regulations within both public and private sectors.

The Government also has responsibility for providing essential goods and services while also stimulating productivity. This requires the development of institutional and operational capacities to maintain infrastructure (facilities), provide oversight and supervision of contracted works (construction, provision and maintenance of agricultural machinery and specialised equipment, for instance), while also providing technical assistance (research, extension and training services) and/or ensuring quality assurance of private service providers. It is critical to strengthen research and planning mechanisms to enable development of sectoral plans and financing strategies, promote local associations and services, ensure rationalized geographic coverage of services, and quality control standards, and improving the qualifications of service providers through formal and in-service training and task shifting, exposure to other country experiences and coaching. In the agricultural sector the deployment of highly trained and qualified human resources is fundamental in the implementation of the ministry mandate. It is not enough to address only specialized training requirements, as well as priorities for strengthening the administration of the service delivery mechanisms. It is equally important to address how the service provider pool will be increased to accommodate expansion of service delivery (particularly at local level), and how core skills will be developed across the public service and non-state actors as a whole.

The period 2005 – 2011 saw the development of key physical and organizational structures of government at the national and state levels and a growing number of educated South Sudanese engaged in establishing a functioning public service sector and vibrant non-state actors. However, institutional conditions are still fragile, individual capabilities are heterogeneous, delivery capacities remain extremely weak, and there is acute need for a professional and accountable public service to create confidence in Government.

The South Sudan Medium Term Capacity Development Strategy (MTCDS), 2011-13 (GoSS, 2011d) puts emphasis on the need for establishing institutional systems and mechanisms critical for achievement of sector specific development outcomes, including enforcement of policies and regulations, monitoring and coordinating local service delivery, and strengthening key infrastructure, particularly at the local level. Institutional structures include the organizational systems, processes, and resources (financial and physical) required for the implementation of institutional mandates, functions and the delivery of services. A major weakness in all post-conflict situations is lack of capacity for National Management of Development Assistance. Ultimately, international development assistance is largely provided outside the national systems or managed by almost independent Project Implementation Units, because systems are not robust enough to meet the accountability needs of donors. This means that development assistance is managed through parallel structures, is often not reflected in the national budget and involves external planning and coordination mechanisms. This poses an inherent risk of undermining national systems that development assistance aims to strengthen, including duplication of effort and resource wastage. There is need to ensure conformity of non-government executed programmes with national and local priorities and the progressive strengthening of national execution modalities in the areas of planning, programme management, fiduciary controls, monitoring and oversight.

A key consideration is the roll out of institutional systems and mechanisms across the sector and down to the decentralised state and local government levels. Rolling out existing and newly developed systems such as sectoral information management, monitoring and evaluation systems necessitates significant strengthening of managerial, operational and technical capacities of Government at state levels and the establishment of arrangements that provide clear structures for information gathering, communication and knowledge sharing, planning, coordination and resource allocation, and management and oversight of non-state service providers. In many cases, building implementation capacity at local levels requires additional infrastructure and staff. Given the low institutional and human resource capacities, a major area of concern has been striking an appropriate balance between deploying appropriate skill sets and expertise in the immediate term to ensure delivery of critical services on the one hand, with ensuring appropriate longer-term investments in improving public administration and conducting training and recruitment of additional qualified nationals on the other. With respect to the first, matching qualified personnel with critical functions has been resolved through short-term technical assistance, mechanisms, programs and conditions to attract members of the South Sudanese Diaspora, and “surge” approaches provided by international cooperating partners. With respect to the second, the approach has been through organisational assessment, organisational restructuring, and development of clear human resource development and training policies and strategies.

