

**SUMMARY  
OF  
DRAFT RICE SEED ROAD MAP  
GHANA**

*CARD Regional Workshop on Scaling up of  
success in CARD Countries and Peer Review of the  
Pilot Initiative for Improved Rice Seed Sector*

4th - 6th February 2014, Nairobi, Kenya.

**OUTLINE**

1. General View of Rice Seed Sector
2. Critical Challenges
3. Vision, Goal, Objectives and Implementation  
Structure of Rice Seed Road Map
4. Strategic Approach
5. Target Setting & Gap Identification
6. Possible Interventions

## **Current Situation – Legislation, Policy and Planning**

### ***Legislation***

1. Plant and Fertilizer Act (Act 803) – Seed Law
2. Biosafety Act, 2011 (Act 831)
3. Plant Breeders’ Right Bill (Before Parliament)
4. ECOWAS Seed Regulation
5. Seeds (Certification And Standards) Regulation, 2012 -ratification process .

### ***Policy***

1. Ghana Seed Policy.
2. Food and Agriculture Sector Development Policy II (FASDEP II)
3. Medium Term Agricultural Sector Implementation Plan (METASIP)

### ***Planning***

1. Disaggregated seed planning

## **Current Situation – Relevant Initiatives**

1. Sustainable Development of Rain-fed Lowland Rice Project.
2. Rice Sector Support Project. (RSSP)
3. West Africa Seed Program (WASP)
4. West Africa Agricultural Productivity Programme (WAAPP)
5. Development of Rice Varieties with Enhanced Nitrogen Use Efficiency and Salt Tolerance (NEWEST PROJECT)
6. Scaling Seed and Technology Partnership

## Current Rice Seed Production (MT)

Seed Class	2012	2011	2010
Breeder Seed	0.32	0.869	0.84
Foundation Seed	14.1	14	23.5
Certified Seed	2,370.12	2,367.50	3,907.30

**There 13 are Officially Released Varieties**

## Rice Dialogue Platforms

- 1) Agriculture Sector Working Group Meetings
- 2) National Variety Release and Registration Committee meetings
- 3) Seed Taskforce Group Meetings
- 4) Ghana Rice Inter-Professional Body (GRIB)
- 5) Annual seed stakeholders meeting by projects and programs

## Critical Challenges

### Legislation and policy

- Actors' lack of knowledge of existing regulations, acts and policies,
- Lack of funds for the implementation of policies, strategies and programs

## Critical Challenges

### Institution

- Limited human and logistic capacity
- Weak linkages among distribution and supply chain actors
- Limited infrastructure and equipment

### Planning

- Absence of production planning at national level, but projects / programs based planning

## Critical Challenges

### Technical Production

- Access to quality seeds
- Site selection
- Seedbed preparation
- Contamination at all levels (off-types volunteers, admixtures)
- Water & Weed management
- Pest and disease management
- Use of recommended rates of inputs

## Critical Challenges

### Inspection (Technical)

- Insufficient knowledge of varietal characteristics by inspectors and producers
- Inadequate equipment for thorough field inspection
- Ill-equipped satellite laboratories

### Supply & Marketing

- Poor haulage system
- Limited promotion and publicity
- Poor patronage rice seeds
- Poor accessibility
- Limited use of ICT marketing systems

## **Vision and Goal**

### **Vision**

- An efficient and sustainable national rice seed system that will contribute to enhance quality rice production to meet national and international standards

### **Goal**

- To promote the use of quality rice seed for increased productivity that will contribute to national food security, poverty reduction and improved livelihood

## **Objectives**

### **General Objective**

- To ensure national self-sufficiency in quality rice seed production by 2018

### **Specific Objectives**

1. To build technical capacity of actors along the rice seed value chain (production, quality control and certification, processing, storage, marketing)

## Objectives

### Specific Objectives

2. To provide the needed infrastructure along the rice seed value chain (*production, quality control and certification, processing, storage, marketing*) through a PPP arrangement
3. To create demand for quality seeds through promotion and provision of research and development support

## Implementation Structure

Both public and private corresponding to the following Seed Road Map interventions:

- ✓ Fund Mobilization
- ✓ Legislation and Policy
- ✓ Harmonization of data
- ✓ Seed production/quality control and certification
- ✓ Adoption of improved seeds
- ✓ Monitoring and Evaluation

## **Strategic Approach**

In line with the National Seed Policy Government will

- ❖ Accelerate efforts towards the establishment of structured private seed companies
- ❖ Create an enabling environment to encourage private sector
- ❖ To promote pluralistic extension services, seed certification under licensing arrangements and eventually to research and variety development.

## **Target Setting - Background**

- NRDS paddy production by 2018 : 1.6 Million MT
- Average seed used: 50 kg/ha
- Average yield - 2.5 MT/ Ha
- Seed-Grain Ratio -1:50
- Approximate amount of seeds currently self-supplied by or among farmers \_\_8,140 MT (80 %)
- Target amount of production to be covered by certified seeds: 50 %, (20% currently)
- Seed renewal : every 3 years



## Target Setting and Gap identification - Production

	Target amount (MT/year)	Current Production/ supply (MT/year)	Surplus/Deficit (MT/year)
Breeder Seed	2.13	12 (2013)	+9.87
Foundation Seed	106	10.7 (2013)	-95.3
Certified Seed	5,333	2,370.12 (2012)	-3,023

