

Best Practice in Rice Value Chain

Dissemination of NERICA in Uganda (Extension)

CARD Regional Workshop
on February 4th, 2014, Nairobi, Kenya
CARD Secretariat



CARD

COALITION for AFRICAN
RICE DEVELOPMENT

Contents

1. General Description of the Best Practice

- (1) Summary of Best Practice
- (2) Background
- (3) Description of Best Practice

2. Impacts of the Best Practice

3. Success Factors

4. Scalability Assessments

5. Conclusion



CARD

COALITION for AFRICAN
RICE DEVELOPMENT

1. GENERAL DESCRIPTION OF THE BEST PRACTICE



CARD COALITION for AFRICAN
RICE DEVELOPMENT

1. General Description of the Best Practice (1) Summary Information

<Basic Information of the Best Practice>

Country	Uganda
Area of intervention in value chain	Extension: Dissemination of New Agriculture Technology (NERICA)
Mode of Intervention	A series of Projects
Implementer	The Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), National Agricultural Research Organization(NARO)
Partner Organization(s)/ Institution(s)	Japan International Cooperation Agency (JICA): financial and technical supports



CARD COALITION for AFRICAN
RICE DEVELOPMENT

General Description of the Best Practice (2) Background

- Rapid Increase of Rice demand in Uganda from 47,000 MT (1990) to 200,000 MT (2006) - average 9.5% increase per year
 - Development of NERICA varieties by Africa Rice in the 1990s
- ↓
- Uganda's high agricultural potential (fertile soil, untapped land resources and abundant rainfall)
 - NERICA was officially introduced to Uganda in 2002
 - Government efforts in NERICA promotion through campaigning and Upland Rice Project
- ↓
- However, the NERICA dissemination in Uganda was stagnant
 - This is how JICA started cooperation with Uganda Government for accelerating the diffusion of NERICA cultivation



CARD COALITION for AFRICAN
RICE DEVELOPMENT

General Description of the Best Practice (3) Description of Best Practice

- Cooperation started from the dispatch of a rice expert
Support to NaCRRI (National Crop Resources Research Institute), Of NARO(National Agricultural Research Organization) in setting up basic environment for rice research and training
As a result....The base for research and capacity building activities was built (Testing and Demonstration plots) and started providing training to researchers as well as extension workers and farmers
- To up-scale achievement of the cooperation by the expert, NERICA Rice Promotion Project in Uganda was implemented (2008-2011)



CARD COALITION for AFRICAN
RICE DEVELOPMENT

General Description of the Best Practice

(3) Description of Best Practice

Summary of NERICA Rice Promotion Project in Uganda (2008-2011: 3 years)

Project Purpose	NERICA Rice Production is improved in quantity and quality in the target area
Outputs 1	Research and extension capacity of NERICA (upland and lowland) in National Crops Resources Research Institute (NaCRRI) and Zonal Agricultural Research and Development Institutes (ZARDIs) is enhanced.
Outputs 2	Appropriate NERICA production techniques are introduced to farmers, famers groups, rice millers, etc. in the Project area.
Inputs	<p>Japan side: 3 Long-Term experts, 28 Short-Term Experts, Equipment, Local Activity Cost (130 million JPY), Training to Project Counterparts</p> <p>Uganda Side: 19 Officials in Project, Office, Laboratories, Training facilities, Local Activity Cost (USD10,000) , research and demonstration plots</p>



CARD

COALITION for AFRICAN
RICE DEVELOPMENT

General Description of the Best Practice

(3) Description of Best Practice

- Cooperation started from dispatch of an expert
- Support to NaCRRI (National Crop Resources Research Institute), of NARO(National Agricultural Research Organization) in setting up basic environment for rice research and training

As a result....The base for research and capacity building activities was built (Testing and Demonstration plots) and started providing training to researchers as well as extension workers and farmers

- To up-scale achievement of the cooperation by the expert, NERICA Rice Promotion Project in Uganda was implemented (2008-2011)
- The above project is currently further succeeded and scaled by Promotion of Rice Development (PRiDe) Project with the JICA's commitment to support Uganda in NERICA development up to 2016



CARD

COALITION for AFRICAN
RICE DEVELOPMENT

General Description of the Best Practice

(3) Description of Best Practice

Extension approaches taken in the series of cooperation for NERICA promotion are;

- Utilization of NaCRRI demonstration plots (with all different growth stages of NERICA through out the year) for practical cropping training of farmers and extension workers
- Cascade approach (farmers and extension workers are trained together)
- Provision of starter kit to trainees (1kg of NERICA seed per trainee and NERICA cultivation guidebook and manual)



CARD

COALITION for AFRICAN
RICE DEVELOPMENT

2. IMPACTS OF THE BEST PRACTICE



CARD

COALITION for AFRICAN
RICE DEVELOPMENT

2. IMPACTS of the Best Practice

- Area for NERICA cultivation
From 1,500 ha (2004), to 40,000ha (2008), to 60,000ha (2012)
- Share of NERICA to all rice production,
From 1.6%(2004) to 30%(2008), and to 71% (2011)
- Training
<2004-2008>
On-site 28 training to 790 extension workers and farmers,
Outside NaCRRRI, 30 training to 2,300 people
<2008-2011>
12,578 farmers and 1,677 non-farmers trained and **64.3%** of
the trained farmers have actually started to cultivate NERICA



CARD COALITION for AFRICAN
RICE DEVELOPMENT

3. SUCCESS FACTORS



CARD COALITION for AFRICAN
RICE DEVELOPMENT

3. Success Factors

(1) Strong political will and public supports by the government

- large-scale campaign conducted by high rank politicians (the President, and the Vice-President)
- Implementation of Government Project
- Favorable trade policy for domestically produced rice (75 % Import tariff on rice from outside EAC)

(2) Incentives for production.

