

**Country J : NIGERIA**



## NIGERIA: MULTINATIONAL NERICA RICE DISSEMINATION PROJECT



## 2005 ANNUAL REPORT

### OUTLINE

- Introduction
- Achievements
- Success Stories
- Constraints
- Conclusion



## INTRODUCTION

- Official launching of **NERICA PROJECT** 21/06/06 at Mabushi PCU Headquarters.
- Receipt of US\$380,000 at end of third quarter
- Supervisory mission by Project Task Manager Dr Harouna Dosso
- Distribution of 328 NERI-Boxes
- Periodic Monitoring Visits by PCU, NSS, NCRI & RIFA

## Group formation / mobilization

- ✓ Seventy-one (71) farmers groups formed in Nerica States
- ✓ Groups consist of 657 farmers , 259 women groups inclusive
- ✓ Number of States(6), Groups(71), Total farmers(657, Total female farmers(257)

## Group formation /mobilization

s/no.	state	No of groups formation	No of farmers in groups	No of female farmers
1	TARABA	6	62	5
2	OGUN	3	92	17
3	KADUNA	12	140	69
4	ONDO	12	71	38
5	NASARAWA	19	68	14
6	EKITI	19	224	116
	TOTAL	71	657	257

## Seed Production Effort

- **Breeder Seeds**
  - Sustainability of Breeder Seed which is bedrock of other seeds types.
  - National Cereals Research Institute (NCRI) a stake holder in Nerica project has mandate for genetic improvement of rice crop in Nigeria.
- **Task of (NCRI)**
  - Establish PVS gardens in six Nerica States
  - Produce five hectares of breeder seeds of Nerica 1&2
  - Train ADP extension agents to establish and manage PVS gardens

### ❖ Foundation and Certified Seed

- Project distributed 328 NERICA-Boxes to farmers in Participating States.
- NERICA – Box is NERICA rice production technology pack.
- NERICA –Box is anchored on Conservation Tillage – Concept
- Composition of NERICA-Box ;
- 61.2MT were produced out of the 164MT anticipated

### ❖ Status of Seed Production by States

STATES	NO. OF GROUP	HA. PLANTED	YIELD(MT)
Ekiti	4	12.5	25.0
Ogun	3	12.0	1.0
Kaduna	12	12.5	6.7
Ondo	12	12.5	2.5
Taraba	6	14.1	17.1
Nasarawa	19	12.5	8.9
		Total	61.2

### ❖ Seed quality control

- National Seed services (NSS) involved in seed certification and quality control
- NSS also trains ADP's staff on quality seed production techniques

Factor	Maximum Permitted Percentage (%)	
	Foundation	Certified
Off-type	0.50	0.30
Inseparable other crop plants	0.010	0.050
Objectionable weed plants	0.100	0.020
Plants Affected by seed borne Disease	0.10	0.5

### ➤ Standard of each Class

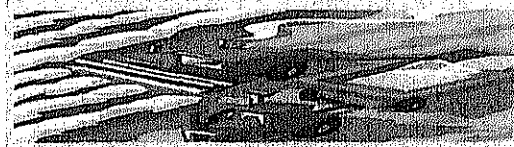
Factor	Foundation%	Certified%
a. Pure seed (Minimum)	98	98
b. Inert Matter (Maximum)	2.0	2.0
c. Other crop seed	10/kg	20/kg
d. Germination Percentage (%) (Maximum)	80	80
e. Moisture Content (Maximum)	12	12
f. Total Weed seeds (Maximum)	10/kg	10/kg
g. Objectionable weed seeds (Maximum)	2/kg	2/kg
h. seed infected by seed-borne disease	0.10	0.5
i. Moisture for vapour – proof Containers (Maximum)	8.0	8.0

### ❖ Isolation Requirements

Contaminants	Minimum Distance Foundation	(Meters) Certified
a. Fields of Other varieties	3	3
b. Fields of same variety n.c. to v.p.r. for c.	3	3

### ❖ Routine Monitoring Visit

- PCU, NSS, NCRI and officials of RFAN undertook joint routine monitoring visits;
- To Guide a sound seed multiplication techniques.



### ❖ Farmers Field Days organized

- States organized several *farmers field* days around NERICA seed multiplication plots.
- Participating Agencies of Fields day, include PCU, NSS, NCRI and RFAN.
- Over 300 men and women farmers also participated.

