



LINKING AGRO BIODIVERSITY VALUE CHAINS, CLIMATE ADAPTATION AND NUTRITION: EMPOWERING THE POOR TO MANAGE RISK



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**INDIGENOUS
PARTNERSHIP**
FOR AGROBIODIVERSITY
AND FOOD SOVEREIGNTY

PLAN OF PRESENTATION

Introduction

Project sites, objectives and partners

Activities and results

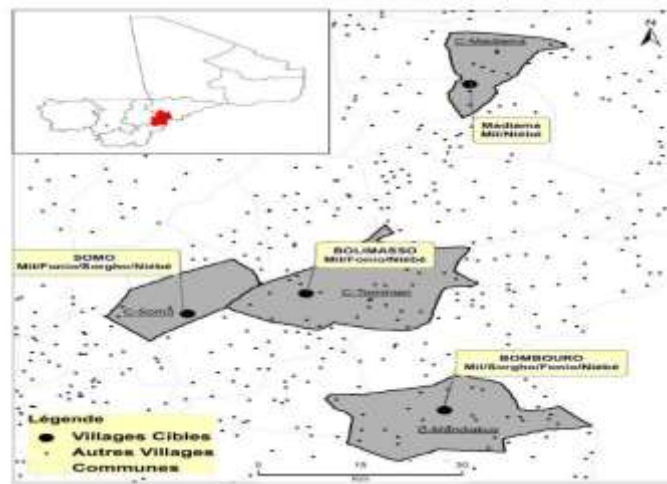
**Proposition of program of activities for
2017/2018**

INTRODUCTION

- ◉ At the heart of West Africa (Mali)
- ◉ 1,241,231km²; population of 16.047226 million (2015)
- ◉ Almost 80% living in rural area
- ◉ Sahelian climate, temperatures (21 to more than 45 °C)
- ◉ Climate change affects negatively natural resources agriculture production.
- ◉ 2015 - 2016 the total cereal production was estimated to **8 045 669 tonnes**; fonio **24 256 tonnes** (EAC 2016).



PROJECT SITES AND CROPS IN MALI



Region	Cercle	Village	Crops
Segou	San	Somo	<i>Tomato, Jaxatu, Échalote / Onion, fonio and bambara groundnut</i>
	Tominian	Bolimasso	<i>Tomato, Okra, and Peper, fonio, and bambara groundnut</i>
	Tominian	Boumboro	<i>Tomato, Okra, Jaxatu, Peper, fonio, and bambara groundnut</i>
Sikasso	Sikasso	Siramana	<i>Tomato, Jaxatu, Okra, fonio, ,and bambara groundnut</i>
	Koutiala	Finkoloni	<i>Tomato, Jaxatu, Peper, Okra Fonio, and Bambaragroundnut</i>
	Koutiala	Ngoutjina	<i>Tomato, Jaxatu, Peper and OkraFonio, and bambara groundnut</i>

PARTNERS IN MALI

Public and private organisations

IER / URG and LABOSEP,
LTA, ESPGRN

NGO ASEM /San

NGO CAAD /Koutiala

Farmers Organizations

« WA SENWE » Bolimasso



«GNOUBOUARISSI » Somo



« Sabugnuma » Boumboro



«Agrogniètasso »Siramana



«Coopérative des producteurs de coton et de vivriers » Finkoloni
and N'Goutjina



PROJECT GOAL

To strengthen the capacities of women and men farmers and other value-chain actors - including rural communities - to manage risks associated with climate change, poor nutrition status and economic disempowerment.

