

**Inception Report**

**For**

**THE PROMOTION OF AFRICAN RICE DEVELOPMENT**

**FOR SUB- SHARA AFRICAN COUNTRIES**

**SPONSOR BY**

**JAPAN INTERNATIONAL COOPERATIVE AGENCY (JICA) IN  
LIBERIA**

**SUBMITTED BY**

**AMOS G. E. ZEON/Christopher D. Momo**

**DIRECTOR OF COMMUNITY EMPOWERMENT/**

**County Agriculture Coordinator (Bomi County)**

**MINISTRY OF AGRICULTURE**

**REPUBLIC OF LIBERIA**

## Abbreviation and Acronyms

ASRP	Agriculture Sector Rehabilitation programs
CAADP	Comprehensive Africa Agriculture Development project
CARD	Collation of Africa Rice Development
FAPS	Food and Agriculture policy Strategy
GOL	Government of Liberia
Ha	Hectare
ICT	Information and communication Technology
JICA	Japan International Cooperation Agency
Km	kilometer
LASIP	Liberia Agriculture Sector Investment program
LNRDS-	Liberia national Rice Development Strategy
MoA	Ministry of Agriculture
MCI	Ministry of Commence
Mou	Memorandum of understanding

# **Table of contents**

## **i) Abbreviation and Acronyms**

### **1 Introduction**

- a. Liberia agriculture sector**
- b. Background of rice production in Liberia**

### **2. Current situation of NRDS (National Rice Development strategy) in Liberia.**

- a. Achievement of NRDS in Liberia**
- b. Present on-going activity of NRDS in Liberia**
- c. Challenges of NRDS in Liberia**

### **3. Major activities in the rice sub sector**

- a. Rice processing**
- b. Storage**
- c. Transportation**
- d. Marketing**

# Introduction

## a. Liberia agriculture sector

The Liberia agriculture sector is forest based. Dominated by traditional subsistence farming systems mainly in the uplands, the farming is characterized by labor intensity, shifting cultivation, low technologies and low productivity. Rice and vegetables occupy about 87% of the cultivated land. Small acreages of tree crops are maintained for generating cash income. Commercial agricultural activities are almost exclusively carried out on plantation estates of rubber, oil palm, coffee and cocoa, the latter two are produced exclusively for export, with little value addition done for rubber and oil palm. Besides the plantation estates, very little private sector investment has been made in the agriculture sector, except for limited commodities trading which has persisted over the years.

## B. Background of rice production in Liberia

Rice is one of the staple food crops in Liberia. Rice is predominantly grown in upland environments by smallholder farmers, with a limited percentage devoted to lowland ecology. Presently, rice is largely cultivated once a year. The low input low risk production keeps the rice yields in uplands persistently low in Liberia.

Rice is generally grown as a subsistence crop, mainly under slash and burn shifting cultivation systems in the uplands, with a limited percentage grown in the lowland ecology. Most of the locally produced rice is consumed at farm or village level. Donor-funded, project-based initiatives are virtually the only vehicles of facilitation along the value chain. These initiatives are involved in extension services, input supply (mainly seed) and distribution of small mills in rice producing areas.

## Current situation of NRDS (National Rice Development strategy) in Liberia

In response to the global food crisis in 2008 to enhance the production of rice, the Government of Liberia (GOL) caused to establish a national rice development strategy under the Ministry of Agriculture. The basis for this is that Liberia is producing around 40 to 48% of its needs and the country being still largely food insecure". Consumption has outstripped production so there is need to focus on strategies that enhance production in order to reduce dependency imports and help increase the income of small farmers.

It is against this background, that the rice sub sector development will work within the context of the Poverty Reduction Strategy (PRS) and the Liberia Agricultural Sector Investment Program which deal with: Food security and Nutrition; Competitiveness and

Linkages to markets and Capacity building. Furthermore, technology transfer linkages, land area and water exist in Liberia to ensure effective increase in rice production in Liberia. Thus, the main thrust concerns rice value chain. It aims at the following key components

1. Land and water management
2. Enhancing access to inputs
3. Enhancing post-harvest quality improvement
4. Enhancing access to market
5. Institutional capacity building
6. Mechanization

### **Achievement of NRDS in Liberia**

The Ministry of Agriculture (MoA) of the Republic of Liberia is mandated to formulate policies and strategies to guide the growth and development of the agriculture sector. To realize efficient and effective results of the National Rice Development Strategies, the Ministry has put in place a well-structural organization program me unit called program management unit (PMU). These units through different projects, plans, coordinate, monitor and evaluate implementation of the National Rice Development Strategy. Therefore the achievement of the NRDS was realized at different level of various projects as stated below:

<b>Name of Project</b>	<b>Achievement under the component of NRDS in Liberia</b>
<b>Agriculture Sector Rehabilitation project(ASRP)</b>	<ol style="list-style-type: none"> <li>a. Trained 1,629 lowland rice farmers in GAP and exposed to improve rice varieties (NL-19, WITTA-4 etc.) have increased productivity from 1.5MT to 3.5MT per hectare in Grand Gedeh, Grand Kru, River Gee and Maryland counties.</li> <li>b. Trained 280 lead farmers in lowland rice farmers in the south-east.</li> <li>c. Trained 19 projects supported subject matter specialists at various from MoA.</li> <li>d. Motivated 10,179 in lowland ecology, 20,165 upland ecology of rice farming to production of rice.</li> </ol>
<b>Smallholder Agriculture Productivity Enhancement Commercialization project (SAPEC)</b>	<ul style="list-style-type: none"> <li>• Conducted feasibility study and prepared technical designs/drawing for 91.5 ha of lowland for rice production to commence soon.</li> <li>• Created a Rice Sub-sector working group in each county to promote lowland rice production.</li> </ul>

