

ANNEX 10 (b) Visit to Mali

29-30 June 2007

Brigitte Courtois, Zelia Menete, Eric Tollens

The purpose of this visit was to discuss with IER and its various stakeholders such as Office du Niger about the collaboration with WARDA. The panel went to Ségou to discuss with Office du Niger staff, and to Niono to see one of the main IER rice stations. We had the opportunity to discuss with a group of farmers in the village of Nango about the main constraints to rice production.

Office du Niger manages a perimeter of 80 000 ha irrigated by gravity from a dam on the Niger river. The demands for settlement on government developed plots are huge. The plot attribution went down from an official 3 ha to 0.25 ha in some cases which creates problem of mechanization. Office du Niger try to encourage private investors to settle large farms (100 to 500 ha) with little success so far (too high costs of development for privates).

Rice is grown during the rainy season. It is highly intensive (5.0 t/ha) transplanted rice.

According to farmers, the main constraints to production are price and quality of fertilizers, increase in disease pressure, lack of farmers' organization to put a pressure on rice buyers, poor quality of rice transformation with small machines that induce a large proportion of broken rice, invasion of the canals by aquatic plants.

Rice is sometimes grown during the dry season but the yield expectations are lower (around 3 t/ha). It is never double cropping but rice grown on different plots. The constraints in terms of cropping calendar are very similar to that encountered on the Senegal river.

Everyone seems happy with the range of varieties available. Those are old varieties well adapted to the local conditions although some people mentioned the increased damaged of RYMV on BG90-2. Gambiaka, the oldest one, is a reference for grain quality.

There is a strong sense of ownership toward WARDA. As in Senegal, relationships with the various stakeholders seem excellent. IER scientists count a lot on WARDA for support and training. The way WARDA left Mali in 2004 was not diplomatic and was not appreciated.

We visited the molecular marker lab in IER. It has been recently installed and has not been used yet. Two persons from IER have been trained in Cotonou. Attention has to be paid to train people to safety procedures in waste management, and to damage control (e.g. in case of broken equipment). The panel commands the fact that molecular marker labs are now set on breeding sites, but want to stress that only very robust techniques can be used in such conditions.

ANNEX 10 (c) Visit to Uganda

Zelia Menete and Eric Tollens

11-15 June, 2007

Status of NERICA Dissemination in Uganda

At least 85% of the Ugandan population, currently 27.2 million people, is dependent on agriculture. Coffee, cotton, tea and tobacco are the key traditional exports. Commercial crops include flowers, rice, maize and sugarcane. Rice used to be a ceremonial food, but now current rice consumption is around 200.000 t with about 50.000 t imported. And demand continues to grow rapidly which offers opportunities for import substitution. Rice is a profitable crop for smallholders - the rice sector provides an opportunity to generate income and employment in rural and urban areas and thereby revitalizes local economies.

No rice research was taking place in Uganda until 1993 and the sector relied on irrigated areas for production. After 1993, Uganda worked with North Korean scientists, IRRI and IITA for improving lowland varieties. In 1996, testing of WARDA WAB series started at NARO but after a RYMV attack at Tilda government farm in 1998, the focus shifted to upland NERICAs and Nerica 4 (also called locally Suparica 2 and NARIC 3) was released along with ITA 357 and ITA 325. Upland rice production really took off in 2000 following the development of formal and informal seed multiplication companies, technology transfer projects, input and credit delivery systems. With the rapid upland NERICA uptake by farmers, rice became a priority crop receiving Government support, in particular from the Office of the Vice-President since 2004. NARO has Nerica 1 and 10 ready to be released and research on drought tolerance, weed, pests and fertilizer management options is on-going. Presently, new germplasm testing includes WARDA's lowland NERICAs. Short-term training in improved rice production is occurring through ECARRN.

Although reliable statistics do not exist, area under rice is about 120.000 ha, with the area under NERICA between 25 to 35 thousands ha. Yields vary from 2 to 5 ton/ha depending on the ecology as upland varieties are also grown in the rainfed lowlands. The upland cultivation has expanded to fragile areas. The private sector is very vibrant and pro-active in the rice sector in Uganda. For example, there are three rice seed companies (FICA, NASECO and Victoria seeds) and several companies are active in marketing, packaging and branding. Suppliers provide fertilizers, weed control options, labor saving and post-harvest equipment to farmers. NGO's are mainly involved in technology transfer and training. There is strong support from USAID through APEP (Agricultural Productivity Enhancement Project), from the Danida financed ASPS (Agricultural Sector Programme Support) and through Sasakawa-Global 2000. However, post-harvest and handling problems persist in affecting rice quality resulting in a small discount for local rice as compared to imported rice, which sells at retail at close to one USD per kg. In addition, weak seed certification, striga infestation due to low soil fertility and threshability of Nerica 4 are problems that need to be addressed urgently to sustain the encouraging results in rice cultivation, and particularly the NERICA 4 variety.