KEY ACHIEVEMENTS PER OUTPUT

OUT PUT1. IMPROVED CROPS , METHODS, APPROACHES AND TOOLS FOR COPING CLIMATE CHANGE

FI1:3.5 PARTICIPATORY VARIETAL / DIVERSITY FIELD TRIALS FOR SELECTION OF WELL-ADAPTED VARIETIES OF FONIO AND BAMBARA GROUNDNUT

List of varieties of fonio and bambara groundnut in Segou region sites (Somo, Bolimasso, and Boumboro)

Number	Fonio varieties	Status of variety	Bambara groundnut	Status of variety
1	Niatia	Improved	Tioma Noufin	Local
2	Bancokocountré	Improved	Tioma Moua	Local
3	Kassambara	Improved	Noublé	Local
4	CVF – 477	Improved	Bigaré	Local
5	Pon de Madougou	Improved	Tioma Foua	Local
6	Pon de Boré	Improved	Loma Poua	Local
7	Finibléni Koutiala	Local	Alinoro	Local
8	Péfozo Clément	Local	Batia	Local

LIST OF VARIETIES OF FONIO AND BAMBARAGROUNDNUT IN SEGOU REGION SITES (SOMO, BOLIMASSO AND BOUMBORO) CONTINUED

Number	Fonio varieties	Status of variety	Bambaragr oundnut	Status of variety
9	Petjrimè Ouabè	Local	Noudafin	Local
10	Petjrimè Vinafo	Local	Noudawulen	Local
11	Pefozo Lamine	Local	Paratourou	Local
12	Peazo Madoubè	Local	Paratourou fima	Local
13			Somo tika	Local
12			Tiamba	Local
14			Tiandiè Koutiala	Local
15			Tianfin	Local

Fonio: 6 improved varieties and 8 local varieties

Bambara groundnut: all varieties are local

**LIST OF VARIETIES OF FONIO AND BAMBARAGROUNDNUT IN SIKASSO REGION SITES
(SIRAMANA, N'GOUTJINA, AND FINKOLONI)**

Number	Fonio varieties	Status of variety	Bambara groundnut	Status of variety
1	Niatia	Improved	Kiamba	Local
2	Bancokocountré	Improved	Bakia	Local
3	Kassambara	Improved	Fitrimè	Local
4	Cvf – 477	Improved	Paratourou	Local
5	Pon de Madougou	Improved	Paratourou Fing	Local
6	Pon de Boré	Improved	Dawanou	Local
7	Wanblen	Local	Boufing Finkoloni	Local
8	Finidjè Boumboro	Local	Dedoda Bi Fan Somo	Local
9	Petjrimè Oumabè	Local	Tiomo	Local
10	Peazo Madoubè	Local	Yoroba Finkoloni	Local
11	Pebirou Bolimasso	Local	Tioma Tyinè	Local
12	Petjrimè Vinafo	Local	Bouyiga Kolonto	Local

Fonio: 6 improved varieties and 6 local varieties
Bambara groundnut: all varieties are local

PHOTOS OF DIFFERENT AGRICULTURAL PRACTICES



Planting CD of Bambaragroundnut at
Sowing Bambaragroundnut in Siramana



Weeding fonio and Bambaragroundnut in
Finkoloni



Weeding fonio in N'Goutjina



Harvest Bam N'Goutjina



Harvest fonio in Finkoloni



Freshing fonio in Finkoloni

RESULTS OF FONIO DIVERSITY FIELD FORA IN SEGOU REGION SITES

Inter sites average yield of fonio varieties in Diversity field for of Boumboro, Bolimasso and Somo

Number	Variety names	Average variety yield in sites kg /ha			Average inter site yield
		Boumboro	Bolimasso	Somo	
1	Niatia	10130	1000	1700	1243,33
2	Bancokocountré	1820	700	1600	1373,33
3	Pon de Madougou	1200	850	2000	1350,00
4	Péfozo Clément	1080	-	1050	1065,00
5	Kassambara	1020	1100	700	940,00
6	Pon de Boré	950	1175	700	941,67
7	Péazo Dami	-	1000	-	1000,00
8	Pébirou Bolimasso	1400	1150	-	1275,00
9	Péfozo Lamine	-	900	500	700,00
10	Pétrimé Vinafo	-	-	1300	1300,00
11	CVF477	1600	-	1400	1500,00
12	Wamblé Boumboro	1500	-	-	1500,00
13	Pétrimè Ouabè	1310	-	200	755,00

The average yield among the tree sites of Ségou region is 1065 kg/ha which is above the national grain production yield which reaches barely 700 kg/ha.

