

## **HUMAN RESOURCE DEVELOPMENT OF SEED PRODUCTION AND DISTRIBUTION**

### **IMPORTANCE OF RICE IN THE GHANAIAN ECONOMY**

Rice is the second most important staple cereal after maize in Ghana. Per capita consumption has increased from 9kg to 38kg over the last two decade (1982 – 2008). The steadily increasing per capita consumption is the result of population growth, rapid urbanization, easy to cook, influx of rice as food aid to disaster areas and the increased proportion of rice in the Ghanaian diet.

The current demand in Ghana stands at 500,000 tons per annum (NRDS, 2009). Local production is unable to meet the demand. Current production stands at 235,000tons per annum (SRID, MOFA). This is also a rise of 29% that in 2008 of 181,000tons. The difference between consumption and local production is met by imports. Rice import volume currently stands at about 400,000tons (SRID, MOFA, 2009).

The high demand for rice is an excellent opportunity for increased production of rice. Increased production will increase farmers' income and wellbeing, in addition to improving the balance of payment deficit.

### **JUSTIFICATION**

The increase in domestic rice production would enable the country to save foreign exchange from rice importation for the provision of basic service such as health care, education and reserved-food stocks to use in case of emergencies in order to reduce human insecurity. Less than 10% of the farmers in the rice sector use certified seeds for production hence the need to develop the rice seed system within the remits of the overall input needs of the rice sector. Consequent continued increase in rice demand, with implications for seed, to support local rice production

The potential for increased rice production is huge. This potential is not met because rice in Ghana faces a number of challenges, some of which includes, land development and associated land tenure arrangements, limited use of improved seeds and fertilizer and other inputs required for production, lack of a comprehensive curriculum for rice seed value training in local institutions and in-adequate human resource capacity development especially in rice seed production, distribution and conservation of quality seeds

### **POTENTIAL INTERVENTION ZONES AND TARGET GROUPS**

The existing intervention zones will be the major and potential rice growing areas identified. Also areas where much result has not been achieved with previous interventions due to poor

management will also be targeted. The zones are based on the traditional rice zones as follows:

- Southern Zones \_ (20%)
- Middle Zones \_ (10%)
- Northern zones – (70%)

The project will benefit the following groups across the rice seed value chain since their activities promote an efficient seed system. With regards to rice research, Breeders, Agronomist, Seed Technologists and Technicians, Soil Scientists will have to be trained. Also, Seed inspectors/Certification Officers, Extensionists, Nutritionist, and Sociologist will be trained under Development and Extension. Furthermore, Seed Growers and Dealers, Haulers/Transporters and other Media Relation Experts will be trained in their specific areas of operation

## OBJECTIVES

To create self-sufficiency in rice production leading to increased food security, poverty reduction and employment generation

### SPECIFIC OBJECTIVES

- To strengthen the capacity of rice seed value chain operators
- To update the curriculum on rice seed production for agricultural training institutions
- To promote the use of improved rice seed varieties

## DESCRIPTION OF COMPONENTS, OUTPUTS AND ACTIVITIES

The project will comprise four (4) components as follows:

1. Capacity building for seed rice operators
2. Promotion of seed rice use
3. Development and update of seed rice certification
4. Project management

Briefly outlined below under the respective components are the result areas of the project

### **Component 1**

*Capacity building for the seed rice operators.*

Output

Strengthen capacity of seed rice operators across the value chain in all the three rice growing zones in the country

#### Activities

Approaches to be adopted includes overseas and local training at various levels, internships, workshops, seminars and fields visits. Disciplines to be instructed include plant breeding and biotechnology, seed technology, agronomy extension, nutrition and communication. For the local training programmes and activities the research institutes and universities will conduct the training.

It is estimated about 500 individuals will benefit from the activities over the project period. The target includes beneficiaries from both private and public sectors. The secretariat of the National Seed Council in collaboration with the technical directorates of DCS and PPRSD

### **Component 2**

#### *Development and Update of Seed Rice Curriculum.*

Agricultural institutions in the country will be supported to develop and or update their curriculum for the training of all categories of trainees over a two year period. The institutions will include the faculties and schools of agriculture of the Universities, Polytechnics and colleges of agriculture education. The curriculum will fashioned to suit the level of each institution.

Activities to be carried include the assessment of the process. The bulk of the work will be contracted to a consultant whose output will be subjected to wider stakeholder consultation and verification before adoption and implementation. In essence three (3) sets of curriculum reflecting the states of the institution mentioned above.

### **Component 3**

#### *Promotion of improved seed rice*

To achieve the strategic goal of 30% of rice land unit improved seeds by 2020, it will be important that a vigorous and systemic promotion of improved rice use be pursued.

Various extension and communication tool including farmer fora, demonstration of results and methods of improved technologies, radio and television panel and resource persons will be developed across the selected zones. These interventions are design to strengthen the awareness and use of improved seed rice among seed growers, dealers, farmers and the general populace. A National Rice Week will be instituted to herald the general season.