Rice research and training are based at the National Crops Research Institute in Namulonge. The team is very small with input from a JICA specialist and technicians. Japan has been supporting strongly rice sector development in Uganda. Japan is also funding a two year FAO project for the dissemination of NERICAs with the farmer field schools approach. A MoU between WARDA and NARO was signed in 2003. The Government of Uganda has applied for membership of WARDA, which is due for discussion at the Council of Ministers meeting in September 2007.

Factors contributing to the expansion of areas under NERICA are the existence of public-private partnerships, a market driven approach linking producers to processors, technology generation and transfer, better input delivery systems and the profitability of rice production backed by Government support and favorable rice policies e.g. 75 % import duty (common external tariff) on imported rice. This strongly indicates that strengthening research, extension, training and other supporting systems for the whole value chain, including a favorable policy environment, are the key to the success of the NERICA dissemination.

Annex 11 Staff time allocation for each project and discipline

Percent of WARDA's staff member's time allocated to each project in 2006														
Last Name	First Name	Discipline	Position Title	Project 001	Project 002	Project 003	Project 004	Project 005	Project 006					Total
				Enhancing productivity	Sustainable intensification	Enhancing performance	Mitigating drought	Rice policy and technology impact	Mitigating human and environmental effects	Networks Partnerships: ARI, ECARRN, ROCARIZ	IVC	SWIHA	Management /admin. support to all projects	
Agboh-Noameshie	Rita Afiavi	Agronomy/NRM	SWIHA Coordinator (Consultant)					03	10	40		20		100
Ajayi	Olupomi	IPM/Entomology	Coordinator					10		30			60	100
Akintayo	Inoussa	Agronomy/NRM	ARI-Coordinator	20				20		60				100
Attiogbevi-Somado	Eklou	Agronomy/NRM	Agronomy-GR and Seed					10	20	70				100
Bado	Vincent	Agronomy/NRM	Head of Sahel Regional Station		15	35					5		45	100
Bruce-Oliver	Samuel	IPM/Entomology	Executive Officer - DGO	0	0	0	0	0	0	0	0	0	100	100
Coulibaly	Pefery	Admin	IT Manager	0	0	0	0	0	0	0	0	0	100	100
De Vries	Michiel	Agronomy/NRM	Agronomist		10	60					30			100
Diagne	Aliou	Ag. Economics	Agric. Economist	40				50		10				100
Diatta	Sitapha	Agronomy/NRM	Soil Chemist, ag. WARDA Rep, CI							30			70	100
Futakuchi	Koichi	Physiology	Crop Ecophysicologist	30	50		20							100
Geerts	Koen	Admin	ADG-CS	0	0	0	0	0	0	0	0	0	100	100
Hotobah-During	Samira	Admin	Head of Donor	0	0	0	0	0	0	0	0	0	100	100

Percent of WARDA's staff member's time allocated to each project in 2006														
Last Name	First Name	Discipline	Position Title	Project 001	Project 002	Project 003	Project 004	Project 005	Project 006					Total
				Enhancing productivity	Sustainable intensification	Enhancing performance	Mitigating drought	Rice policy and technology impact	Mitigating human and environmental effects	Networks Partnerships: ARI, ECARRN, ROCARIZ	IVC	SWIHA	Management /admin. support to all projects	
Ikeda	Ryoichi	Genetic improv/molecular bio	Seed Multiplication specialist	20	10					70				100
Katuli	Nuridin	Admin	Head of OSA	0	0	0	0	0	0	0	0	0	100	100
Keya	Okoth Shelleminah	Agronomy/NRM	ADG-R&D	0	0	0	0	0	0	0	0	0	100	100
Kiepe	Paul	Land & Water Management	NRM Specialist, IVC Coordinator, Head GIS, Program Leader						30		50		20	100
Kroma	Margaret	Other Social Sciences	Visiting Scientist-Rural Sociology					50	25	10		10	5	100
Lisette-Vidal	Aline	Comm / Extn / KM	Head, Library & Information	0	0	0	0	0	0	0	0	0	100	100
Luzi-Kihupi	Ashura	Genetic improv/molecular bio	Regional Coordinator	15						35			50	100
Maina	George	Admin	Head of finance	0	0	0	0	0	0	0	0	0	100	100
Manneh	Baboucar	Genetic improv/molecular bio	Molecular Biologist	25	15		60							100

