

Concept Note

Quality Improvement of Domestic Rice - Support for Value Chain Actors

A. Strategic context of the Project and the commitment of the government and development partners for rice sector value chains development

Agriculture continues to be the mainstay of the Ghanaian Economy contributing to about 39% of GDP and employing about 51% of the working population. The National Food and Agriculture Sector Policy (FASDEP II) has the vision of modernized agriculture, culminating in structurally transformed economy and evident in food security, employment opportunities and reduced poverty. The vision is linked to Global, Regional, Sub-regional and National Development programmes such as MDG Goal, GPRS II and CAADP of NEPAD. The common goal is food security, employment creation income, generation and poverty reduction.

The crop sub-sector in particular quality and competitive rice production provides a major option to exploit towards achieving these goals. This is because the rice crop has contributed to the Green Revolution in South-East Asia and other parts of the Sub-Saharan continent.

Rice production in Ghana is however lacking behind levels of consumption. Ghana produces only 30% of its rice requirements and imports 70% which comes up to about 500tons/year and costing about 218 dollars hard foreign currency exchange.

One challenge to increasing local rice production and consumption is the poor quality of paddy supplies that results in poor quality milled rice production. The process of reversing this trend will go a long way to creating improved competitiveness of locally produced rice and reduction in rice imports. The Ministry of Food and Agriculture however does not have a well developed strategy to promote the rice value chain. This strategic plan is therefore to provide guidelines that will give support to post harvest handling of rice in relation to processing, storage, distribution and marketing of paddy to enhance quality of milled rice production, competitiveness, marketing and consumption.

B. Justifications

Locally produced rice is of poor and variable quality and therefore the low patronage and consumption and uncompetitive to the imported rice among consumers particularly the urban population. This is mainly due to the poor post harvest handling of the crop resulting in quality defects such as presence of stones, varietal mixtures and mouldy grains. The inadequate availability of standard milling machines equipped with pre-cleaners, destoner, hullers, polishers, paddy separators, aspirators, and graders contributes to the generally poor quality of milled rice. In addition to the poor milling are the poor distribution and storage systems. The situation has created low profitability in the rice industry resulting in high attrition rate and unemployment in the sector.

Improved rice processing techniques aimed at increasing the acceptability, marketing and consumption of local (Ghana grown) rice needs to be pursued. This project seeks to offer equipment support and strengthen the capacities of stakeholders of the rice sector with the view to contributing to improving competitiveness of the quality to enhance income generation and national food security and import substitution.

C. Potential Intervention zones and target groups

The project will target communities in identified rice growing areas in the country where substantial quantities of paddy rice are produced by farmers to meet the annual operating capacities of installed mills so as to reduce the transportation cost component of the investment. It will also target communities where there is some level of rice processing and milling is undertaken as major income generating activities. The target groups will include farmers, rice processors (parboiling), millers, artisans, traders and consumers.

D. Main objectives of the project

- **Main objective**

To improve the quality, competitiveness and consumption of domestic rice.

- **Specific Objectives**

a) To offer strategic support to rice value chain actors (VCAs) for production of quality rice

The delivery of poor quality paddy for processing is due to unavailability of basic equipment and lack of quality control measures. Support in relation to appropriate harvesting and threshing equipment (small–medium scale harvesters and threshers) will be provided to enhance the production of quality paddy (well filled, no impurities, less broken, no stones). Standard rice mills (equipped with pre-cleaners, destoners, hullers, polishers, paddy separators, aspirators, and graders) will be provided to mill quality paddy to meet acceptable national minimum standards. Existing one-pass mills will be improved by adding attachments such as aspirators and polishers to improve the quality of milled rice. Efforts will also be made to provide equipment spare parts to sustain the operation and maintenance of mills. Improved parboiling equipment will be made available to processors to improve the quality of locally produced parboiled rice. Special incentive packages will be extended to enterprises which produce and promote the consumption of quality local rice.