Improving performance through human resource development to ensure efficient and effective delivery of essential public services and functions by enhancing the technical and functional skills and capacities required to deliver institutional mandates, and human resource management systems for recruitment, training, evaluation and other related functions that contribute to organizational performance is the second aspect of capacity strengthening. Development of sector-specific specialized skills and expertise (for instance the training of agricultural research and extension workers), as well as for core functional skills, such as basic public financial management is very critical. A key strategy is strengthening alternative approaches to training programmes, including the scaling up of

in-country training capacities, both through rehabilitation and construction of training and educational facilities, as well as on-the-job training (including coaching and mentoring). The human resource gaps also include areas where highly skilled workers and technical experts are required and where a different approach to skills development, such as linkages with regional and international institutions of higher learning is required. Consequently, the MAF developed capacity building and training strategy (GoSS, Undated) which aims at empowering people and communities to take a leading role in defining solutions to their own development problems. Specifically, MAF capacity building and training strategy focuses on at rapid evolution of the agricultural production system and targets every level - from farmer level to technicians, extension workers to degree and beyond - in line with the overall development objective of providing South Sudanese citizens with knowledge and skills that will enable them quickly change their condition through own efforts leading to self sufficiency, and dignity.

The third element of capacity building is related to empowering households to manage their livelihoods, claim their rights and ultimately realize their full potential. Through rapidly boosting human capacity, particularly around economic literacy and numeracy and modern farming and livestock production methods, and improving access to inputs, basic farming tools and markets, the impediments to agricultural growth can be significantly reduced or removed. But for this to have maximum impact of poverty and employment, it is vital that gender inequalities in agriculture are addressed, not least because in South Sudan, a very large number of farmers are women and households are women-headed.

Lessons for and future outlook on capacity strengthening for agricultural research and innovation

The Government of South Sudan recognizes the need to raise productivity in non-oil export sectors in order to diversify as well as make growth more inclusive. Employment generation and improved livelihoods are not only important for poverty reduction, but are central to maintaining peace and security. The challenge for South Sudan is to shape the growth process to promote the creation of productive, remunerative and decent employment for both men and women, particularly among young people. A major driver of job creation will be rapid private sector development - family farms and micro-, small- and medium-sized enterprises in key growth sectors such as agriculture and to effectively use the natural resources of South Sudan to accelerate inclusive growth (GoSS, 2011a; UNDP, 2011). This will focus on creating an enabling environment for inclusive growth through policy development, enhancing functional literacy and effectively linking communities to microfinance services and marketing channels, with a particular focus on women and women-headed households; trade capacity development through farmer groups and cooperatives, and enhancing the skills, knowledge and working environment of agricultural service providers (see Annex 1).

A number of key strategic lessons learned have also been derived from the CPA period. First is the overarching need to “put state-building first” and to ensure that all development programs contribute to the process of building credible, functioning and accountable government structures. Second comes the need to balance a focus on core executive functions with support for oversight and accountability, including citizen participation, and with building strong relations between the centre, States and society. Third is the need for

more appropriate and credible approaches to the transition from humanitarian relief to development, focusing on building core service delivery capacities that enable the Government to take responsibility for the delivery of services to the population. Last, and crucially, is the need to ensure that the post-independence programs are better focused, with an emphasis on transformative programmes that can be scaled-up.

Bibliography

Asebe, E. 2010: Regional Trade and Transportation Facilitation Assessment in Southern Sudan and Northern Great Lakes Region." Draft report prepared for the World Bank, September 15, 2010.

Diao, X., V. Alpuerto, R. Folledo, C. Guvele and L. You, 2009: Assessing Food Security and Development Opportunities in Southern Sudan." Paper prepared by Development Strategy and Governance Division of IFPRI for US Agency for International Development. IFPRI, Washington, D.C.

Dorosh, P., H. Wang and L. You, 2008: Crop Production and Road Connectivity in Sub-Saharan Africa: A Spatial Analysis." Washington, D.C.: IFPRI and the World Bank Spatial and Local Development Team, FEU, SDN.

FAO/WFP (various years): FAO/WFP Crop and Food Security Assessment Mission to Southern Sudan." Special Report. www.fao.org/giews.

Government of Southern Sudan (GoSS), 2007: Agriculture and Forestry Sector Strategic Plan, 2007 – 2011. Ministry of Agriculture and Forestry, Juba, June 2007.

GoSS, 2009: Growth Strategy 2010-2012. Ministry of Finance and Economic Planning, Juba, December 2009.

GoSS, 2011a: South Sudan Development Strategy, 2011-13 – Realising freedom, equality, justice, peace and prosperity for all. Ministry of Finance and Economic Planning, Juba, August 2011.