Percent of WARDA's staff member's time allocated to each project in 2006

Last Name	First Name	Discipline	Position Title	Percent of WARDA's staff member's time allocated to each project in 2006										Total
				Project 001	Project 002	Project 003	Project 004	Project 005	Project 006					
				Enhancing productivity	Sustainable intensification	Enhancing performance	Mitigating drought	Rice policy and technology impact	Mitigating human and environmental effects	Networks Partnerships: ARI, ECARRN, ROCARIZ	IVC	SWIHA	Management /admin. support to all projects	
Meijs	M.G.J. Marcel	GIS	GIS/Water Management Specialist						50		50			100
Millar	David	Comm / Extn / KM	Science Writer	1,5	2	0,5	0	2,5	2	1	0,5	10	80	100
Mohapatra	Savitri	Comm / Extn / KM	Communications Officer	0	0	0	0	0	0	0	0	0	100	100
Narteh	Lawrence	Agronomy/ NRM	Network Coord	10	10					80				100
Ndjiondjo-p-Nzenkam	Marie-Noelle	Genetic improv/ molecular bio	Molecular Biologist	15	10		60			15				100
Nwilene	Francis	IPM/Entomology	Entomologist/Liaison Scientist	35	50	15								100
Oikeh	Sylvester	Agronomy/ NRM	Cropping Systems Agronomists	50	35				15					100
Olatifede	Kola	Admin	Budget Manager	0	0	0	0	0	0	0	0	0	100	100
Rodenburg	Jonne	Agronomy/ NRM	CSA	15		15					70			100
Saito	Kazuki	Physiology	Physiologist		50	50								100
Samejima	Hiroaki	Agronomy/ NRM	NRM		40	40		20						100
Sanchez	Ines	Genetic improv/ molecular bio	Population Genetics & Evolution	15			15			70				100

Percent of WARDA's staff member's time allocated to each project in 2006														
Last Name	First Name	Discipline	Position Title	Project 001	Project 002	Project 003	Project 004	Project 005	Project 006					Total
				Enhancing productivity	Sustainable intensification	Enhancing performance	Mitigating drought	Rice policy and technology impact	Mitigating human and environmental effects	Networks Partnerships: ARI, ECARRN, ROCARIZ	IVC	SWIHA	Management /admin. support to all projects	
Seck	Papa Abdoulaye	Ag. Economics	DG	0	0	0	0	0	0	0	0	0	100	100
Semon	Mande	Genetic improv/molecular bio	Upland Rice Breeder	50	10		40							100
Séré	Yacouba	IPM/Entomology	Plant Pathologist	25	40	30							5	100
Sie	Moussa	Genetic improv/molecular bio	Lowland Rice Breeder	15	60	15					10			100
Sokei	Yoshimi	Physiology	Agronomist	10	10					80				100
Tia	Dro Daniel	Genetic improv/molecular bio	GR Specialist	20					10	70				100
Traore	Karim	Genetic improv/molecular bio	Irrigated rice Breeder	5	30	65								100
Tsunematsu	Hiroshi	Genetic improv/molecular bio	Geneticist-Associate Upland Breeder	20			80							100
Van Mele	Paul	Comm / Extn / KM	TT Agronomist					15		65	20			100

				Percent of WARDA's staff member's time allocated to each project in 2006										
				Project 001	Project 002	Project 003	Project 004	Project 005	Project 006					
Last Name	First Name	Discipline	Position Title	Enhancing productivity	Sustainable intensification	Enhancing performance	Mitigating drought	Rice policy and technology impact	Mitigating human and environmental effects	Networks Partnerships: ARI, ECARRN, ROCARIZ	IVC	SWIHA	Management /admin. support to all projects	Total
Youm	Ousmane	IPM/Entomology	Asst. Director R&D	20									80	100

Source: WARDA

Annex 12

Number of journal articles published by WARDA scientists per years. Impact factor (average 2002-2004)and Rank in the discipline of these journals.

Journals with impact factor	2000	2001	2002	2003	2004	2005	2006	Impact factor*	Rank 2003
African Entomology					1			0.480	0.49
Agric, Ecosystems Environment		2	1	2			1	1.340	0.66
Agricultural Economics	1	1			1			0.654	0.40
Agricultural Systems			1	2			2	0.912	0.54
Agricultural Water Management			1		1			0.791	0.35
Agroforestry Systems					1			0.638	0.39
Agronomie			1					0.679	0.34
Agronomy Journal				1	1	1		1.118	0.81
Animal science			1					0.924	0.89
Biological Control		1						1.215	0.93
Biology and Fertility of Soils	1	2					2	1.223	0.89
Comm in Soil Sci and Plant Anal	5	2	1	2				0.403	0.48
Crop Protection				2	1	1		0.865	0.52
Crop Science							1	0.827	0.73
Euphytica	1			1	1		2	0.734	0.61
European J Agronomy		1	2	1				1.140	0.79
European J Plant Pathology						1		1.373	0.92
Experimental Agriculture					3			0.414	0.43
Field Crop Research	1	2	1	2	2	5	2	1.191	0.78
Food Policy			1		1	1		0.561	0.38
Genetics						1		4.299	0.81
Genome							1	1.925	0.67
Geoderma	1		1		2		1	1.282	0.83
Hydrological Processes				1				1.260	0.68
Int J Pest Management	2	1	3					0.556	0.23
J Agric Rural Dev Trop Subtrop					2			0.028	na
J Agricultural Economics					1			0.468	0.49
J Applied Entomology		1						0.459	0.56
J Exp Botany	1							3.133	0.91
J Plant Nutrition	1							0.495	0.49
J Plant Nutrition Soil Science			1			1	1	0.953	0.66
J Plant Physiology	1							1.048	0.79
J Science of Food and Agric					1		1	1.086	0.88
J Sustainable Agriculture		1		1	1		1	0.184	0.20
J Virology					1			5.288	0.94
Land Degradation Development					1			0.794	0.50
Maydica				1				0.474	0.52
Molecular Ecology						1		3.753	0.92
Nematology	1							0.692	0.76
Nutrient Cycling Agroecosystems		2			1	4		0.754	0.76
Outlook on Agriculture					1	1		0.318	0.37
Physiol and Mol Plant Pathol		1						1.329	0.86
Plant and Soil	2				1	1	1	1.475	0.86
Plant Mol Biol			1					3.945	0.97
Plant Pathol J							1	1.299	0.70