<p><b>Japanese Grant Under Liberia Agriculture Transformation Agenda (LATA)</b></p>	<ol style="list-style-type: none"> <li>a. The purchasing of paddy rice from rural farmer in five counties namely: Lofa, Nimba, Bong, Grand Gedeh, and Gbapolu county.</li> <li>b. 25 vehicle purchased for administration and operation</li> <li>c. 6 rice mills purchased for operating area</li> <li>d. 15 of each threshers and power tillers.</li> <li>e. Five warehouses constructed in the following rice producing areas namely: Lofa, Nimba, Grand Gedeh, Bong, and Gbapolu county.</li> </ol>
---	--

### **. Present on-going activity of NRDS in Liberia**

As it relates the National Rice Development Strategy, a number of steps were taken namely, the development of Food and Agricultural Policy and Strategy (FAPS) in 2008 within the context of the framework of the PRS, the development and validated Liberia Agriculture Sector Investment Program (LASIP) in 2010, which seeks to transform Liberian agriculture within the context of Comprehensive Africa Agriculture Development Program (CAADP) between 2010-2015. This provided a framework for progressively increasing GoL's annual budgetary allocation to the agriculture sector to a minimum of 10% to ensure sustainable annual 6% growth in compliance with the Maputo Declaration in 2003 to ensure the sector's contribution to economic growth, employment and income generation, food and nutrition security and poverty reduction.

### **. Challenges of NRDS in Liberia**

To increase rice production and build the effectiveness of the NRDS there are few challenges that should be resolved namely:

- Adaptive research capacities
- Lack of certified seed production system
- Outdated information on socioeconomics of rice
- Lack of credit and micro-finance institutions
- Inadequate trained manpower
- Lack of an extension system in all rice growing areas
- Inadequate feeder road network and
- Climate change affecting rice yields in upland and lowland environments

## **Major activities in the rice sub sector**

### **a. Rice processing in Liberia**

In Liberia, both the quantity and quality of rice suffer huge losses, especially during post-harvest operation. The qualitative losses come mainly as a result of poor handling after harvesting and poor processing technique. In Liberia locally milled rice has a high percentage of broken grains, sometime, unhusked grains as well as bran and husk fractions are found in the milled rice. This makes Liberian rice farmers finding it more difficult to sell their rice because locally produced rice is widely perceived as being of poor quality. The main actors of the rice processing from the smallholder farmers are women. After harvest they sundry the rice in the open-air, fan it to remove the unfit grains and transport it to the milling center. After milling the rice is packs and linked to market or consumers.

### **b. Rice storage**

Storage of rice is done in two forms in Liberia. First the seeds grown as planting material (farmer seeds) are stored as a paddy after being dry enough. Second if it is milled the polish rice is transported to designated warehouse for sale.

Generally storing grain is done to reduce grains loss to weather, moisture, rodents, birds, insects and micro-organism. Unfortunately the Liberian storage infrastructures are inadequately constructed in a sense that the building even though may be special but has no temperature control system. The gates are half way lifted given a chance for rodents to enter for destruction. Sometime there is no enough ventilation.

### **C. Rice Transportation**

Most of the domestically locally produce rice comes from the rural part of Liberia. Transportation of domestically milled rice has serious challenges due to the bad road condition in the rural part of Liberia.

Most transportation of locally produced rice is mainly done by the trader, who is considering as the middle man between the farmers and the buyer. Rice transported by the trader may consist of 80% of white or polished rice and 20% unprepared paddy or brown rice being transported in the mixing ration allow the rice to remain driers reducing its susceptibility to damages.

At the milling center, the farmer brings the dry paddy rice to be mills, weigh and polish by the mill operator. After polishing it is packages in bags usually 20- 25 kg woven propylene bag allowing for easy handling and storage. The trader rent truck to transport the rice.

Sometime getting truck is difficult for the trader because of the deplorable condition of the road, at time the trader pay highest cost for the truck

However: there is a component of NRDS that is to address the transportation problems by considering the following:

- To improve physical access to market in high production area
- Put in place well pave feeder roads in high production area.
- Build adequate storage facilities, and warehouse in high production area.
- Identify and build farm-to-market roads linking production area.

## **Rice MARKETING**

Before the formulation of the NRDS the locally produced rice was sold through unorganized rural traders. This was due to the lack of finance required to sponsor the trading been limited. The NRDS knowing that the increasing access to financial services for traders will increase the efficiency and profitability of rice producers has established a component that provides the following:

- Information on production and marketing of locally produce rice
- Create awareness on the linkages between price and standard grades of locally produce rice.
- Create access to market for farmers engaged into local rice production.

Presently the strategy that is piloted in Lofa, Nimba, Bong and Gbapolu counties which are the area of locally produce rice is that the farmer brings their dry paddy rice to the milling center where the Ministry Extension Agents are assigned.

The agent weighed the rice, and records the weigh in (Kg), the weighed rice is milled and packages usually 20 – 25 kg woven propylene bags, allowing for easy handling and stowage. The purchased and marketing of the paddy rice is done through the Ministry Agent or Extension workers assigned at the milling center of each county

Currently the Ministry of Agriculture and the World Food Program (WFP) has entered into an MOU to purchase all locally milled rice as a Whole sellers in the active production areas and distribute to operational to be use for the school feeding program in Liberia.