

Towards Implementation of National Rice Development Strategies in Mozambique

1. Overview of the CARD initiative

The Coalition for African Rice Development (CARD) initiative was launched at the Tokyo International Conference on African Development (TICAD IV) in 2008 and spearheaded by JICA, NEPAD, AGRA. In addition to the three mentioned, core partners include research agencies and regional/international financial institutions, i.e. AfricaRice, AfDB, FAO, FARA, IFAD, IRRI, JIRCAS and World Bank.

The goal is to double rice production in Sub-Saharan Africa from 14 to 28 million tons in 10 years through addressing the issues of: (i) the whole rice value chain approach, (ii) the salient rice-growing agro-ecological zones, (iii) capacity building and (iv) South-south cooperation.

The objectives of CARD are : (i) rationalize and increase investment for rice sector development mainly through existing funding frameworks, (ii) develop capacities of governments to effectively manage rice sector development as well as to secure government funding / donor investment, (iii) provide enabling environment for rice-related investment both for development agencies and governments and (iv) better coordinate interventions based on the shared view on rice development through NRDS which has to be in line with overarching development frameworks (PRSP, CAADP...etc).

Currently, CARD supports the following 23 Sub-Sahara African countries:

The first group: Cameroon, Ghana, Guinea Conakry, Kenya Madagascar, Mali, Mozambique, Nigeria, Senegal, Sierra Leone, Tanzania and Uganda and

The second group: Benin, Burkina Faso, Central African Republic (CAR) , Côte d'Ivoire, Democratic Republic of Congo (DRC), Ethiopia, the Gambia, Liberia, Rwanda, Togo and Zambia.

2. Overview of the process of NRDS formulation and implementation

In Mozambique, the National Rice Development Strategy (NRDS) document was developed by the National Rice Task Force and endorsed by the main stakeholders in the rice sector through a consultative meeting on the contents.

Mozambique currently imports 350,000 tons of rice, of a value of USD150 million. This puts immense pressure on foreign exchange and on trade balance of the country.

The NRDS aims to increase rice production from 265,098 tons in 2008, to 1, 123,083 tons in 2016 - a fourfold expansion.

The NRDS aims to accomplish the target by both the expansion of area under rice cultivation and by increasing the rice productivity from the current average yield of 1.1 t/ha to 2.8 t/ha (Figs 1 and 2).

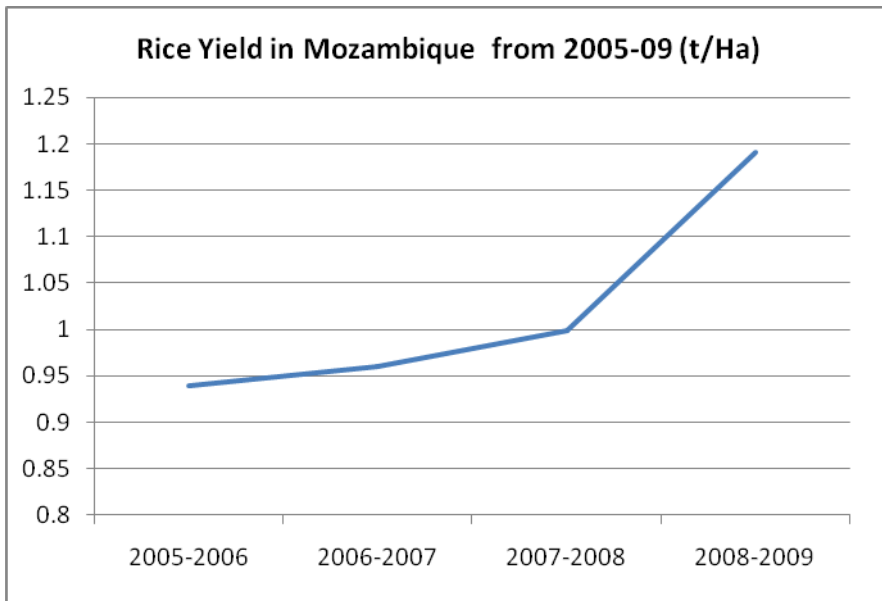


Fig. 1. Illustration of average rice yields obtained by farmers in Mozambique between 2005 and 2009.