Journals with impact factor	2000	2001	2002	2003	2004	2005	2006	Impact factor*	Rank 2003
Plant Production Science							1	0.416	na
Seed and Science Technology			1					0.461	0.17
Soil and Tillage Research			1	1			1	1.221	0.75
Soil Use and Management						1		1.161	0.77
The Plant Journal							1	6.044	0.98
Theor Appl Genet	1			2				2.511	0.98
Tropical Medicine Int Health		1		2				1.974	0.66
Weed Research							1	1.204	0.63
Total	19	18	18	21	25	19	21		

Journals with no impact factor	2000	2001	2002	2003	2004	2005	2006		
Acid Soil Res and Rehabilitation	1								no
Acta Agronomica Hungarica			1						no
African Crop Science J			1						no
African Insect Science Bulletin	1								no
African J Biotechnology						4	8		no
Afrique Science						1			no
Agriculture and Horticulture							1		no
Agric and Food Sci J of Ghana				1					no
Agronomie Africaine		1		1	2	3			no
Asian J Plant Sciences					1	1	2		no
Autrepart					1				no
Biocontrol News and Information		1	1						no
Bull Entomol Research	1								no
Cahier Agricultures	3	1			1	1			no
Development Policy Review					1				no/?
Economic Dev Cultural Change	1								no/?
Economic Review		1							no
Farming Japan			1						no
Ghana J of Agricultural Science							1		no
Insect Science and its Application	1	1							no
Int Coop Agric Forestry (Jpn)	1								no
Int J Agricultural Sustainability				1	1		1		no
Int J Nematology	1								no
Int J Tropical Insect Science							1		no
Int Rice Commission Newsletter		1				1	1		no
Int Rice Research Notes	2						1		no
Int Sorghum Millets Newsletter					2				no
J Agric Environment	1								no
J Agronomy and Crop Science					1				no
J Breeding and Genetics						1			no
J Exp Agriculture			2						no
J Indian Society Soil Science	2								no
J Plant Disease and Protection			1						no
J Science and Technology Ghana					1				no
Jpn J Crop Science		1							no
Jpn J Food Sci and Technology	1		1						no
Jpn J Rural Economics				1					no
Jpn J Tropical Agriculture		2	1						no

Journals with no impact factor	2000	2001	2002	2003	2004	2005	2006	
KM4D Journal							1	no
Land Use Policy				1				no
Netherland J Agric Science				1				no
New Agriculturist			1					no
Nigerian J of Science					1			no
Oryza	1				1			no
PLA Notes			1					no
Sahelian Studies and Research					1			no
Savanna J Sci and Agric							1	no
Sekai no Norin Susai							1	no
Shokucho					1			no
Sumaru J Agric Research		1	1					no
The Developing Economies							2	no
The Modern Language						1		no
Tropical Science	1	2						no
Uganda J Agric Science						1		no
W Africa Seed Planting Material	1							no
Wageningen J Life Sciences			1					no
World Development				1				no/?
World J Agric Sci							1	no
Total	19	12	13	7	15	14	22	
Overall total	38	29	31	28	39	33	43	

Annex 13

WARDA's Funding Structure, 2000-2006 (US\$ Thousands): Restricted vs Unrestricted Grants