- Rapidly increased rice demand in Uganda
- Demand in local markets (consumers' preference for rice)



CARD

COALITION for AFRICAN
RICE DEVELOPMENT

3. Success Factors

(3) Utilization of Foreign Experts

- Knowledge and Information Gap on NERICA because; Rice was new to Country, and NERICA was new.
- Japanese experts with good knowledge of Rice
- Accumulated knowledge and information on NERICA through Joint research

(4) Adoption of right extension approaches

- Provision of Training and Seed with technically strong manuals
- Cascade Approach effective for short term diffusion
- Training with all growth stages of NERICA(year-round)



CARD

COALITION for AFRICAN
RICE DEVELOPMENT

3. Success Factors

- (5) Favorable natural climatic environment of Uganda
- General feature of climatic and environmental conditions in Uganda (e.g. Abundant rainfall fertile soil) gives favorable environment to NERICA, thus helped fast dissemination of NERICA cultivation.
 - Climatic stability in Uganda (sunshine duration, rainfall, temperature) made possible the year round training with all different growth stage of rice



CARD COALITION for AFRICAN
RICE DEVELOPMENT

4. SCALABILITY ASSESSMENT



CARD COALITION for AFRICAN
RICE DEVELOPMENT

4. Scalability Assessment

Diffusion of new agriculture technology (NERICA cultivation)	
Ideas	Experience from Uganda (cooperation between the Government of Uganda and JICA) Remarkable success in Uganda as described above
Vision	Appropriate scale is decided based on political vision, priority given to NERICA, market space, natural resource endowment, financial capacity, human and institutional resources, among other factors of respective countries.
Drivers	Policy/Governments – Taking the food crises caused by soaring food prices in 2008, policies are placed in all CARD countries for increasing production of basic cereals. Markets – Increasing trend of rice consumption in Africa pushed the pressure for scaling (depending on consumer preference for upland rice though) Organizations – Africa Rice, IRRI, and other institutions, development partners and financial institutions are committed in rice production increase in CARD countries.



CARD COALITION for AFRICAN
RICE DEVELOPMENT

4. Scalability Assessment

Space	
Fiscal/ Financial	Usually not much space. But in partnership with financial institutions, donors, and other development partners, government of respective countries can create the space. It, however, depends on government priority on NERICA.
Natural Resource/ environmental	Favorable climate for NERICA production is indispensable (prerequisite). Provision of Year-round training with NERICA of all growth stages is possible only with stable climate like that in NaCRRI, Uganda. Availability of arable land and water resources is the determinant of the space. (competition with other crops from income and food security perspectives needs to be considered)
Policy	While policy space for scaling rice production already exists in most CARD countries, that for upland rice, especially NERICA, depends on government strategies for rice development, market demand, people's preference, available resources, among others. Policy space can be easily created in countries where subsistence farming prevails and farmers produce for their self-consumption, and/or upland rice has markets.



CARD COALITION for AFRICAN
RICE DEVELOPMENT

4. Scalability Assessment

Space	
Capacity	Organizational, institutional, and human resource capacity is necessary to provide decent trainings. (Prerequisites) Space for human resource capacity can be created through cooperation of experts from outside the countries (especially at the initial stage), while that for institutional and organizational capacity can be created only by the respective government (depending on the priority on NERICA)
Political	Rice production, particularly upland rice should be given some priority to get political supports. (Prerequisite for political space)
Cultural	Consumers' preference for rice (especially NERICA in this case) is prerequisite.
Partnership	There is space for partnership with Africa Rice, IRRI, JIRCAS and national research institutions with expertise and knowledge in NERICA cultivation



CARD COALITION for AFRICAN
RICE DEVELOPMENT

5. CONCLUSION



CARD COALITION for AFRICAN
RICE DEVELOPMENT

5. Conclusion

Critical Conditions to scale up Fast NERICA dissemination experience in Uganda to other CARD countries;

- Climatic and environmental conditions for successful NERICA cultivation and provision of effective year-round training
- Policy and political priority on NERICA which is necessary for mobilization of financial, institutional, and human resources



CARD COALITION for AFRICAN
RICE DEVELOPMENT

5. Conclusion

- Complementarity with government programs such as Campaigning and Upland Rice Project (fertilizer subsidy program could also enhance adoption of NERICA cultivation)
- Market conditions which incentivize the producers to adopt NERICA cultivation (Existence of market demand for upland rice, and protection from imported rice)



CARD COALITION for AFRICAN
RICE DEVELOPMENT

5. Conclusion

- Availability of human resources (both national and foreign) who can fill the gap in knowledge and information on new technology
- Capacity to provide technically high quality training (even with the assistance from foreign experts at the initial stage), combined with distribution of small “starter kit (NERICA seed and cultivation guideline & manuals)” to producers



CARD

COALITION for AFRICAN
RICE DEVELOPMENT

5. Conclusion

In addition:

- Some approaches in this best practice (Cascade approach, provision of training with all stages of growth, and provision of starter kit) are applicable to dissemination of other technologies or crops



CARD

COALITION for AFRICAN
RICE DEVELOPMENT

THANK YOU



CARD COALITION for AFRICAN
RICE DEVELOPMENT