



**Republic of Sudan**  
**FEDERAL MINISTRY OF**  
**AGRICULTURE AND FORESTRY**

**MANAGEMENT OF SUPER TROPICAL FRUIT**  
**POTENTIAL IN ARID ENVIRONMENT**

**2015**



# INTRODUCTION

- Sudan is located in North Eastern part of Africa ,  
Bordered by Seven Country's (Egypt, Libya. Chad,  
Central Africa, South Sudan, Ethiopia, and Eretria.  
With long border to the Red Sea.
- The Country is endowed with Diversified Ecological  
Zones from the Desert to the rich savanna Which  
Qualify it to Produce Different Types of Crops.
- **Area:** 1.88 million sq.km
- **Population:** 33.4 million
- **Federal System** 18 States.
- **Arable land:** 180 million fed ( About 75 million Ha),
- **Cultivated Area:** 20%of Arable land.



# CONT

- Abundant Water Resources :
- From Rainfall (1 Trillion cubic meters)
- Rivers, Renewable Water Resources: River Nile, Blue Nile, White Nile, Atbara River ( Rahad and Dinder Seasonal) (20.55 Billion cubic meters more expected 6.5 billion c.m.)
- Underground water (5 billion cubic meters) and Seasonal stream (3-5 billion cubic meters).
- **Live Stock:** 103 million heads.
- **Natural pasture:** 14 million hectares.
- **Forests:** 21 million hectares.

# THE ROLE OF AGRICULTURE

- **Agriculture provides 34% of GDP, with average growth rate of 5%**
- **Agricultural Exports account for 90% of the total export excluding petroleum.**
- **Provide Food for the Nation.**
- **Employs 60% of total labour force**
- **Sudan has recently been diversifying from traditional agricultural commodity to include higher-value horticultural crops, including fruits.**
- **The horticultural sector is the fastest-growing segment of the global fruits market, but in response to several constraints, the global industry seeks new sources of supply.**

Sudan has great potential for such fruit production, with large areas of farmland providing excellent preconditions for expanding tropical fruit production, and they are well-positioned for Middle Eastern, North African and European markets.



# Irrigation Services

- The introduction of modern irrigation systems can dramatically improve the capital value of suitable land assets as well as productivity and yield.
- Sprinkler Irrigation or Pivot Irrigation, Drip Irrigation and Gravity Irrigation( Methods and Technique of measuring water) are using.



Expansion area to fruit tree production in arid zone of the north Sudan has been in progress. The area has suitable fertile soil and abundant irrigation water.



To achieve fruit production in arid environment, so many interventions such as selection of most suitable technological systems for irrigation and implementation of full technological packages to the local environment have been used.





## GOVERNMENT PLAN

- Sustainable development through building the infrastructure.
- modernizing and developing agriculture.
- increase production and productivity.
- enabling the private sector to guide the economic development Through ,Stimulating foreign and domestic investments (major priority for the Government)

# The Vision

Vision of the horticultural  
development strategy

*A comprehensive national socio-economic development led by a dynamic horticultural sector capable of rapid and sustainable growth and biased towards the weak and vulnerable sectors of the population*

## The Mission

The overall mission of the horticultural development strategy

Is to transform horticulture from a sector dominated by subsistence production to a modern sector responsive to market signals and with substantial contributions to poverty reduction, growth, foreign exchange earnings and sustainable management of natural resources.





## **Mango Production**

More than 35 varieties are available. Area under cultivation is 27500 Hectare. Total annual production: 602300 tons. Main production seasons all year round, except September-October. Season of export is from December to August.



## **Banana Production**

In Sudan, banana is produced commercially in small and medium-scattered orchards along the River Nile and its tributaries banks and in large plantations at Kassala. The water resources are the Blue Nile River and in an aquifer system in the alluvial deposits of the Gash River. The cultivar “Dwarf Cavendish” covers most (95%) of the plantation area. A number of other cultivars have been introduced at different times including Grand Nain and Williams Selections. However, these improved varieties have shown that these can be grown and adopted by farmers successfully and provide a starting point for expansion. 23000 ha. – produces about 1150000 tons annually have been noted. The crop has the opportunity to be exported to the neighboring Arab States and Middle East. Season of export extending from October to June.





## **Grape fruit Production**

The history of planting Citrus in the Sudan was dated back to 1896 according to Mr. Wingate's report on Dongla province. Citrus planting is known to be disseminated in the States of the North, Nile River, Khartoum, Kassala, Gazira, Blue Nile, Kordofan and Darfur. It would be recommended that to plant the highly demanded varieties of lime and grapefruit followed by oranges, mandarin and then Pummelo. More than 27000 hectare are planted with citrus trees. Mean production season is from October to March except for lime which produces all year round.



