

Concept Note

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

In Ghana Shared Growth and Development Agenda (GSGDA) which is overarching national development policy, agriculture is considered as one of the key drivers of the economic growth. And increased agricultural productivity is essential component for agricultural sector.

In Ghana, especially in urban areas, rice consumption is drastically increasing. However, about 70% of rice consumed in Ghana is imported. For foreign currency savings and enhancing food security, increased domestic rice production becomes imperative. Under this circumstance, rice is set as one of the five main commodities in FASDEP II. In addition, rice is set as one of the five main commodities of FASDEP II and programme 4 of Medium Term Agricultural Sector Investment Plan (METASIP: investment plan to implement the objectives of FASDEP II)

B. Justification

Rice is an important cereal crop in Ghana with a per capita consumption of 32 kg/yr. Demand for rice continues to be on the increase. However, local production is unable to meet demand. Domestic milled rice production in 2009 amounted to 204,000 Mt while total imports amounted to 384,000 Mt in the same year. The deficit of 180,000 MT is met through imports. Per capita rice consumption is increasing at the rate of 9% per year and is expected to increase from 45% in 2011 to 64% in 2015. Currently, Ghana has a self sufficiency level of about 25%. However, in order for the government of Ghana to cut down on the amount of foreign exchange spent on rice importation, the government through its medium term agriculture sector investment plan (METASIP) is expected to raise the self sufficiency level to 75% by 2015. In order to achieve this level of self sufficiency, yield levels are expected to increase to 50% by the same period. Efforts have been made through various interventions in the past to improve rice production in all the rice growing ecologies in the country. However, rice yields are still low due to lack of water management structures, weed infestation, declining soil fertility, lack of organized seed production and distribution system, inadequate credit facilities along the value chain, poor seed quality, lack of technical business and marketing skills to manage economic activities along the supply chain, inappropriate harvesting and post-harvest management technologies and inadequate

human resource capacity and development along the value chain. About 75% of Ghana's rice is produced by 78% of small to medium scale farmers in rain-fed lowland/inland valley systems (IVS) where both flooding and drought are major constraints. Over 1 million ha of potential inland valleys/lowlands are available for rice production in Ghana. Of all the rice growing ecologies, the inland valleys are of priority because of the relative ease with which water can be controlled. Therefore, to increase rice yields by 50% by 2015, the untapped potential of the rain-fed lowlands/inland valleys need to be exploited. However, drought is a major constraint in both upland and rain-fed lowland rice production systems. Yields in these rain-fed systems remain low and highly unstable (0.5 – 2.0 t/ha) due mainly to drought. With the looming climate change, the drought and flooding situations will get worse thereby causing yields from rain-fed rice systems to be much lower and more unstable. Many of the rivers which run through the IVS /lowlands and are necessary conditions for the development of irrigated rice systems also run the risk of drying up with the looming climate change. To increase rice production to the level of self sufficiency, there is the need to develop improved water control structures in the lowland/inland valleys so water can be efficiently managed for rice production. This project is therefore aimed at exploiting the potential of lowlands/IVS through the development of water management structures for rice intensification and efficient water management.

C. Potential intervention zones and target groups

Inland valleys and lowlands distributed in the forest, savannah and forest-savannah transition zones will be selected. Large and broad valleys in the Northern, Upper East and Upper West regions will be selected for development for medium to large scale production. Valleys in the Ashanti and Volta regions will also be selected for development for small to medium scale production. Valleys in the three northern regions have been selected because of the importance of the rice industry there. Large scale valleys which have not been developed are available. The three northern regions have the highest poverty levels (38 -79%). Intervention in these regions will also draw on experiences from previous projects such as Lowland Rice Development Project (LRDP) and the Rice Sector Support Project (RSSP). Valleys in Ashanti region will be selected because there are many fertile unexploited valleys in the region. Yield per unit area is also high and rice is a cash crop in the region. Intervention in the Ashanti Region will draw on experiences from projects being undertaken by Japan International Cooperation Agency (JICA), Japan

International Research Centre for Agricultural Sciences (JIRCAS), Inland Valleys Rice Development Project (IVRDP) and the New Sawah Project. The Volta region is also selected because it is the third largest rice producer, rice is a cash crop and current intervention will draw from experiences of past interventions such as DfID PVS Project, GATSBY Rice Project and Nerica Rice Project.