The SRID, GJA, Prinpag other private sector and civil society organization will collaborate to execute the activities. A national launch of the activity will be launched in sequence starting from Tamale, Hohoe, Kumasi and Accra yearly.

#### **Component 4**

##### *Project Management*

The projected will be implemented simultaneous across all the rice growing zones. Project launch will be done in one key rice growing district per zone. The key output from this component includes the setting up of project steering and technical committee respectively. The drawing and harmonization of annual work plans and budget and the facilitating sourcing and disbursement of government and development parties funding. Compilation and submission of project wide scheduled reports. The Project Management unit to be headquartered at the Directorate of Crop Services will organize annual auditing of project funds. For the composition of the steering and technical communities respectively the NRDP arrangements will be modified to suit the purpose of this project.

#### **COST AND FINANCING**

Component	Cost (US\$)	Source of Funding
1. Capacity building for seed rice operators		Donor/GoG
2. Promotion of seed rice use		Donor/GoG
3. Development and update of seed rice certification		Donor/GoG
4. Project management		Donor/GoG
Grand Total		

#### **IMPLEMENTATION STRATEGY**

Project shall be implemented by the Ministry of Food and Agriculture (MoFA) in collaboration with the Council for Scientific and Industrial Research (CSIR) at the National level. The Regional and District Agricultural Development Units will manage implementation of the project at their levels.

Other collaborators like NGOs, Universities and other Private Institutions in the agricultural sector will be brought on board along the implementation of the project. A Project Steering Committee will be set-up at the launch of the project at the national level to oversee the smooth running of the project.

### **Project Organization and Management**

The Ministry of Food and Agriculture shall set up the Project Management Unit (PMU) headed by the Project Coordinator with relevant project support staff. The team shall be responsible for overall management and coordination of the project.

To enhance efficient field operations, regional and district coordinating units and shall be established. These shall be headed by the respective Regional and District Directors of Agriculture as a way of effectively managing project operations.

### **Monitoring and Evaluation**

As part of the implementation strategy, a monitoring and evaluation unit shall be setup within the PMU, an effective M&E system developed to identify indicators to reflect project output and overall goal of the project.

### **Risks**

The following are potential risks to the project implementation.

- Unavailability of quality and quantity of breeder, foundation and certified seeds for multiplication and distribution to the target groups
- Inadequate funds for training of breeders and seed technologist to enhance the quality of improved seed that are produced
- Inability of farmers access improved seeds due to distribution problems
- Inability of farmers to afford improved seeds for cultivation
- Target group not accepting the improved seed that have been produced
- Trained personnel moving out to do private activities after being trained by the project.

- Inaccessibility or obsolete of machinery for processing the seeds produced

## PROJECT FACTSHEET

LOG FRAME

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Risks/Assumptions
Goal: Meet National rice seed requirement by establishing and ensuring a sustainable national seed production, promotion and distribution system.	Sufficient improved rice seed available	Data on availability on improved seed made available to the target group	(a)unavailability of funds for project implementation (b) Favourable agro-climatic conditions (c) availability of breeder and foundation for multiplication
Purpose: To provide human resource to enhance production quality rice production and competitiveness	Seed experts available	Data by National Seed Service (MoFA-DCS), reports, professional census	(a)availability of funds for training of personnel (b)trained experts
<b>A. Produce adequate Quantities of Breeder, foundation and certified seed from released rice varieties adaptable to different ecologies.</b>			
Output 1: Breeder Seed Production (Required breeder seed produced annually)	Improvement in quality and quantity of paddy rice	MoFA reports	

Output 2: Identify and register recognized seed growers with capacity and expertise to produce quality certified seeds.	Capacity Enhancement training for seed growers. Equipment for seed production	survey reports, MoFA reports	
Output 3: Existing one-pass mills improved	number of improved one-pass mills operating	survey reports, MoFA reports	
Output 4: Equipment spare parts provided and mills maintained and operational	availability of types and quantity of spare parts	survey reports, field visits reports	
Output 5: Quality of milled/parboiled rice improved	quality and quantity of milled rice	survey reports, field visits reports	
<b>B. Capacity building</b>			
Output 1: Groups/associations of VCAs formed and operational	number of operational rice associations	survey reports, associations meeting reports, FBO database	
Output 2: Rice quality standards developed	number of quality standard manuals developed	standard manuals	
Output 3: Packaging and labelling introduced	number and types of packaging equipment and materials	market survey reports	
Output 4: Capacities of traders enhanced	number of traders	market survey reports	

<b>C. Credit support system</b>			
Output 1: Linkages between MFIs and value chain actors (VCAs) /associations established and functioning	number of financial institutions, number of VCAs associations	meeting reports, bank reports/records	
Output 2: Enough capital made available to VCAs	number of VCAs funded, amount disbursed and recovered	bank reports/records, association reports/records, survey reports	
<b>D. Market information systems</b>			
Output 1: Market information system developed and operational		market reports	