b) To build the capacities of rice value chain operatives in post production handling of rice

The project will seek to develop a sustainable rice value chain by enhancing the capacities of all actors to adhere to strict quality control procedures through the formation of groups and associations. These identified groups especially the youth will be offered training in the area of primary rice processing technologies (threshing, winnowing, drying and storage) using available improved technologies for employment and income generation. In addition training will be offered in improved rice parboiling technology emphasizing on good hygienic practices, milling, safety practices, packaging and labelling and storage and distribution. The capacity of traders will be built in good practices in the distribution of rice from producing areas to marketing centres. The capacity of processors will be built in the use of appropriate packaging equipment

and materials, branding and adoption of standard weight and measures to enhance competitiveness in marketing of local rice.

c) To promote linkage of rice value chain actors to credit sources to ensure reliable access to inputs, equipment and market.

The project will seek to identify micro-finance institutions and establish linkages with rice value chain actors/associations. The capacities of the actors in basic business management principles will be enhanced to enable them develop business plans to access financial support. This will enable them obtain enough capital to acquire and efficiently operate and maintain mills as well as purchasing of raw material for all year operation to meet the requirement of the market. Training of FBOs in effective management of credit will be pursued.

d) To facilitate reliable pricing and market information system for use by stakeholders along the value chain

The project will collaborate with the Statistics, Research Information Directorate division (SRID) to provide the needed information that will guide production, distribution and sale of quality rice.

E. Description of the components, outputs and activities

Components

A. Equipment support

Output 1: Quality of paddy produced enhanced

Proposed Activities

- ✓ Identification of appropriate harvesters and threshers
- ✓ Acquisition of harvesters and threshers
- ✓ Installation and test run of harvesters and threshers
- ✓ Training in right use and maintenance of harvesters
- ✓ Capacity building in quality control of paddy production

Output 2: Standard rice mills installed and operating

Proposed Activities

- ✓ Identification of appropriate mills
- ✓ Acquisition of mills

- ✓ Installation and test run of mills
- ✓ Training in safety precautions, operation and maintenance of mills
- ✓ Training artisans/institutions in fabrication of mill parts

Output 3: Existing one-pass mills improved

Proposed Activities

- ✓ Identify and assess the existing one-pass mills
- ✓ Establish gaps
- ✓ Acquire necessary attachments
- ✓ Carry out modification
- ✓ Build capacity of millers in the operation and maintenance of mills
- ✓ Monitor and evaluate

Output 4: Equipment spare parts provided and mills maintained and operational

Proposed Activities

- ✓ Access the frequently needed parts of mills
- ✓ Establish linkages with manufacturers and place orders
- ✓ Build capacity of identified local artisans or institutions to fabricate parts
- ✓ Acquire/fabricate to build stock of needed spare parts

Output 5: Quality of milled/ parboiled rice improved

Proposed Activities

- ✓ Identify potential millers and parboilers in the project areas
- ✓ Carry out training needs assessment
- ✓ Build capacities of millers in milling operations and maintenance
- ✓ Build capacities of parboilers in improved parboiling technology
- ✓ Capacity building in packaging and labelling

B. Capacity building

Output 1: Groups/associations of VCAs formed and operational

Proposed Activities

- ✓ Identification of stakeholders
- ✓ Sensitization of group members
- ✓ Formation and registration of groups/associations
- ✓ Capacity building in effective group management

Output 2: Rice quality standards developed

Proposed Activities

- ✓ Identify and assess the existing quality control practices
- ✓ Establish gaps and needs
- ✓ Develop training manuals
- ✓ Build capacity of processors in basic GHPs, GMPs, regulatory and quality standards

- ✓ Build capacity of processors in the operation and maintenance of mills
- ✓ Monitor and evaluate

Output 3: Packaging and labelling introduced

Proposed Activities

- ✓ Identify appropriate packaging equipment and materials
- ✓ Designing of packaging, labelling and branding
- ✓ Procure the equipment and packaging materials
- ✓ Install and test-run the equipment
- ✓ Training of stakeholders in packaging of rice using appropriate packaging material
- ✓ Training in branding and adoption of standard weights for marketing rice
- ✓ Publicity and advertising