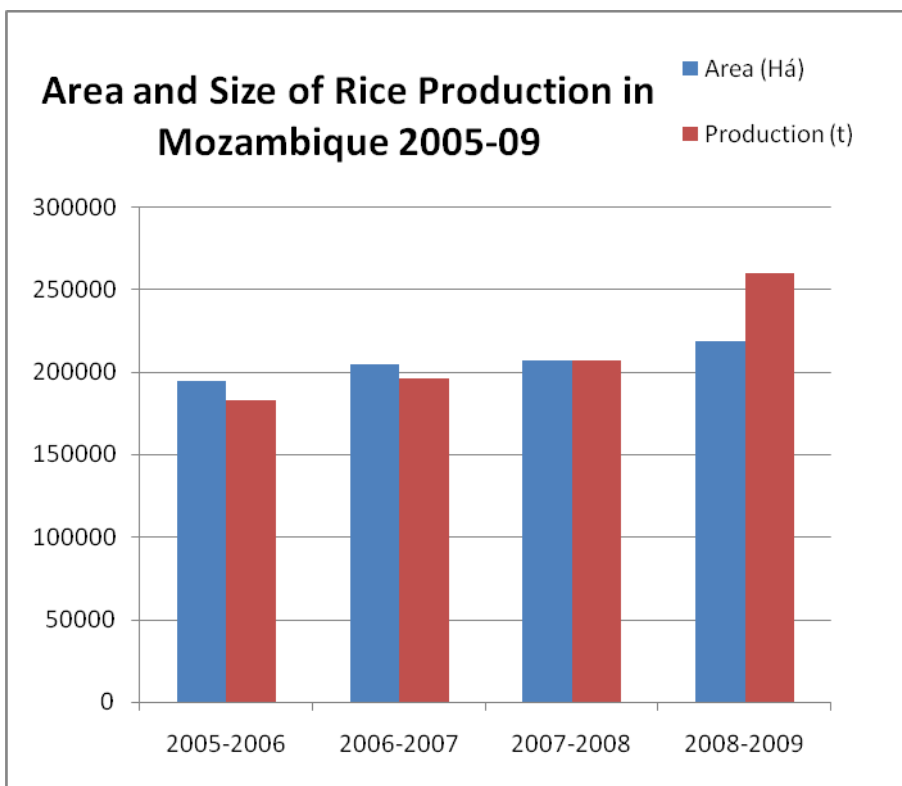


Fig. 2. Trends in area under rice cultivation in Mozambique and total rice production during the period between 2005 and 2009.

3. NRDS: Summary and measures identified

The strategies put forth in NRDS identify eight key subsectors along the rice value chain that requires intervention. The following table provides a glimpse of the necessary interventions required under each sub-sector;

Sub-Sectors	Key elements that require intervention to achieve the goals of NRDS
A. Input availability	Improve access and use of improved seed varieties and other inputs, to overcome cost problems. Better and more affordable access to credit.
B. Agronomy	Improve crop management, pest protection, weed management and land preparation
C. Irrigation and water management	Rehabilitation of existing irrigation and irrigation expansion, with emphasis on human capacity building. Development of newly irrigated areas, ownership, maintenance and responsibility of user associations.
D. Post harvest handling	Enhance availability of pre and post-harvesting equipment, storage practises, improved milling standards and access, rice grading, packaging, branding
E. Marketing	Promotion of required marketing infrastructure, market access, feeder roads, trading network, competitiveness of locally produced rice, quality promotion
F. Utilization	Promotion of utilization of rice products and by-products within rural communities
G. Extension	Strengthening the extension services for rice to rural farmers, developing farmer agronomy knowledge, training, demonstrations
H. Investment	Wider awareness creation for expanded investment on seed multiplication, irrigation, pre and post-harvest, alongside investment in human capacity all along the value chain

4. Harmonization of NRDS priorities with the interests of key stakeholders of rice sector development

Areas with a high potential of rice production currently have high levels of poverty, therefore developing the rice sector can have a significant impact in reducing the levels of poverty in Mozambique

Rice is identified as one of the major cereal crops in achieving the national strategic objectives on poverty reduction and agricultural growth

The PEDSA identifies agriculture as a main focus of poverty reduction in Mozambique and places high priority on agricultural growth and food security

The NRDS is consistent with the goals of PEDSA and aligns with the four pillars of the PEDSA, namely:

- 1) Increasing agricultural productivity
- 2) Access to markets
- 3) Management of natural resources
- 4) Institutional capacity building

5. The rice sub-sector analysis and the proposed list of interventions for the immediate future

The task force analyzed the sector by asking questions such as what are the issues faced by the various stakeholders along the rice value chain and how to address them in a sub-sector specific fashion. This is presented in a matrix called 'Subsector Intervention Element Matrix' (SIEM). The SIEM showing the current needs of the rice sector is shown below:

	Policy / Institutional	Infrastructure	Human resource capacity	Provision / support	Information / knowledge
Seed	<p>Improvement access & use of improved varieties of seeds</p> <p>Creation / Expanding Seed Multiplication</p> <p>Strengthening National Seed Service (SNS)</p>	<p>Strengthening Seed Distribution Network</p>	<p>Training for Farmers on proper use/ multiplication of seeds</p> <p>CD of researchers</p> <p>CD of technicians</p>	<p>Certified seeds: + 6,400 t</p> <p>Distribution of Seeds with subsidies</p> <p>Supporting on-farm seed production</p> <p>Strengthening capacity of public & private</p> <p>Company: GoM buy seeds</p>	<p>Awareness on availability of various seeds</p>
Fertilizer			<p>Training of Farmers on the application</p>	<p>Oversee Marketing & Distribution: 20,000 t</p>	