RESULTS OF FONIO DIVERSITY FIELD FORA IN SEGOU REGION SITES CONTINUED

Inter sites average yield of fonio varieties in Diversity field of Boumboro, Bolimasso and Somo continued

Number	Variety names	Average variety yield in sites kg /ha			Average inter site yield
		Boumboro	Bolimasso	Somo	
14	Péaozo Madoubè	810	-	-	810,00
15	Finiblèni Koutiala	1110	200	350	553,33
16	CVF 478	640	1600	-	1120,00
17	Péfozo Sokoro	-	500	-	500,00
18	Pétrimè Bolimasso	-	1350	-	1350,00
Average yield		1190,00	960,00	1045,00	1065,00

The varieties which demonstrate constancy in yield among sites are: Niatia, Bancokocountré, and Pon de Madougou, with respectively inter three sites yield of 1243,33, 1373,33, and 1350,00 kg/ha

PHOTOS OF DIFFERENT VARIETIES OF FONIO

1. Niatia Origine : IER Cycle : 90 days Yield : 820 kg/ha		2. Banco Kocountré Origine : IER Cycle : 90 days Yield : 920 kg /ha	
3. Pon de Madougou Origine : IER Cycle : 90 days Yield : 1000kg /ha		4. Péfozo Clément Origine : Sokoro Cycle : 85 days Yield : 1480 kg/ha	
5. Kassambra Origine : IER Cycle : 90 jrs Yield : 900 kg/ha		6. Pon de Boré Origine : IER Cycle : 90 days Yield : 1100kg /ha	
7. Péazo Dami Origine : Sokoro Cycle : 85 days Yield: 1100kg		8. Pébirou Bolimasso Origine : Bolimasso Cycle : 90 days Yield : 950 kg /ha	
9. Péfozo Lamine Origine : Boumboro Cycle : 90 days Rendement : 900 kg		10. Péchrimè Vinafo Origine : Sokoro Cycle : 90 days Yield : 640 kg /ha	
11. CVF 477 Origine : IER Cycle : 90 jrs Yield : 840 kg /ha		12. Wamblé Origine : Boumboro Cycle : 95 days Yield : 900 kg à 1000kg/ha	
13. Péchrimè Ouabè Origine : Bolimasso Cycle : 90 days Yield: 320 kg /ha		14. Finijè Origine : Boumboro Cycle : 85 jrs Yield : 900 kg /ha Not in the test	
15. Péazo Madoubè Origine : Damy Cycle : 90 days Yield : 540 kg /ha		16. Finiblèni Origine : Koutiala Cycle : 90 days Rendement : 520 kg /ha	

However, other local varieties Péfozo clément 1065 kg/ha and Pébirou Bolimasso 1275 kg/ha, demonstrate their performance between two sites.

Most of the tested varieties perform well although drastic climate conditions and meet farmers preference; so adopted.

Total fonio varieties: 14 with 6 improved and 8 local

RESULTS OF BAMBARAGROUNDNUT DIVERSITY FIELD FORA IN SEGOU REGION SITES

Inter sites average yield of Bambara groundnut varieties in Diversity field of Boumboro, Bolimasso and Somo

Number	Variety names	Average variety yield in sites t /ha			
		Boumboro		Somo	
		Pods	Grains	Pods	Grains
1	Alinoro	1,05	0,85	3,5	2,85
2	Batia	3,05	2,45	-	-
3	Noudafin	1,9	1,71	-	-
4	Noudawulen	3	2,29	-	-
5	Paratourou	2,65	2,38	-	-
6	Paratourou fima	3,9	3,5	-	-
7	Somo tika	2,85	2,65	-	-
8	Tiamba	4,7	3,35	-	-

RESULTS OF BAMBARAGROUNDNUT DIVERSITY FIELD FORA IN SEGOU REGION SITES CONTINUED (18 ALL LOCAL

Number	Variety names	Average variety yield in sites t /ha					
		Boumboro		Bolimasso		Somo	
		Pods	Grains	Pods	Grains	Pods	Grains
9	Tiandiè Koutiala	4,8	3,96	-	-	-	-
10	Tianfin	3,8	3,01	-	-	-	-
11	Bigaré	-	-	3,75	3,15	1,75	1,15
12	Dawanou	-	-	2,85	2,2	-	-
13	Fitère burou Somo	-	-	4,5	3,45	-	-
14	Fitère Bolimasso	-	-	5,2	3,8	-	-
15	Fitèrèmourou ou Somo	-	-	4,35	3,3	-	-
16	Noufin	-	-	2,95	1,9	1,75	1,15

