

**Republic of South Sudan  
Presentation on Forest  
Management and Climate Change  
Workshop**

14<sup>th</sup> – 16<sup>th</sup> December, 2016

Dar Es Salaam, Tanzania

# Presentation Content

# 1.0 Background *Information*: Forest Resources of South Sudan

South Sudan is well endowed with diverse natural forests and Woodlands which shows that out of South Sudan land area (approx. 664,000 Km<sup>2</sup>) some 208,157 Km<sup>2</sup> (33%) is covered by trees and another 257,236 Km<sup>2</sup> ( 40%) of land area is covered by shrubs. The combination of forest reserves, protected areas, national parks and game reserves together cover approx. 19,500 Km<sup>2</sup> (just 9%) of tree cover.

**Natural Forests and Woodland formations:** comprising of forest vegetation and woodland formation or **physiognomic** categories:

(a) Closed forests: Derivatives of tropical rain forest; main productive forest type (est. yield 1.2 cu.m/ha./yr) , multi-storied predominantly hardwood spp.(69,900 sq. Km)

# Forest Res. cont

(b) Open forests and woodlands – tree crowns occupy 10 – 40% . Area cover 407,600 sq. Km. Estimated yield of 0.6 cu.m./ha./yr.

(c ) Savanna with trees which consists of scattered or single trees

(d) Shrub formations with yield estimate as 0.2cu.m./ha./yr. it covers an area of about 42,000 sq. Total allowable cut from those forest types is estimated at 44.4 million cu.m.

# 1.1 Categories of Forests / Woodlands

## 1.1.1 Natural Forests/Woodlands

Categories and Forests/woodlands types: Cover approximately 191, 667 Km<sup>2</sup> and classified as:

a. **Low rainfall woodland savannas** (27% land area) rainfall 300 – 900 mm per annum: Tree species are mainly short thorny acacia spp.

# Categories cont.

b. The High rainfall Savanna Zone: (14%) zone has annual rainfall between 900- 1200 mm per annum

- Trees generally tall, broad leaved. Tall grass and less thorny comprises of Anogiessus-Khaya-Isoberlinia woodlands

c. Other Vegetation types.

i. Gallery forests – modified tropical rain forests confined to valleys and streams banks . Tree spp. Cola cordifolia; Syzigium guinensis and Mitragyna stipulosa

# Categories of Forests and Woodlands cont

- ii. **Montane 'vegetation-true montane'** . Covers less than 1%. Thus includes montane vegetation of Imatong mountains and Acholi ranges (1500 meters a.s.l. The Imatong Mountains and adjacent hills cover about 1,032 Km<sup>2</sup>. Tree spp. Podocarpus milanjanus; Juniperus procera; Olea spp.; Arundinaria alpina (bamboo)
- iii. **The Flood Plains and Grasslands** (10%) – region with annual creeping floods. Falls within rainfall belt 750 mm per annum. Tree spp. Are mainly Palms; Mixed Acacia – Balanites savana type; Zyziphus spp. etc

## 1.1.2 Plantation Forests

- Forest policy framework estimates forest reserves total to 17,500 with plantations covering about 1,900 km<sup>2</sup>, developed and pursued for various purposes.
- There are sixty eight (68) plantations of mainly *Tectona grandis* (teak) & few other exotic tree species, covering up to 187,900 hectares.



## 2.0 Importance of Forests Ecosystems

- Contribution atmospheric carbon and Oxygen cycles to water cycles
- Protect land from erosion & excessive
- Conserve biological diversity of plants and animals
- Produce food (fruits, seeds; mushrooms etc.) and fodder, fiber and construction materials
- Wood fuel – Charcoal, roofing material
- Rural setting : absorb climate shocks and improve resilience; employment,

## 3.0 The Mandate and Functions of Directorate of Forestry

The Directorate of Forestry of the Ministry of Agriculture and Forestry, RSS was established following the Comprehensive Peace Agreement, January, 2005 and successive formation of Government of Southern Sudan.

The Directorate of Forestry was charged with ensuring that effective implementation of Forestry Policy Framework and Legislation (2007) in all States of Southern Sudan was achieved.

# 3.1 Vision, Mission and Overall Goals

**Vision:** *A greener South Sudan with fully recovered natural and plantation forests effectively managed for sustainable socioeconomic development*

**Mission:** *To establish and rehabilitate forests/woodlands to ensure sustainable utilization and management of industrial and non-industrial plantations to meet the growing demand of timber and non-timber products at local, regional and international levels*

## **Goal and Overall Objective**

**Goal:** *Ensuring sufficient and sustainable forest resource base and flow of forest goods and services to support livelihoods and socioeconomic development for the present and future generations*

**Overall Objective:** *To reduce degradation of natural and plantation forests in order to ensure sustainable Forest management and economic growth and development of South Sudan*

## 3.2 The Forest Management Environment

The current Directorate comprises of seven (7) Forestry Departments and Units under a Directorate General:

1. Afforestation & Natural Forests Conservation;
2. Agro-forestry and Forestry Extension Services;
3. Forest Training and Research Unit;
4. Forests Survey and Inventories;
5. Forest Utilization and Sawmilling ;
6. Forests Investment and Economics (National Forest Programs; Concessions Appraisals, Industries Units)
7. Forest Administration & Finance.