	Policy / Institutional	Infrastructure	Human resource capacity	Provision / support	Information / knowledge
				Urea, 15,000 t NPK in 2020 Marketing Network in rural areas	
Irrigation / water management	Encouraging investment in irrigation Responsible Policy Adjustment		Productivity increase from 1.2 to 3.5 t/ha Staff at all levels and farmers will be trained in the O&M Increasing No. of staff irrigation Establishing strong WUAs	Strengthening collaboration and linkages between national, regional and international institutions involved in irrigated rice research and development program Encouraging private sectors to machinery rental service for leveling & bunding	
On-farm technology dissemination (E)			+ 22 extension workers Training on Agronomy/ practice to Farmers Training on Land preparation		
Mechanization	Develop an industrial extension program		Training of farmers in technical, business management,	Promotion of Mechanization	Preparation Design and test of improved rice pre

	Policy / Institutional	Infrastructure	Human resource capacity	Provision / support	Information / knowledge
			<p>and entrepreneurship for maintenance of agricultural equipment</p> <p>Training more researchers and extension engineers in the NARS</p> <p>Small workshops for manufacturers</p>		harvest equipment
Quality improvement	Strengthening farmer groups: farm machinery service		<p>Strengthening extension services for post harvest management</p> <p>Training for researchers/extension officers at MSc and/or PhD degrees</p>	<p>Enhancing the availability & use of efficient equipments</p> <p>Strengthening farmer groups: farm machinery service</p>	<p>Improved availability of post harvest technologies at the village level</p> <p>Design and test of improved equipment</p>
Access to market	<p>Promotion of competitive marketing system</p> <p>Packaging & Branding</p>		<p>Exchange visits (scientists, farmers, processors)</p> <p>Rice Consultative Goup</p> <p>Promotion of group marketing</p>		Publications, radio & TV programs
Access to credit	Credit scheme for rice development		Training of Farmers' associations	Conception of credit line to farmers	

After studying the components of the various on-going projects in rice sector, the task force prioritized those needs that are to be sponsored in the next funding cycle. In the matrix below, those subsector intervention elements (cells) that are insufficiently funded are shown in yellow color. Cells colored in blue show those elements that are currently addressed by various projects. The red cells show those elements which require immediate attention. The eight identified priorities are shown in the matrix below:

Mozambique	Policy / institutional	Infrastructure	Human resource capacity	Provision / support	Information / knowledge	Unclassified
Seed				Priority 1.		
Fertilizer				Priority 2.		
Irrigation / water management		Priority 3.				Priority 4.
On-farm technology dissemination						
Mechanization				Priority 5.		
Quality improvement					Priority 6.	
Access to market	Priority 7.					
Access to credit	Priority 8.					
Overall policy tools						
Unclassified						

6. Concept Notes

From each of the subsector identified as a priority, the task force identified two components each that would require sponsorship in the immediate funding cycle. The concept notes developed by the task force on each of these topics are shown in the annexes 1 through 16. These annexes show the goals, objectives, components (activities), the expected results, required duration, budget and the potential sources of funding.

The budget estimates of all the proposed projects and their percentage share of the total budget is shown in the table below:

Sl. No	Project Title	Estimated Budget (USD)	Percentage of Total
1	Strengthening rice seed supply chain through sensitization and improved access to credit	150,000	0.02
2	Distribution of Certified Seeds through Voucher system to rice growers	22,500,000	3.66
3	Distribution of Fertilizers through voucher system to rice farmers	7,800,000	1.27
4	Expansion of Fertilizer marketing network in rice growing areas through training of retailers and establishing linkage with agro-dealer network	800,000	0.13
5	Construction, rehabilitation and upgrading of irrigation structures in rice growing areas	560,000,000	91.00

6	Promotion of maintenance, responsibility and ownership of irrigation infrastructures at the grass root level	5,600,000	0.91
7	Enabling of public-private partnerships in the provision of machinery rental service for use in levelling and bunding of rice fields	110,000	0.02
8	Facilitation of credit or grant to private sectors engaged in irrigation/water management	600,000	0.10
9	Provision of equipments to increase productivity in small scale rice farms	12,000,000	1.95
10	Facilitation of credit or grant to farmers and private sectors in farm mechanization	200,000	0.03
11	Improve quality and productivity of rice through the provision and dissemination of harvest and post harvest equipments	2,300,000	0.37
12	Strengthening of private sectors in rice value chain through facilitation of imports and local manufacturing of harvest- and post-harvest equipments	300,000	0.05
13	Promotion of market competitiveness of locally produced rice	660,000	0.11
14	Promotion of packaging and branding of locally produced rice	260,000	0.04
15	Credit scheme for rice development – Using a part of import tariff as a source of credit/guarantee/insurance scheme to rice farmers through service providers	1,250,000	0.20
16	Strengthening the linkage between credit for inputs and outputs along the rice value chain	825,000	0.13
	Total	615,355,000	