GoSS, 2011b: Southern Sudan Vision 2040 - Towards Freedom, Equality, Justice, Peace and Prosperity for all. Ministry of Finance and Economic Planning, Juba, Draft of 24 February 2011.

GoSS, 2011c: National Agriculture and Livestock Extension Policy (NALEP). Report of the Agriculture and Livestock Extension Task Force, Ministry of Agriculture and Forestry and Ministry of Animal Resources and Fisheries, Juba, February 2011.

GoSS, 2011d: Medium-Term Capacity Development Strategy (MTCDS). Ministry of Human Resources Development, Juba, Draft of 31 May 2011.

GoSS, Undated: Capacity Building and Training Policy. Ministry of Agriculture and Forestry, Juba, Undated Draft.

SSCCSE, 2006: Southern Sudan Livelihood Profiles. A Guide for Humanitarian and Development Planning. Southern Sudan Centre for Census, Statistics and Evaluation, Juba.

SSCCSE, 2009: Southern Sudan - National Baseline Household Survey. Southern Sudan Centre for Census, Statistics and Evaluation, Juba.

- Sebit, S., 2011:** Analysis of Farm Production Costs in Southern Sudan. Background Paper prepared for the World Bank, Washington, D.C.
- Selassie, Z., 2009:** Southern Sudan: Non-Oil Revenue Study." Report for the African Development Bank. African Development Bank, Côte d'Ivoire.
- UNDP, 2011:** Draft country program document for the Republic of South Sudan (2012-2013). United Nations Development Programme, Juba, South Sudan.
- United Nations, 2005:** Sudan Joint Assessment Mission (JAM), Volume 1: Framework for Sustained Peace, Development and Poverty Eradication. A report of the World Bank, United Nations, Government of Sudan and Sudan Peoples Liberation Movement.
- USAID South Sudan, 2011:** Maize Yield in South Sudan – Central, Eastern and Central Equatoria. Assessment report by the FARM Project. United States Agency for International Development and Ministry of Agriculture and Forestry. Juba, November/December 2011.
- WFP, 2011a:** Annual Needs and Livelihoods Analysis (ANLA) – Southern Sudan. ANLA Technical Working Group, World Food Program (WFP) Juba, January 2011.
- WFP, 2011b:** South Sudan Maize Production Cost and Agricultural Labour Analysis. Report prepared by Andy D. Hale of The Borlaug Institute for International Agriculture, Texas A&M University System. The Howard G. Buffet Foundation and World Food Program, Purchase for Progress Program, Juba, July 2011
- World Bank, 2007:** World Development Report, 2008 – Agriculture for Development. The World Bank, 1818 H Street NW, Washington, DC 20433, USA
- World Bank, 2011a:** AICD: South Sudan Infrastructure: A Continental Perspective." Draft April 2011. World Bank, Washington, D.C.
- World Bank. 2011b:** Behind the Recent Growth of South Sudan's Cross-Border Regional Trade with Uganda." Draft Report, PREM Africa Region, June 2011, World Bank, Washington, D.C.
- World Bank, 2011c:** Policy Note on Infrastructure for GoSS Development Plan." Africa Sustainable Development Network, World Bank, Washington, D.C.
- World Bank, 2012:** Agricultural Potential, Rural Roads, and Farm Competitiveness in South Sudan. Report No. 68399-SS, Agriculture and Rural Development Unit, Sustainable Development Department, Country Department AFCE4, Africa Region, The World Bank, 1818 H Street NW, Washington, DC 20433, USA, May 30, 2012.

Annex 1: Agricultural policy framework

Mandate of Ministry of Agriculture

The pursuance of sustainable agricultural development and ensuring an immediate change in the lives of South Sudanese is a major preoccupation of the Government of the Republic of South Sudan. *The Ministry of Agriculture, Forestry, Cooperatives and Rural Development (MAFCRD) has been tasked to: (i) make South Sudan fully food security compliant, at household and regional levels, to the extent of producing quality surplus products for local, regional, and international markets; (ii) make improved agriculture and forestry services become a driving force for national socio-economic development; and (iii) improve the livelihood of rural South Sudan without compromising the sustainability of its natural resources for future generations.*

Vision of MAFCRD

Food security for all the people of South Sudan enjoying improved quality of life, environment, and economic prosperity.