D. Main Objectives of the Project

Global objective:

Increase use of efficient irrigation infrastructure and water control structures

Specific Objectives:

- Identify suitable characterized valleys/lowlands for development
- Negotiate land tenancy arrangement for selected valleys/lowlands
- Survey and design valleys/lowlands and develop appropriate water management structures.
- Build capacity of target extension workers and farmers for efficient water management and further disseminate to other extension and farmers.

E. Description of the Components, Outputs and Activities

Component I

- **Identification and characterization of valleys/lowlands**
 - Collect and compile data on valleys/lowlands using the existing information from institutions such as CSIR, GIDA and MOFA etc.
 - Conduct study to identify and characterize new valleys/lowlands.
 - Prioritize identified valleys/lowlands based on the detailed characterization of them.

Component II: Land acquisition, tenancy and compensation

- Identify owners of selected valleys/lowlands.
- Negotiate with owners and others concerned.
- Develop and sign tenancy agreement.

Component III: Survey of selected valleys/lowlands, design of water control structures and land development

- Conduct survey socio-economic and topographic surveys in selected valleys/lowlands.
- Detailed design of water management structures in selected valleys/lowlands.
- Land development and construction of water management structures.

Component IV: Community mobilization, capacity building for effective and efficient water management

- Sensitize various communities where the project is implemented.
- Conduct needs assessment on capacity building at the developed valleys /lowlands.
- Train target extension workers and farmers in:
 - Operation and maintenance of water management structures.
 - Efficient water and crop management practices.
- Develop training manuals for extension and farmers based on existing efforts.

Component V: Project Coordination

- Coordination of all project activities
- Monitoring and evaluation

G. Implementation Strategy of the project

- Collaboration with different institutions e.g. CSIR-technical backstopping, GIDA-technical backstopping, District assemblies – intermediary on land issues, MOFA- Project supervision and coordination
- Community involvement- Sensitization of the communities
- Hold stakeholder meetings to discuss:
 - Project implementation
 - Roles of different stakeholders
- Utilization of past and existing effort – to avoid duplication (synergy)

H. Project Organization and Management

- MOFA assumes overall responsibility for the project implementation
- GIDA provides technical support to the project
- National Agricultural Research Institutions also provide technical support as necessary
- RADU and DADU implement project activities under the supervision of MOFA headquarters
- District Assemblies to play important role in the land tenure arrangements

- **Executive and Management structure**
Project Coordinating Unit at Headquarters

- Project supervision Directorate: Director CSD –has overall responsibility for project implementation
- Liaison officer: A MOFA CSD staff to coordinate all activities at Head quarters
- Technical Staff- GIDA to be responsible for all technical aspects of project
- Monitoring and evaluation unit
- Regional level:
 - Regional Director of Agriculture responsible for project implementation in the region. He has overall responsibility for project implementation.
 - Regional Project Officer is responsible for coordination of all project activities in the region
 - District Project Officer responsible for coordination in the district
 - At the field level, target extension officers will be responsible for daily monitoring of field activities
- Project Steering Committee will be responsible for taking all the policy decisions regarding implementation of project
- Membership will include:
 - Dep. Minister in-charge of Crops - Chair
 - Director, Crop Services Dept
 - Directors of CSIR institutes involved
 - Representative from GIDA
 - Representative of Funding Agencies
 - Regional Directors of Agriculture

I. Monitoring and Evaluation

Reports on daily project activities will be compiled on monthly basis by the Regional Project Office

- Half yearly review meetings to be held by PCU with all regional directors, regional project officers, district project officers and other collaborators
- Field visits by Monitoring and Evaluation staff of project