### ➤ Farmers field day by States

S/n	State	No of Field Days Held	No of participating farmers	No of farmers	No of Guest
1.	TARABA	Nil	Nil	Nil	Nil
2.	OGUN	1	91	14	10
3.	KADUNA	2	150	80	65
4.	ONDO	12	87	52	24
5.	NASARAWA	18	313	99	36
6.	EKITI	3	-	-	-
	Total	36	641	245	135

### ❖ NERICA Baseline Survey

- The Project Coordinator and M&E Specialist met The Director (NCRI), with NERICA Desk officer and ROCARIZ Economists, on WORLD BANK accepted NERICA Baseline Survey Terms of Reference



### ❖ Regional Launching of M-NERICA Rice Dissemination Project

- NERICA Participated in Regional Launching Workshop in Accra Ghana, 9<sup>th</sup> – 13<sup>th</sup> May 2005
- Resource persons are Dr. INOUSA AKINTAYO (ARI Coord.), and CISSE BOUBAKAY
- PC & Accountants from Anglo-phone countries attended : Gambia, Ghana & Sierra Leone.

### ❖ 34<sup>th</sup> Session of N.C.A.

- PC attended 34<sup>th</sup> session of National Council of Agriculture in ASABA, Delta State, 9<sup>th</sup>-17<sup>th</sup> March 2005
- Information paper on NERICA Project produced.



### ❖ NERICA REPORTS

#### □ Prepared and Circulated:

- Annual report 2004
- Annual Work-plan and Budget 2005
- 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> Quarterly reports for Year 2005
- Progress report submitted to House Committee on Agriculture.
- Proceedings of NERICA National Launching

### ❖ SUPERVISION MISSION BY TASK MANAGER

- ADB mission led by Dr. A. DOSSO (Senior Agronomist) and Task – Manager visited Nigeria to supervise NERICA Project activities 9<sup>th</sup> -13<sup>th</sup> May 2005.
- Mission visited ADB Nigerian Office ,PCU Director , Dr. S. A. Ingawa.
- Met NERICA farmers Groups in Kaduna and Nasarawa States.
- Paid courtesy call on National Chairman RIFAN.
- Mission noted the Acceptance of NERICA by farmers groups.

### ❖ INITIAL ADVANCE

- Initial Advance of US \$380,000 received in Sept.
- Task Manager supervision clarified
- related to funding.

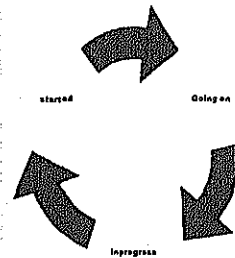


### ❖ STATUS OF PROCUREMENT

- Project procures 4, 4-WD and 22 Computers through National Shopping Mode.
- Other Goods namely: Motor Cycles, Bicycles, Printers, Photocopiers, Scanners and Internet are being considered .
- Banks has given approval/"No Objection"

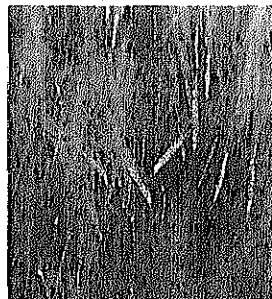
### ❖ Procurement of Works

- Office rehabilitation,
- Spot improvement of roads
- Market Stalls
- Seed Stores
- Drying Sheds
- HIV/AIDS and Malaria Control.



### ❖ Documentary on NERICA

- Strategy put in place to promote dissemination of NERICA Project in Nigeria through production of documentary on the Project.



### ❖ Workshops Attended

- Annual conference of Agric. Ext. Agents (A.E.S.O.N)
- Zonal Research –Extension – farmers – Input (REFILS.) system;
- Stakeholders Workshop on SAKSS.; at IITA Ibadan papers presented *PCU M&E data collection methods and outputs*
- Data reconciliation workshop
- National Annual PME workshop
- PFT for Kwara State
- Market Information Workshop at Cotonou, Benin Republic
- National Stake holders workshop on Unlocking Sources of Growth in Nigerian Agric.

## ❖ TRAININGS

- Project Coordinator served as resource person in the training of research and extension personal involved in NSPFS on CBPAES and presented papers namely:
- Brief history of Agric. Ext. in Nigeria
- Agric Extension Approaches in Nigeria
- How Adults learn
- M&E specialist, also presented a paper participatory M&E Approaches , served as resource person in HRD personal of States ADPs, PCU and NAERLS.