	2000	2001	2002	2003	2004	2005	2006
Unrestricted Grants							
Belgium	162,069	131,780	147,565	182,301	166,065	229,890	245,271
Canada	470,212	452,828	442,655	574,248	701,067	692,446	505,214
Denmark	126,199	109,311					
France	141,000	148,000	161,385	75,562	95,640	89,026	95,645
Germany		140,403	140,655	175,065	185,295	194,285	192,132
Japan	654,340	412,990	804,762	1,029,012	1,120,039	897,249	737,965
Netherlands	704,920	642,008	665,731	792,036	892,771	918,612	867,000
Norway	255,807	241,434	360,000	526,774	588,365	768,255	654,688
Sweden	336,344	319,041	357,916	416,536	514,018	454,400	426,279
United Kingdom	268,434				616,438	639,363	914,800
USAID	250,000	224,991	225,000	225,000	225,000	200,000	200,000
World Bank	1,310,000	1,390,000	1,080,000	760,000	700,000	747,500	1,086,000
Cote D'Ivoire		59,836	41,086				
Total Unrestricted Grants	4,679,325	4,272,622	4,426,755	4,756,535	5,804,697	5,831,025	5,924,993
Special Transition Grant Incomes (Crisis Related) :							
World Bank			180,087	1,221,243	430,000		
United Kingdom						143,400	
Japan						40,000	
Total Unrestricted and Special Grant Revenues	4,679,325	4,272,622	4,606,842	5,977,778	6,234,697	6,014,425	5,924,993
Total Restricted Project Grants	3,407,242	4,796,839	5,158,657	4,411,405	4,220,726	5,191,938	5,034,582
Sub-Total Unrestricted and Restricted Grant Revenues	8,086,567	9,069,461	9,765,499	10,389,183	10,455,423	11,206,363	10,959,575
Other Revenues:							
Member States: Center Earned Income:	297,928	147,505	135,117	72,776	313,378	54,849	113,597
	405,881	566,330	374,842	278,762	70,385	160,048	363,300
Total Grant and Other Revenues	8,790,376	9,783,296	10,275,458	10,740,721	10,839,186	11,421,260	11,436,472

Annex 14
WARDA'S 5th EPMP: Staff Perceptions Survey

Respondent Information:

When joining WARDA you were: Internationally recruited/Nationally recruited

During your work at WARDA you spend most of your time doing: Administration/Research/Tasks to Support Administration/Tasks to Support Research/Other

Questions:

Please select one of the following five possible responses for questions 1 to 24. The final part of the questionnaire invites you to freely comment on further issues you chose to raise.

Agree strongly

Agree somewhat

Disagree somewhat

Disagree strongly

No opinion

WARDA's "new vision" for moving forward is shared by you.

WARDA's "new vision" for moving forward is shared by a great majority of the staff.

WARDA provides an environment conducive to innovative research.

WARDA's arrangements for the management of research are effective and inclusive.

WARDA's administrative and management systems are supportive of your work.

The decentralized system of research at WARDA works well.

Staff-management relations at WARDA are good.

WARDA provides a good overall work atmosphere.

The performance management process provides good supervision and allows you to perform your best.

Reports on project income and expenditure allow effective control of budget.

Reports on project income and expenditure are provided to you in a timely fashion.

The purchasing/administrative services provide items at prices that are competitive in the market.

The purchasing/administrative services provide items in a timely fashion.

Job opportunities at WARDA attract the highest quality staff.

There are good opportunities for professional advancement at WARDA.

The appropriately trained support staff is available to allow good quality research.

The corporate services alignment process with IITA has been an issue open for discussion by all WARDA staff.

The alignment of WARDA and IITA corporate services will be good for WARDA.

The alignment of WARDA and IITA corporate services will be good for you.

The programmatic alignment with CIAT and IRRI has been an issue open for discussion by all WARDA scientific staff.

The programmatic alignment of WARDA with CIAT and IRRI will be good for WARDA.

The programmatic alignment of WARDA with CIAT and IRRI will be good for you.

WARDA's management of successive relocations of its Headquarters was appropriate.

Inputs from individual researchers are taken into consideration by management.

Please briefly write any further comments you would like raised with the Panel:

ANNEX 15
Africa Rice Center (WARDA) Stakeholder Survey

Please disregard this questionnaire if you consider that you are not sufficiently familiar with the Africa Rice Center (WARDA).

Respondent information:

Please mark the type of organization that most closely describes your organization:

- National agricultural research institute []
- University []
- Advanced research institution other than university []
- Non-governmental civil society organization []
- Non-governmental farmer organization []
- Private company []
- Government department or institute []
- Other []
- Explain.....

Country where your organization is located:

Your organization is related to WARDA as a: donor []; partner []; partner and donor []; user of WARDA's products and services []; other:

Questions:

What is your assessment of WARDA's performance, measured by delivery of useful (high-quality and relevant) research in the areas listed below? Please tick one option for each area.

	excellent	good	fair	poor	no opinion
RAINFED UPLAND RICE SYSTEMS					
Producing improved lines and varieties of good quality with higher and stable yield					
Provided integrated management options for weeds, pests and diseases					
Provided integrated management options for stress resistance (drought, soil fertility and toxicity)					
RAINFED LOWLAND RICE SYSTEMS					
Producing improved lines and varieties of good quality with higher and stable yield					
Provided integrated management options for weeds, pests and diseases					
Provided integrated management options for stress resistance (drought, soil fertility and toxicity)					
IRRIGATED LOWLAND RICE SYSTEMS					
Producing improved lines and varieties of good quality with higher and stable yield					
Provided integrated management options for weeds, pests and diseases					
Provided integrated management options for stress resistance (soil fertility and toxicity)					