## Target Setting and Gap identification - Area (ha)

	Area (Target production ) (ha/yr)	Current cultivated area for seed production (ha)	Gap (ha)
Breeder Seed	0.85	4 (2013) 0,2 (2012)	+ 3.15 (2013) - 0.65 (2012)
Foundation Seed	42.6	6.8 (2012)	- 35.8
Certified Seed	2,133	1,409.94 (2012) 1,344 (2011) 1,654 (2010)	-723 (2012) - 789 (2011) -479 (2010)

## Target Setting and Gap identification - Human Resource Gap - Inspection

Geographical area (Region)	Number of Inspectors		Gap in number
	Required	Available	
Northern	7	4	3
Upper East	6	2	4
Upper West	5	2	3
Greater Accra	4	1	3
Volta	6	3	3
Ashanti	8	5	3
Eastern	4	1	3
Central	7	5	2
Brong Ahafo	6	3	3
Western	3	-	3
<b>Total</b>	<b>56</b>	<b>26</b>	<b>30</b>

## Target Setting and Gap identification at production level

- i. Insufficient machinery
- ii. Lack of appropriate machinery and timely access
- iii. Lack of technical skills and know-how on the operation and maintenance of field machinery
- iv. Inadequate irrigation infrastructure and insufficient knowledge in water management
- v. Contamination at all levels (off-types volunteers, admixtures)
- vi. Poor weed, pest and disease control practices
- vii. Use of recommended rates of inputs (Seeding rate: breeder 30kg, foundation 40kg and certified 50kg)
- viii. Site selection especially for certified seeds

<b>Target Setting and Gap identification - Supply &amp; Market</b>	
	<b>Market varieties</b>
<b>Breeder seed production/ supply</b>	<ul style="list-style-type: none"> <li>• Inadequate budgetary allocation</li> <li>• Limited number of research scientists</li> <li>• Poor seed infrastructure and equipment ( including long term storage facilities)</li> </ul>
<b>Foundation seed production/ Supply</b>	<ul style="list-style-type: none"> <li>• Limited number of personnel</li> <li>• Inadequate budgetary allocation</li> <li>• Poor seed infrastructure and equipment</li> <li>• Absence of proper seed forecast</li> </ul>
<b>Certified seed production</b>	<ul style="list-style-type: none"> <li>• Lack of contract enforcement</li> <li>• Poor linkages among actors</li> <li>• Limited knowledge of released varieties</li> <li>• Limited promotional activities</li> <li>• Poor infrastructure (processing and storage facilities)</li> </ul>

<b>Target Setting and Gap identification - cont' Supply &amp; Market</b>	
	<b>Market varieties</b>
<b>Distribution of seeds</b>	<ul style="list-style-type: none"> <li>• Poor haulage system</li> <li>• Limited promotion and publicity</li> <li>• Poor patronage</li> <li>• Poor accessibility</li> <li>• Limited use of ICT marketing systems</li> </ul>
<b>Financing</b>	<ul style="list-style-type: none"> <li>• Limited access to credit facilities</li> <li>• High interest rates on credit</li> <li>• Untimely release of credit</li> </ul>
<b>Quality Control/ Standard</b>	<ul style="list-style-type: none"> <li>• Weak compliance to quality standards</li> <li>• Limited number of quality control personnel</li> <li>• Limited seed processing and storage centers and obsolete equipment</li> <li>• Inadequate means of transport (vehicles, motorbikes)</li> </ul>
<b>Others</b>	<ul style="list-style-type: none"> <li>• Limited extension services personnel and logistics</li> <li>• Institutional linkages along the value chain based on availability of funds</li> </ul>

### **Possible Interventions - Technical Aspects at Production level**

- ✓ Make Agricultural Mechanization Services Enterprise Centres (AMSEC) more functional
- ✓ Build capacity of machine operators

### **Possible Interventions - cont' Technical Aspects at Production level**

- ✓ Secure more land under the existing irrigation schemes
- ✓ To develop new rice fields within the existing schemes
- ✓ Build capacity of seed growers and AEAs
  - i. efficient water use and control techniques
  - ii. varietal characteristics and appropriate methods of removing contaminants
  - iii. effective weed control practices
  - iv. effective pest and disease control
  - v. adequate seedbed preparation to ensure effective weed control
- ✓ Zone suitable areas for rice seed production: irrigated (40%) and rain-fed lowland (60%)
- ✓ Government to create the enabling conditions for agro-inputs to be affordable and accessible (subsidies, etc)

### Possible Interventions – Technical Aspects of Inspection

- ✓ Build capacity of inspectors on varietal characteristics
- ✓ Provide the requisite equipment for field inspection (GPS, moisture meters, etc)
- ✓ Provide equipment and reagents to the laboratories
- ✓ Rehabilitate existing laboratories

### Possible Interventions – Supply and Marketing

Distribution of seeds	<ul style="list-style-type: none"> <li>• Poor haulage system</li> <li>• Limited promotion and publicity</li> <li>• Poor patronage</li> <li>• Poor accessibility</li> <li>• Limited use of ICT marketing systems</li> </ul>	<ul style="list-style-type: none"> <li>✓ Improve feeder roads in rice growing areas</li> <li>✓ Introduce modern seed haulage facilities</li> <li>✓ Intensify publicity on new varieties</li> <li>✓ Discourage seed growers from broadcasting</li> <li>✓ Introduce e-marketing technologies (mobile phone applications)</li> </ul>
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## **Prioritization of Intervention Options**

- This Prioritization will be done later in consultation with other key stakeholders including the private sector.