J. Risks

- Willingness of farmers and private partners (all stakeholders) to participate in the project
- Favourable political climate for the implementation of the project
- Timely release of funds
- Contract award and procurement are done timely
- Staff of various institutions are well motivated to participate in the project
- Landowners do not take over developed lands

Project/Program	Objectively Verifiable indicators	Means of Verification	Important Assumptions/ Risks
1. Global objective:			
Increase use of efficient irrigation infrastructure and water control structures	35,000 ha of lowland/inland valleys developed between 2012 and 2018 at the rate of 5,000ha/year	GIDA, SRID Progress report Field visits,	<ul style="list-style-type: none"> ○ Favourable political climate, ○ Willingness by stakeholders to participate in project, ○ Timely release of funds ○ Landowners do not take over developed land
2. Specific Objective			

1. Identify suitable characterized valleys/lowlands for development	Number of identified valleys	Progress reports	Funds are made available
2. Negotiate land tenancy arrangement for selected valleys/lowlands	Number of agreements concluded and signed	Progress Reports	Landowners do not take over developed lands
3. Survey and design valleys/lowlands and develop appropriate water management structures.	Number of surveyed valleys/lowlands Number of developed water management structures	Progress Reports	Contract awarded and procurement done on time
4. Build capacity of target extension workers and farmers for efficient water management and further disseminate to other extension and farmers.	Number of AEAs and Farmers trained in the Project	Progress Reports	Timely release of funds
3.Outputs/Results			
Component 1: Identification and characterization of valleys/lowlands			
1.1 Collect and compile data on valleys/lowlands using the existing information from institutions such as CSIR, GIDA and MOFA etc.	Number of valleys/lowlands for which information is collected.	Progress reports	
1.2 Conduct study to identify and characterize new valleys/lowlands.	Number of valleys/lowland for which study is conducted.	Progress reports	Funds are made available
1.3 Prioritize identified valleys/lowlands based on the detailed characterization of them.	Number of valleys/lowland selected	Progress reports	
Component 2: Land acquisition, tenancy and compensation			
2.1 Identify owners of selected valleys/lowlands	Number of valleys/lowlands for which owner was identified	Progress report	<ul style="list-style-type: none"> ○ Rightful owners of land identified ○ Land owners willing to release their land for development
2.2 Negotiate with owners and others concerned.	Number of valleys /lowlands for which negotiation is conducted.	Progress report	
2.3 Develop and sign tenancy agreement.	Number of valleys/lowlands for which tenancy agreement is concluded	<ul style="list-style-type: none"> ○ Progress report ○ Copies of tenancy agreement 	
Component 3: Survey of selected valleys/lowlands and design of water control structures			
3.1 Survey of selected valleys/lowlands and design of	Number of valleys/lowlands to be surveyed and designed	Progress report	<ul style="list-style-type: none"> ○ Availability and timely

water control structures			release of funds ○
3.2 Detailed design of water management structures in selected valleys/lowlands.	Number of valleys/lowlands for which detailed design was conducted	Progress report	
3.3 Land development and construction of water management structures.	Number of valleys/lowlands for which land development and construction of water management structures are conducted.	○ Progress report ○ Field visits	
Component 4: Community mobilization, capacity building for effective and efficient water management			
4.1 Sensitize various communities where the project is implemented.	Number of communities sensitized.	Progress report	○ Funds are released and on time ○ Favorable political climate
4.2 Conduct needs assessment on capacity building at the developed valleys /lowlands.	Number of valleys/lowlands for which needs assessment is conducted.	Progress report	
4.3 Train target extension workers and farmers	Number of AEAs and farmers trained.	Progress report	
4.4 Develop training manuals for extension and farmers based on existing efforts.	Completion of manuals	Progress report	
Component 5: Project Coordination			
5.1 Coordination of all project activities		Progress report	○ Availability and timely release of funds ○ Favorable political climate
5.2 Monitoring and evaluation	Number of monitoring and evaluation	Progress report	

- Willingness of farmers and private partners (all stakeholders) to participate in the project
- Favourable political climate for the implementation of the project
- Timely release of funds
- Contract award and procurement are done timely