Designed rice policy options for promoting viable rice seed production and distribution systems					
Designed rice policy options for promoting competitive rice production and marketing systems					
Designed and disseminated viable post-harvest technologies					
Developing technology transfer approaches					

If you are not exclusively a donor, and are also a WARDA partner, please assess WARDA's work in relation with the work of your organization in the areas listed below. Please tick one option for each area.

	competing / repeating	complementing	no opinion
RAINFED UPLAND RICE SYSTEMS			
Producing improved lines and varieties of good quality with higher and stable yield			
Provided integrated management options for weeds, pests and diseases			
Provided integrated management options for stress resistance (drought, soil fertility and toxicity)			
RAINFED LOWLAND RICE SYSTEMS			
Producing improved lines and varieties of good quality with higher and stable yield			
Provided integrated management options for weeds, pests and diseases			
Provided integrated management options for stress resistance (drought, soil fertility and toxicity)			
IRRIGATED LOWLAND RICE SYSTEMS			
Producing improved lines and varieties of good quality with higher and stable yield			
Provided integrated management options for weeds, pests and diseases			
Provided integrated management options for stress resistance (soil fertility and toxicity)			
DESIGNED RICE POLICY OPTIONS			
Designed rice policy options for promoting viable rice seed production and distribution systems			
Designed rice policy options for promoting competitive rice production and marketing systems			
Designed and disseminated viable post-harvest technologies			
Developing technology transfer approaches			

Please assess WARDA's work in relation with the work of other organisations that you know, in the areas listed below. Please tick one option for each area Please tick one option for each area and specify the name of the organization.

	competing / repeating	complementing	no opinion
RAINFED UPLAND RICE SYSTEMS			
Producing improved lines and varieties of good quality with higher and stable yield			
Provided integrated management options for weeds, pests and diseases			
Provided integrated management options for stress resistance (drought, soil fertility and toxicity)			
RAINFED LOWLAND RICE SYSTEMS			
Producing improved lines and varieties of good quality with higher and stable yield			
Provided integrated management options for weeds, pests and diseases			
Provided integrated management options for stress resistance (drought, soil fertility and toxicity)			
IRRIGATED LOWLAND RICE SYSTEMS			
Producing improved lines and varieties of good quality with higher and stable yield			
Provided integrated management options for weeds, pests and diseases			
Provided integrated management options for stress resistance (soil fertility and toxicity)			
Other activities			
Designed rice policy options for promoting viable rice seed production and distribution systems			
Designed rice policy options for promoting competitive rice production and marketing systems			
Designed and disseminated viable post-harvest technologies			
Developing technology transfer approaches			

Please assess your organisation's experience in contributing to WARDA's activities. Please tick the appropriate options for each activity.

	Significantly	Not significantly	Not at all
Priority setting			
Design of research projects			
Ex-ante impact assessment of projects			
Conduction of research			
Adaptation/validation of research results			
Diffusion of research results/technologies			
Training and capacity building			
Advocating policies			
Building and maintaining partnerships			
Ex-post impact assessment			

Please assess the actual and preferred balance of WARDA's activities/efforts in the Research for Development Continuum. A Center devoted exclusively to Basic Research would get a value equal to

1, while a Center devoted exclusively to Development Assistance to End-Users would get a value equal to 7. Please tick the box with appropriate value for each row.

	1	2	3	4	5	6	7
Perceived balance of WARDA today							
Preferred balance of WARDA in the future							

Please assess WARDA's degree of involvement in improved rice seed production. Please tick the box with appropriate box.

too much about right too little don't know

degree of involvement

Please assess WARDA's degree of involvement in rice policy research and rice policy advice in countries. Please tick the box with appropriate box.

too much about right too little don't know

degree of involvement

In your view, what could WARDA be doing better?

In your view, what is WARDA doing right and should continue to do?

Are there new opportunities within WARDA's mandate that WARDA's research should tackle? If so, describe:

What recommendations do you have that could improve WARDA's governance and its financial management?

What other comments would you like to make about WARDA and its programs?