Mission of MAFCRD

To transform agriculture from a traditional/subsistence system into a modern and socially and economically sustainable agriculture through science-based, market-oriented, competitive and profitable agricultural system, without compromising the sustainability of the natural resource for generations to come.

Strategic Objectives and interventions of MAFCRD

- ❖ Priority policies that quickly boost agricultural production
- ❖ Make available agricultural inputs, including credit facilities, at affordable cost
- ❖ Rehabilitate and expand rural infrastructure including feeder roads and markets
- ❖ Develop and provide research and extension services, and market linkages
- ❖ Develop and strengthen institutional and human resource capacity
- ❖ Protect, regenerate and conserve natural resources and formulate policy incentives for their rational and sustainable management and utilization

The key interventions needed to guide South Sudan to sustainable agricultural development and economic growth:

a) *Provide the necessary agricultural inputs for increasing agricultural productivity using private sector intermediaries and regional agricultural institutions:*

- Improved seeds, seedlings and tissue culture – tested and verified
- Agro chemicals including fertilizer, pesticides and herbicides – controlled
- Labour saving and cost-effective farm implements
- Mechanized equipment for the large scale irrigated fields
- Credit facility to farmers, associations, and youth and women groups

b) *Efficient provision of agricultural services:*

- **Research:** Technology generation and adaptation by agro-ecological zone and by enterprise/commodity; Importation of technologies and best practices from neighbouring countries; Establishing agro-ecological field stations and research centres.
- **Extension:** Advisory and information services to farmers; Linking farmers with technology producers, input suppliers, processors and markets; Involving the private sector and progressive farmers to provide village level extension services; training and recruiting village-level extension agents (High School Diploma); opening farmer training schools.
- **Market information and linkages to markets; agricultural credit and insurance**

c) *Improve rural/village infrastructure:*

- Rehabilitation and expansion of feeder road networks, phase by phase
- Rehabilitation and expansion of rural markets (market centres, stores, post-harvest facilities, village drying floors, harvesting and handling hangars)
- Development and construction of irrigation schemes, priority by priority
- Reclamation and development of swamplands for commercial agriculture

d) *Sustainable natural resources management and protection of the environment:*

- Land use study and mapping
- Techniques and improved practices in land husbandry; soil and water conservation; forestry and pasture conservation and improvement
- Sustainable agro-forestry/forestry techniques and management
- Mitigating environmental degradation
- Land policy reform
- Integrated natural resource management and the environment
- Inter-sector coordination

Forest Policy Framework

The vision for forestry is “*a green South Sudan, with fully recovered natural and plantation forests, effectively managed for sustainable socio-economic development*”. With this vision MAFCRD will pursue the following development objectives:

- To develop and implement appropriate policies, legislation, institutional reforms and strategies for a vibrant forest sector;
- To create and sustain conducive and facilitative environment for all stakeholders and beneficiaries;
- To establish and ensure sustainable management of industrial and non-industrial plantation to meet the growing wood demands;
- To encourage and support the growth of competitive private sawmilling and manufacture forestry industry based on supply from sustainable managed forests;

- To combat desertification and desert encroachment and their negative impacts on biodiversity conservation;
- To reverse the trend of decline in forest cover and to ensure that a set minimum percentage (set at 20%) of the country's land area remains under forest cover; and
- To strengthen forestry institutions and services to increase productivity, achieve household food security, alleviate poverty and contribute to the macro-economy of Southern Sudan”.

The overall development objective for the forest sector is to ensure a sufficient and sustained forest resource base and flow of forest goods and services to support livelihoods and socio-economic development for the present and future generations. This will be achieved by promoting sustainable utilization of forest resources, and increasing production of timber and non-timber forest products through private-public-partnerships for local, regional and international consumption/markets.