All Forestry Departments are headed by Directors and each Department consists of several specialized Units manned by Deputy Directors

# 4.0 Impacts of Climate Change

- **Forestry and management: Risks, vulnerability and impacts**
- In terms of Climate Change and vulnerability strongly relates to forest degradation, deforestation and its contributions towards C- emissions /sequestration (other GHGs inclusive); mitigation/ adaptation towards droughts, adverse climatological variabilities.
- Loss of much forest / woodlands covers due to: high deforestation rate and forest/ land degradation resulting to induced surface erosion; excessive aridity, clearance, annual forest fires and droughts affecting the entire environment and Communities livelihood / change in live styles
- Socioeconomically, the forest dependent Communities' livelihoods and source of meager economics are disrupted; social instability/physical insecurity amongst communities; loose of human & livestock (hunger & starvation) life due to fluctuations / delays in rainfall patterns; invasive disease and plant species; changes in physical/chemical soils characteristics (lose fertility, reduced food crops production & productivity)

# Impacts cont.

- **Wildlife and Tourism: Risks, vulnerability and impacts**
- Degradation of protected areas and game reserves vegetation causes migration and lose of wildlife resources affecting tourism national economy (revenues)
- **Agriculture and Food Security: livestock, fisheries**
- **Risks, Vulnerability and impacts**
- The risks and vulnerability of climate change are associated mainly with periodic dry spills and occasional droughts (metrological, hydrological, agricultural, or socioeconomically); and Hazards (natural or manmade) in South Sudan. The resultant effects:
- Impacts on agricultural productivity and production due to failure of rainfall, delays/insufficient rainfall, reduced planted areas, disease/pests invasions etc.

# Impacts cont.

- **Agricultural Production: Risks, Vulnerability and impacts**
- The risks and vulnerability of climate change are associated mainly with periodic dry spells and occasional droughts (metrological, hydrological, agricultural, or socioeconomically); and Hazards (natural or manmade) in South Sudan. The resultant effects:
- Impacts on agricultural productivity and production due to failure of rainfall, delays/insufficient rainfall, reduced planted areas, disease/pests invasions etc.
- Impacts on food security: access, availability and consumption or use
- Physical insecurity- migration and raids
- Dwindling livestock production: reduced consumption of livestock products such as meat and meat products, fisheries products etc.
- Agricultural Policies ( at various stages of legislation): Crop Production; Mechanization; Plant Protection etc.

# 4.1 Key Players: Stakeholders in Forestry

- **Local Communities and Subsistence Users;** “common-property customary tenure regimes” – unprotected forests/woodlands 207,000 Km<sup>2</sup>; & 257,236Km<sup>2</sup> of shrubs
- **Informal entrepreneurs** in fuel wood, charcoal and other value- chains
- **Commercial private sector** (exportable timber mainly teak)
- **National and State government forestry authorities:** Technical needs back stopping, design legal, regulatory and incentive instruments



# 5.0 Existing Regulatory Mechanisms

- **Legislation:** Low at National and State levels
- **Forest Policy, 2015:** Legislature complete, pends approval/endorsement H.E. President of the Republic
- **Strategies:** National Development Plans, Vision 2040; Forests Strategic Plans: Afforestation and Natural Forests/woodlands Conservation & Operational Plans
- **Institutional Framework:** Ministry of Environment and Forestry (National Level) and State Ministries of Agriculture

# 6.0 Status of Forest Management

- National and State Forests: (46) Central Forest Reserves/Plantations (RSS Central Government): and (22) State Forest Plantations
- Private Forests – mainly woodlots and Stands
- Community Forestry- natural forests/woodlands - undemarcated

# 6.1 Adjustment Plans and Practices

Integration of Climate Change mitigation and adaptation into National Forest and Environmental Programs: e.g. Afforestation, conservation; Agroforestry & forest extension; research & Training. Ratifying UNFCCC and developing:

a- REDD+ program

b- MESA/IGAD/ICPAC EO Project:

C- Developed INDC/NDC (REDD+ & Adaptation)

D- Developed INC/ Initial National Communication.

# 7.0 Conclusions and Recommendations

- There is strong need to integrate forest policies, strategies and annual plans to mitigate and adapt towards Climate Change
- Recommendations for assistance of RSS National Government in:-
  - A. Conducting National Forest Inventory, Natural Forest Reservation
  - B. Piloting Indigenous Tree Species Plantation
  - C. Development of Climate Change Policy
  - D. Capacity Building
  - E. Studies on Demand and Consumption of Timber and non Timber Forest Products

# Thanks for your attention