Output 4: Capacities of traders enhanced

Proposed Activities

- ✓ Identify buying centres
- ✓ Register buyers and suppliers
- ✓ Capacity building of traders in grading and sorting of appropriate varieties
- ✓

C. Credit support system

Output 1: Linkages between MFIs and value chain actors (VCAs) /associations established and functioning

Proposed Activities

- ✓ Create and operationalize platforms for VCAs and MFIs
- ✓ Sensitize stakeholders (including micro-finance institutions) on platform creation
- ✓ Organise platform meetings for interactions

Output 2: Adequate credit made available to VCAs and recovered

Proposed Activities

- ✓ Training in commercialization and crop productivity
- ✓ Develop business plan
- ✓ Capacity building in basic business management practices
- ✓ Capacity building in credit management
- ✓ Facilitate credit disbursement and recovery

D. Market information systems

Output 1: Market information system developed and operational

Proposed Activities

- Assessment/evaluation of business enterprises of VCAs
- Data collection on prices/market trends

- Collation and analysis of data
- Create a database of price and market information
- Establish database of stakeholders in the value chain
- Organise forum to engage in price setting along value chain
- Dissemination of data
- Develop communication system for market information sharing via media, cell phones, internets, information centres

F. Costs and financing

	Component	Cost (GHS)
A.	Equipment support	
B.	Capacity building	
C.	Credit support system	
D.	Market information system	
	Total	

G. Implementation strategy of the project

Project will organize an inception workshop to launch it. Thereafter, stakeholders will be identified to discuss the various components and guidelines for implementation. Groups will therefore be formed to discuss in detail activities to be carried out. Work plans and budgets will be developed and discussed and finalized and various stakeholders/partners will be assigned specific roles to play. An operational manual with a monitoring and evaluation system will be developed and to guide implementation.

H. Project organization and management

- Effective management system
 - ✓ Project inception workshop
 - ✓ Identify all project partners
 - ✓ Develop work plans and implementation strategies
 - ✓ Assign roles and responsibilities to partners
 - ✓ Periodic review and reporting of project activities

I. Monitoring and evaluation

- Effective monitoring and evaluation system
 - ✓ Coordinate and manage project

- ✓ Periodic monitoring, evaluation and review of project activities
- ✓ Periodic reports on activities carried out
- ✓ Acquisition and supervise distribution of logistic support

J. Risks

- ✓ Timely availability of funds
- ✓ Political stability continue to prevail in the project implementation areas
- ✓ Favourable agro-climatic conditions prevail
- ✓ Commitment of project implementation partners
- ✓ The current government agricultural policy remains unchanged
- ✓ Good bilateral relations continue to exist between Ghana and development partners

K. Project factsheets

L. Logical framework

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Risks
Goal: To improve the quality, competitiveness and consumption of locally produced rice	Increased production, sale and consumption of local rice in Ghana by 50% by 2018	National statistical data, MoFA reports, rice import and export data	(a) Political stability continue to prevail in the project implementation areas (b) Favourable agro-climatic conditions prevail (c) Commitment of project implementation partners
Purpose: To provide equipment support and application of appropriate technology to enhance quality rice production and competitiveness	Improvement in quality and quantity	National statistical data, MoFA reports, rice import and export data, Socio-economic study reports	(a) Favourable agro-climatic conditions prevail (b) availability of funds to procure equipment and raw material (c) VCAs adapt technologies
A. Equipment support			
Output 1: Quality of paddy produced enhanced	Improvement in quality and quantity of paddy rice	survey reports, MoFA reports	
Output 2: Standard rice mills installed and operating	number of mills operating	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. Capacity building			
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	
C. Credit support system			
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	
D. Market information systems			
Output 1: Market information system developed and operational		market reports	