RESULTS OF BAMBARAGROUNDNUT DIVERSITY FIELD FORA IN SEGOU REGION SITES CONTINUED

Number	Variety names	Average variety yield in sites t /ha					
		Boumboro		Bolimasso		Somo	
		Pods	Grains	Pods	Grains	Pods	Grains
17	Nouwulen /Noublen	-	-	2,95	2,25	2	1,35
18	Tioma foua	-	-	4,2	3,1	2,2	1,6
19	Tioma Tjinè	-	-	2,2	1,8	-	-
20	Tioma Tobo	-	-	3,95	3,15	-	-
21	Tioma moua	-	-	-	-	2,85	2
22	Tioma poua	-	-	-	-	2,5	1,9
Average yield		3,17	2,61	3,69	2,81	2,36	1,71

Over the 22 varieties tested, 10 succeeded in Boumboro, 7 in Somo and 10 in Bolimasso. The trial should be replicated for best characterization of varieties adaptabilities

PHOTOS OF DIFFERENT VARIETIES OF BAMBARAGROUNDNUT SEGOU REGION

<p>1. TiomaFoua Origine :Bolimasso Cycle : 90 days Yield : 420 kg /ha</p>		<p>2. Paratourou Fima Origine : Boumboro Cycle : 95 days Yield : 500 kg/ha</p>	
<p>3. Alinoro Origine : Djoubasso Cycle : 90 days Yield :1200 days</p>		<p>4. Bakia Origine : Toutou Cycle : 100 days Yield : 1300 days</p>	
<p>5. Paraturu Origine : Boumboro Cycle : 90 days Yield : 1100kg /ha</p>		<p>6. Noudawulé Origine : Boumboro Cycle : 90 days Yield : 1100 kg /ha</p>	
<p>7. Tiamba Origine : Boumboro Cycle : 100 days Yield : 1200 kg /ha</p>		<p>8. Tiomamoua Origine : Bolimasso Cycle : 95 days Yield : 700 kg /ha</p>	
<p>9. LomaPoua Origine : Somo Cycle : 90 Yield : 700 kg/ha</p>		<p>10. Fitèreburou Origine : Bolimasso Cycle : 90 days Yield : 1000 kg/ha</p>	
<p>11. TiomaTjinè Origine : Bolimasso Cycle : 90 days Yield : 600/ha</p>		<p>12. Bigaré Origine : Koutiala Cycle : 90 days Yield : 360 kg/ha</p>	
<p>13. Tikajè Koutiala Origine : Koutiala Cycle : 90 days Yield : 600 kg /ha</p>			

FONIO DIVERSITY FIELD FORA IN SIKASSO REGION SITES

Inter sites average yield of fonio varieties in Diversity field of Finkoloni, N’Gountjina, and Siramana

Number	Variety names	Average variety yield in sites kg /ha			Average inter site yield
		Finkolon i	N’Gountjina	Siramana	
1	Bancokocountré	339	559	650	516,00
2	Kassambara	450	610	350	470,00
3	Niatia	405	390	390	395,00
4	CVF 477 SB	291	170	440	300,33
5	Pon de Madougou	503,5	330	490	441, 17
6	Pon de Boré	354	440	570	454,67
7	Wanblen	538	370	610	506,00
8	Finidjè Boumboro	517	540	730	595,67
9	Petchrimè Ouabè	745	630	580	651,67
10	Péazo Madoubè	572	510	720	600,67
11	Pebirou				580,83
	Bolimasso	492,5	620	630	
12	Petchrimè Vinafo	374,5	540	510	474,83
General average					462, 14

The highest yields were obtained from varieties Finidjè Boumboro, Pétchrimè Ouabè et Péazo Madoubè with respectively 595,67, 651,67, and 600,67 kg/ha.