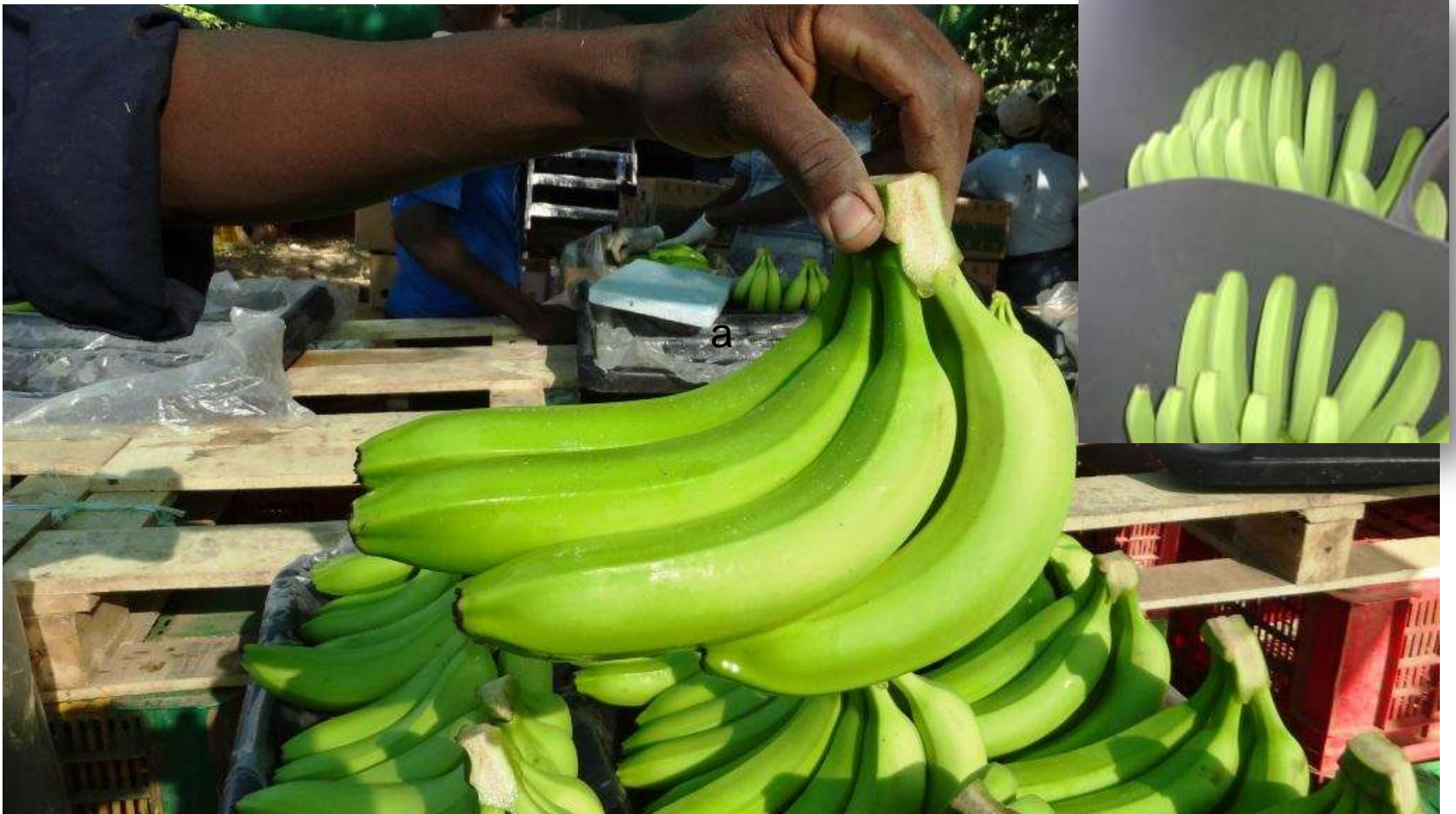
## **Guava Production**

In the Sudan Guava is grown successfully in the areas of Singa, Kassala, Abujebaeha, Rahad, Nile River and Jailli in Khartoum state. No authentic statistic information on areas and production amounts are available. Six thousand hectare produces 112000 tons annually are noted. There are four clones of guava namely: Shendi (white pulp), Pakistani (white pulp), Gunib (red pulp) and Singa (white pulp). Production per hectare area is estimated to be around 10-17 tons annually.



# Post harvesting Technique in Horticultural Crops

## 1- Banana



# Protection of Banana Fingers





# Handling and Cleaning





# Packing



# Post harvesting Technique in Horticultural Crops

## 2- Mango



**THANK YOU.....**