ANNEX 16
Acronyms and Abbreviations

AC	Audit Committee
ACOPCI	Non-governmental organization in Côte d'Ivoire
ADG	Assistant Director General
AEZ	Agroecological zones
AfDB	African Development Bank
AfGM	African Rice Gall Midge
AFLP	Amplified fragment length polymorphism
AGRHYMET	Agriculture Hydrology Meteorology Regional Center, Niamey, Niger
AfRGM	African Rice Gall Midge
AMC	Agreement Management Committee
ANADER	Agence Nationale d'Appui au Développement Rural in Côte d'Ivoire
ANEHA	African Network on HIV/AIDS
APRAG	Agricultural Policy Research and Advocacy Group
ARC	Agricultural Research Council of Nigeria at Abuja
ARI	African Rice Initiative
ASARECA	Association for Strengthening Agricultural Research in Eastern & Central Africa
ASI	ADRAO/SAED/ISRA Thresher- Cleaner
ATE	Average Treatment Effect Estimation of Adoption
AVRC	Asian Vegetable Research Center
AVRDC	Asian Vegetable Research and Development Center
BAC	Bacterial artificial chromosome
BCF	Back cross line, e.g. in F2
BGBD	Below-ground Biological-diversity
BLB	Bacterial Leaf Blight
BOT	Board of Trustees
CAADP	Comprehensive Africa Agricultural Development Programme
CBFC	Community-based Fish Culture in Irrigated Systems and Seasonal Floodplains
CBSS	Community Based Seed Systems
CCER	Center-Commissioned External Review
CDC	Centre Directors Committee of the CGIAR
CERAAS	Centre de Recherche pour l'Adaptation à la Sécheresse (drought research), Thiès, Senegal
CFC	Common Fund for Commodities (of U.N., based in Amsterdam)
CFA franc	Communauté financière africaine franc (currency used in West and Central Africa)
CGIAR	Consultative Group on International Agricultural Research
CGNET	CGNET Services International, global information networks and communications service provider
CIAT	Centro Internacional de Agricultura Tropical
CIMC	Community Based Integrated Crop Management
CIAT-TSBF	Centro Internacional de Agricultura Tropical-Soil Biology and Fertility Institute
CIDA	Canadian Development International Agency
CIMMYT	Centro Internacional de Mejoramiento de Maiz y Trigo
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement
CIRES	Centre Ivoirien de Recherche Economique et Sociale, Abidjan
CNRA	Centre National de Recherche Agronomique, Côte d'Ivoire
CNRADA	Centre National de Recherche Agronomique et de Développement Agricole (Mauritania)

CNU	National Coordination Units
COM	Council of Ministers
COPRORIZ	Coopérative des Producteurs de Riz
CORAF	Conseil Ouest et Centre Africain pour la Recherche et le Développement /West & Central African Council for Agricultural Research and Development (WECARD)
CPA	Chartered Public Accountant
CRIL	IRRI-CIMMYT Crop Research Informatics Team
CS	Corporate Services
CSA	Cropping Systems Agronomy
CSC	Consortium Steering Committee [of IVC]
CSO	Civil Society Organization
CSSL	Chromosomal Segment Substitution Line
DB	Data base
DFID	Department for International Development
DG	Director General
DGIS	Netherlands Directorate General for International Cooperation
DNA	Deoxyribonucleic acid,
ECA	East and Central Africa
ECARRN	East and Central Africa Rice Research Network
ECOWAS	Economic Community Of West African States
EC	European Commission
ECSA	East, Central and southern Africa
EFC	Executive and Finance Committee
EMT	Executive Management Team
EPMR	External Programme and Management Review
ESA	East and Southern Africa
ET	Evapotranspiration
EU	European Union
EcCo	Executive Committee of the CGIAR
FAO	Food and Agriculture Organization
FARA	Forum for Agricultural Research in Africa
FE	Iron
FERRIZ	Model for fertilizer recommendation
FMHS	Farm management household survey
FTE	Full time equivalent
GCP	Generation Challenge Program
GIS	Geographical Information Systems
GMO	Genetically-modified organisms
GPD	Gross Domestic Product
GRU	Genetic resources institute
GSS	General Support Service Staff
GTZ	Gesellschaft für Technische Zusammenarbeit (of Germany)
GxE	Genotype and environment
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HP	Harvest Plus
HR	Human Resources
HQ	Headquarters
IA	Internal Audit or Impact Assessment (see the context)
IAU	Internal Audit Unit (of the CGIAR)
ICARDA	International Center for Agricultural Development in the Dry Areas

ICIPE	International Center for Insect Physiology and Ecology
ICLARM	International Center for Living Aquatic Resources
ICM	Integrated Crop Management
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
ICRM	Integrated crop and natural resources management technologies
ICT	Information and Communication Technology
ICW	Inter-Centre Week meeting of the CGIAR
IDC	Information and Documentation Center
IER	Institut d'économie rurale (NARI of Mali)
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IGNRM	Integrated Genetic and Natural Resources management
IHP	Interspecific Hybridization Project
IITA	International Institute of Tropical Agriculture
ILRI	International Livestock Research Institute
INERA	Institut de l'Environnement et des Recherches Agricoles
INGER	International Network for Genetic Evaluation of Rice
INRAB	Institut National de la Recherche Agronomique du Bénin
IPG	International public goods
IPM	Integrated Pest Management
IRAG	Institut de Recherche Agronomique de Guinée
IRD	Integrated Resources Development or Institut de Recherches pour le Développement in France (formerly ORSTOM)
IRRI	International Rice Research Institute
IRS	Internationally Recruited Scientists
IRSS	International Research Support Services
IT	Information technology
ISFM	Integrated Soil Fertility Management
ISNAR	International Service for National Agricultural Research (now at IFPRI)
ISO	International Standards Organization
ISRA	Institut Senegalais de Recherches Agricoles
ITC	International Teledetection Centre in Enschede, the Netherlands
IVC	Inland Valley Consortium
IVDRC	International Vegetable Development and Research Center
IVS	Inland valley system
IWMI	International Water Management Institute
JICA	Japan International Cooperation Agency
JIRCAS	Japan International Research Center for Agricultural Sciences
K	Potassium
LSU	Louisiana State University
M&E	Monitoring and evaluation
MAS	Marker-aided selection
MDG	Millennium Development Goals
MoA	Memorandum of Agreement
MoU	Memorandum of understanding
MSc	Master of Science
MTP	Medium Term Plan
N	Nitrogen
NARC	National Agricultural Research Center, NARO, Tsukuba, Japan
NARES	National Agricultural Research and Extension Systems
NARI	National Agricultural Research Institute