## ❖ Project facilitation Meeting

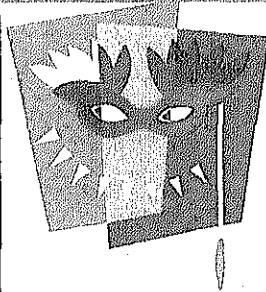
### □ OBJECTIVES

- Review progress of project so far.
- Intervening constraints
- Solution to identified problems
- Planning for coming year.



## ❖ Success stories

- Very popular name for NERICA-1 recommended by State State farmers in recognition of its drought resistance
- Farmers introduced Eshbaretan in Under main Mamman Doka in Kaduna state



## ❖ Unsurpassed Demand for NERICA

- Farmers demand NERICA RICE technology in order to fight Hunger and poverty in Nigeria



## □ CONSTRAINTS:

- o Delay in Banks disbursement of funds
- o Seed Production

## □ CONCLUSION

- The Multinational NERICA Rice Dissemination Project has rightly stoked the fire that is both widespread and pervasive.
- Farmers are increasingly demonstrating favourable and positive attitude to NERICA resulting in ever-soaring demand.
- Projects Coordinating Unit is once more demonstrating its celebrated prowess of intimate networking with all the stakeholders.



# Participatory Varietal Selection 2006 Activities in Nigeria

## INTRODUCTION

- Farmers' participatory variety selection is a new concept in plant breeding that involves farmers in varietal selection.
- It enables farmers and plant breeders to collectively identify suitable crop varieties that suit farmers' need and with consumers' acceptability.
- It also ensures speedy and lasting adoption.
- It provides the plant breeders with the information on farmers' preferred plant characteristics for general and specific environments.

## OBJECTIVES

- The specific objectives of the exercise is:
- To identify farmers' acceptable rice cultivars in the lowland and upland ecologies.
  - Expose and disseminate new rice varieties, particularly new interspecifics developed by WARDA and NCRI plant breeders.
  - To shorten the time lag between varietal development and release.

## MATERIALS AND METHODS

- Number of nurseries: One lowland and one upland.
- Locations: Six States: Taraba, Kaduna, Nasarawa, Ogun, Ondo and Ekiti.
- Entries: Maximum of fifty entries per nursery and two nurseries per states.

*Note: Some locations do not have a complete set of the entries in the nursery due to insufficient seed.*

### Land preparation: As per local practices

#### Planting material

##### • Oribbling in Upland nursery

Transplanting broadcasting or dibbling in lowland nursery

#### Fertilizer application

Optimum input level of 30, 30, 30 N, P and K as basal and 30 N at panicle initiation stage for the upland; 80, 40, 40 for the lowland

#### Weeding

Post-emergence herbicides with complementary hand weeding

#### Plant size

2 m x 5 m

#### Design

Augmented with two checks in each block

#### Farm size

Each farmer will have a maximum choice of 5 varieties in the garden according to priority of choice. Each farmer's choice was ranked and weighted from 5 down to 1. First choice was given the weight of 5, while the last choice was given the weight of 1. A variety's total farmer's weight was added and used for ranking the variety.

## RESULTS

- None of the two nurseries was established at Ogun State.
- Only upland nursery was established at Nasarawa State.
- Only lowland nursery was successful at Kaduna state.
- Though both nurseries were established in Ondo state, the upland nursery was badly damaged by birds, and farmers went in to harvest the garden in the attempt to save the crop. Hence no farm walk as possible.
- To date, four farm walks have been conducted as follows:
  - lowland vegetative stage at Owebi, Ondo state;
  - upland at maturity stage in Keffi, Nasarawa state;
  - lowland at maturity stage in Kaduna/Kaduna state;
  - upland at maturity stage at Epe, Fako State.



## RESULTS CONTINUES

### Lowland nurseries farm walk

#### a. Kaduna State

- a total of 52 farmers participated with equal proportion of males and females
- a total of 38 varieties were identified by farmers at maturity stage
- two NERICA lines, L-34 and L-36 had the highest frequency of selection and also highest score, Table 1.