Sector Guiding Principles

- 1. Peace and Security:** For a country coming out of a long and protracted war, peace and security are at the top of the pre-conditions needed for a strong and stable foundation for sustainable agricultural growth and economic development. The Government of South Sudan shall make peace and security as the number one priority for planting the seeds of sustainable economic development by achieving household food security, improved farm income, and rural entrepreneurship and employment.
- 2. Good Governance:** Basic human rights, justice, equality, fairness, objectivity, equity distribution of resources and services, decentralization and empowerment shall be the key guiding lights for ensuring ownership and accountability of development efforts
- 3. Natural Resources and the Environment:** The protection, preservation and conservation of our natural resources and the environment shall be at the forefront of the national policies, laws and regulations of RSS. With a logo of “*Cut one tree, plant five*”, MAFCRD along with counterpart Ministries at the States level will be the vanguard of the natural and forest resources of the nation so that the current generation and future generations of the land would benefit at household, community, State and national level economically, socially and environmentally.
- 4. Food Security:** Ensuring that each and every household of South Sudan has access to food and that each individual consumes not less than the minimum dietary requirement (FAO standard) shall be the principal preoccupation and goal of RSS. Working at inter-ministerial level, the **National Food Security Council** will give emphasis to increased production of both staple and cash crops to satisfy the needs of the population both at quantity and quality level resulting in healthy and quality life, self-reliant and productive society.
- 5. Human Resources and Institutional Capacity:** Since both institutional and human resource capacity have been destroyed during the war, greater emphasis should be given to rebuild these capacities at RSS, State, County, Payam, Boma and village level. Institutional capacities include physical, technical and administrative capacities at all levels of public, private community-based organs in all States, towns, and villages. With regard to human resources, RSS and the States shall give emphasis to increase the technical and administrative skills of public service employees through formal and

informal training focusing on the young and women. The Government will also provide incentives to the Diaspora to bring their expertise and resources for nation building. Since agro-pastoral is the major livelihood for more than 90% of the population, the Government will put increased resources to educate, train and increase the skills of cultivators and cattle herders to increase productivity and improve livelihoods.

- 6. Infrastructure:** The effect of the war was particularly severe to infrastructure. Bridges, roads, power and water supply, transportation and communication facilities, agro-processing and marketing facilities, irrigation facilities, etc, were destroyed. In partnership with development partners, RSS and the States shall put all efforts and resources to rehabilitate and rebuild existing and new infrastructures. Modern and effective infrastructure will be one of the priorities of RSS to attract local, national, regional and foreign investment.
- 7. Provision of Services:** As a technical and service Ministry, MAFCRD will give more emphasis to the provision of appropriate agricultural and forestry services in the form of improved inputs, improved agricultural technology and extension, agricultural credit, agricultural data and analysis, market information, and policy guidelines.
- 8. Gender and Equity Mainstreaming:** To achieve household food security and agriculture-led economic development, women should be empowered to improve their labour productivity, be engaged in decision-making process, participate in community-based development efforts, and improve their daily life. Since the contribution of the youth is paramount to nation building, the Government will ensure that the youth have access to resources and public services distributed equitably and rationally.
- 9. HIV/AIDS and Other Killer Diseases:** Since agricultural productivity is severely affected because of the diseases, particularly HIV/AIDS, Malaria and Tuberculosis, the Government will make sure that every public and private institution will incorporate HIV/AIDS into their respective programmes and activities.
- 10. Participatory Planning Process (PPP):** No development effort will be initiated without the participation of key stakeholders and beneficiaries. PPP shall be the *modes operandi* for any development activity initiated by the Government, NGOs, bi-lateral and international donors. Development of partnerships to enhance efficiency, transparency, accountability and professionalism, and to build confidence and trust among stakeholders shall be given due focus. In particular, MAFCRD shall:
 - Review its role as a Central Government agency and promote gradual transfer and devolution of responsibilities to other players that are more effective in dispensing the services;
 - Enhance the roles of States and Local Governments through devolved responsibility for resource management and benefit sharing;
 - Promote the role of the Private Sector as Investors and Managers;
 - Encourage the participation and maximize benefits of local communities and farmers;
 - Enhance the role of NGOs/CBOs so as to strengthen civil society participation;
- 11. Coordination and Communication:** Effective coordination and communication among and between RSS Ministries, RSS-States, States-States, States-Counties, Departments-Departments, Department Heads-staff, etc. shall be an established operational procedure at all levels of the Government at RSS and State and local level.