NARO	National Agricultural Research Organization (Uganda)
NARO	National Agriculture and Food Research Organization (Tsukuba, Japan)
NARS	National Agricultural Research Systems
NC	Nominating Committee
NCU	National Coordinating Units
NEC	National Experts Committee
NEPAD	New Partnership for Africa's Development
NERICA	New Rice for Africa
NGO	Non-Governmental Organization
NIAES	National Institute for Agro-Environmental Sciences, Tsukuba, Japan
NIAS	National Institute of Advanced Studies
NISER	Nigerian Institute for Social and Economic Research
NIVISA	Natioanl Inland Valley Information Systems of Africa
NRM	Natural Resources Management
ORSTOM	French Research Institute for the Tropics , now IRD
OSIRIZ	Observatoire du Marché International du Riz of CIRAD
OVDL	Organisation volontaire du développement local
P	Phosphorous
PADS	Participatory Adaptive Research and Dissemination of Rice Technologies in West Africa
PAM	Policy Analysis Matrix
PASS	Program on African Seed Systems
PBO	Planning and Budget Officer
PC	Program Committee
PCR	Polymerase chain reaction (
PLAR	Participatory Learning and Action Research
PPB	Participatory Plant Breeding
PS	Principal Staff
PVS	Participatory Varietal Selection
PVS-E	Extension-led Participatory Variety Selection
QA	Quality assurance
QTLs	Quantitative Trait Loci
QUEFTS	Quantitative Evaluation of the Fertility of Tropical Soils
R&E	Research and Extension
R&D	Research and Development
RADORT	Research on Accelerated Diffusion of Rice Technologies
RAPD	Random amplified polymorphic DNA
RCU	Regional Coordination Unit
RIDEV	Ddecision tool developed by WARDA
ROCARIZ	Réseau Ouest et Centre Africain du Riz
RS	Remote sensing
RYMV	Rice Yellow Mottle Virus
SAC	Scientific Advisory Committee
SAED	Société d'aménagement et d'exploitation des terres du Delta du Fleuve Sénégal et des vallées du Fleuve Sénégal et de la Falémé (Senegal)
SARC	Sub-Sahara Africa Rice Consortium
SAS	Statistical software
SC	Science Council of the CGIAR
SG 2000	Sasakawa Global 2000
SGRP	Sytemwide Genetic Resources Programme of the CGIAR
SINGER	Systemwide Information Network for Genetic Resources

SMT	Senior Management Team
SNP	Single nucleotide polymorphism
SNRPV	Service National de la Promotion Rurale et de Vulgarisation Agricole (Guinea)
SOPs	Standard Operating Procedures
SP	Strategic Plan
SPIA	Systemwide Program on Impact Assessment
SPIRIVWA	Sustainable Productivity Improvement for Rice in Inland Valleys of West Africa
SRO	Subregional organization
SSA	Sub-Saharan Africa
SSR	Social sciences research
Stata	Software package for statistical analysis
SUN	Financial Accounting Software
SWEP	Systemwide ecoregional programme
SWIHA	Systemwide Initiative on HIV/AIDS and Agriculture
TILS	Training, Information and Library Services
TOR	Terms of reference
TPE	Target population of environments
TSBF	Tropical Soil Biology and Fertility, a division of CIAT based in Nairobi
UEMOA	West African Economic and Monetary Union
UNAIDS	United Nations Aids Organization
UNDP	United Nations Development Programme
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development
VAT	Value-added tax
WA	West Africa
WAFRINET	West Africa Network of Taxonomy
WAICENT	World Agricultural Information Centre Portal
WAIVIS	West African Inland Valley Information System
WARDA	West Africa Rice Development Association
WCA	West and Central Africa
WECARD/COR AF	West & Central African Council for Agricultural Research and Development/Conseil Ouest et Centre Africain pour la Recherche et le Développement
WB	World Bank
WUR	Wageningen University and Research Centre
Zn	Zinc
4Rs	Regional Rice Research Reviews