The ten most selected and highly rated varieties of rice in lowland rice PVS garden in Kaduna, Kaduna State

Nigeria, 2006

Farmer	Varietal name	Frequency of selection	Weighted score	Ranking by weight
17	NERICA L-34	35	158	1
18	NERICA L-36	34	132	2
check	FARO 44	14	49	3
33	NCRO 55	13	43	4
39	FAROX508-3-10-10-4	9	30	5
check	FARO 52	10	29	6
36	FAROX-501-B-3-1-2-2	6	21	7
32	NCRO 52	5	19	8
14	NERICA L-24	6	17	9
19	NERICA L-38	6	15	10

## RESULTS CONT

Selected varieties are in three categories

- WARDA NERICA lines entries L34 and L36
- NCRI breeding lines NCRO 55 and FAROX 508-3-10-H14
- Two prominent released varieties used as check, FARAOs 52 and 44
- One of NCRI line FAROX 508 is an interspecific

### The criteria for choosing rice varieties farmers at Kaduna are:

- Ease of threshing
- Good plant height
- Early maturing
- Many tillers with heavy panicle
- Less disease problem
- High yielding

## RESULTS CONT

#### b. Owena, Ondo State

- Farm walk was at vegetative stage
- Only NCRI lines were in the nursery
- Only nineteen farmers (cooperative group) participated including women
- Eighteen varieties identified by farmers
- FARO 52 was selected by all the farmers (19) followed by four NCRO lines (Table 2)

The ten most selected and highly rated varieties of rice in lowland rice PVS garden in Owena, Ondo State

Nigeria, 2006

Farmer	Varietal name	Frequency of selection	Weighted score	Ranking by weight
check	FARO 52	19	75	1
26	NCRO 26	10	40	2
30	NCRO 48	10	27	3
35	NCRO 59	7	25	4
31	NCRO 55	6	21	5
45	FAROX-508-3-11-F70-1-1	4	16	6
11	NCRO 46	11	15	7
28	NCRO 36	5	14	8
36	FAROX-501-B-3-1-2	3	11	9
42	FAROX508-3-11-F43-2-1	5	10	10

## RESULTS CONT.

### Upland nurseries' farm walk

#### a. Keffi, Nasarawa State

- Farm walk was at maturity stage
- Received a full complement of the entries
- only 28 farmers participated; all males
- twenty four varieties identified by farmers
- two of the new NERICAs were more selected than already released NERICAs 1 and 2 (NERICAs 7 and 9)
- 7 NERICAs were among the top ten selected varieties. (Table 3.)

The ten most selected and highly rated varieties of rice in upland rice PVS garden in Keffi, Nasarawa State, Nigeria, 2006

Rank	Varietal name	Frequency of selection	Weighted score	Ranking by weight
1	NERICA 7	11	45	1
2	NERICA 9	9	35	2
3	WAB 706-12 K2 K1	13	28	3
4	NERICA 2	7	25	4
5	NERICA 1	6	23	5
6	NERICA 14	5	20	6
7	NERICA 12	7	16	7
8	FARO 48	3	11	8
9	NERICA 11	4	10	9
10	FARO 49	4	10	10

## RESULT CONT

#### B. Epe, Ekiti State

- Farm walk was at maturity stage
- Full complement of entries
- low plant population due to traditional planting method, planted within hips
- A total of 41 farmers participated
- A total of 22 varieties were identified by farmers
- Two WAB series were most identified in the garden followed by three NERICA lines including NERICA 1. (Table 4.)

The ten most selected and highly rated varieties of rice in upland rice PVS garden in Epe, Ekiti State, Nigeria, 2006

Rank	Varietal name	Frequency of selection	Weighted score	Ranking by weight
1	WAB 75-10 FIB	26	105	1
2	WAB 75-15 A JB	27	92	2
3	NERICA 1	31	91	3
4	NERICA 14	15	45	4
5	NERICA 11	13	45	4
6	WAB 704-52 3	15	37	6
7	NERICA 13	11	32	7
8	NERICA 12	10	32	7
9	NERICA 2	11	29	9
10	NERICA 17	10	24	10

## CONCLUSIONS

- Limitation due unequal numbers of entries not withstanding there is evidence of differences in farmers preferences; hence the need for specific varietal recommendation
- Similarly in the upland where all entries featured in the two locations only two well known released NERICAs were selected in the two locations. All other selected entries differ, this also points to the need for specific location release of rice varieties in Nigeria.
- Three most selected varieties in each nursery and at each location will be made available to farmers for second year garden in all participating farmers fields.