INTER SITES AVERAGE YIELD OF BAMBARAGROUNDNUT VARIETIES IN DIVERSITY FIELD FOR A OF FINKOLONI, N'GOUNTJINA AND SIRAMANA IN SIKASSO REGION

Number	Variety names	Average variety yield in sites kg /ha			Average inter site yield
		Finkoloni	N'Gountjina	Siramana	
1	Noufing	149	107	300	185,33
2	Tioma fousa	535	200	200	311,66
3	Tomo	460	236	620	438,66
4	Dedodabifan	463	394	640	499,00
5	Boufigué	783	280	760	607,66
6	Bougniga	528	257	300	361,66
7	Dawanu	446	115	540	367,00
8	Fitèrè	408	100	440	316,00
9	Paratourou	155	137	160	150,66
10	Batia	513	186	400	366,33
11	Paratourou fima	673	238,2	300	403,73
12	Tiamba	1503	167	1200	956,66
General average yield					413,70

The highest yields were obtained from varieties Tiamba from Boumboro and Boufigué with respectively 956.66 and 607,66 kg/ha.

TOLERANT VARIETIES PER SPECIES

Fonio: 14 (6 improved and 8 local)

Bambara groundnut 18 local varieties

VEGETABLE DIVERSITY FIELD

The tested species and varieties are in table below:

Species	Varieties			
Tomato	Cobra 26 F1	Caraïbo	Savana F1	Local tomato
Egg plant / Jaxatu	N'galam	Local		
Onion	Violet de Galmi			
Pepper	Angel	Local		
Okra	Koni	Fouroubani	Bendiya	Locale

VEGETABLE DIVERSITY FIELDS RESULTS SOMO

Species	Varieties	Yields t/ha
Tomato	Savana	80,66
	Cobra	93
	Caraibo	76
	locale	-
Okra	Bendiya	7,33
	Koni	11,33
	Fouroubani	6,66
	Temoin Gassourouni	10
Peper	Angel	3,33
African Egg plant Jaxatu	N'galam	13,33
	Local	6,66
Onion	Violet de galmi	23

VEGETABLE DIVERSITY FIELDS RESULTS BOLIMASSO

Species	Varieties	Yields t/ha
Tomato	Savana	54,46
	Cobra	73,53
	Caraibo	116
	locale	76
Okra	Bendiya	failed
	Koni	failed
	Fouroubani	failed
	Temoin	failed
Peper	Angel	2;20
African Egg plant Jaxatu	N'galam	25
	Locale goyoba	37.2
Onion	Violet de galmi	38,66

VEGETABLE DIVERSITY FIELDS RESULTS BOUMBORO

Species	Varieties	Yield t/ ha
Tomato	Savana	47,5
	Cobra	54,9
	Caraibo	55,68
	locale	50,4
Okra	Bendiya	8,400
	Koni	6,500
	Koni	6,000
	Fouroubani	4,200
	Temoin	3,000
Peper	Angel	0,900
African Egg plant Jaxatu	N'galam	15,000
	Locale goyoba	13,000
Onion	Violet de galmi	30,000

PHOTOS



DIVERSITY SEED AND RECIPES FOOD FAIRS RESULTS

Two diversity seed and recipe food fairs have been organized in the context of the project plus one seed diversity fair through PAPAM.

Segou region:

62 people (43 men and 19 women) participants, 74 varieties of 14 species with 34 local varieties and 40 improved varieties and 17 recipes culinaires (tô, djouka, foyo, galette etc.) for 5 species where fonio and bambaragroundnut were ahead

Sikasso region:

231 participants with 103 men and 128 women under the chair of representative of Maire of rural Commune de N'Goutjina 12 species and 39 varieties (24 local varieties and 15 improved) ;

11 recipeces of 8 species including trees (precooked fonio, dry whased fonio, soumbala, dry chalote etc.).

FI1.2 AMOUNT OF QUALITY SEED PRODUCED

Species	Area / Men ha	Area/ Women ha	Total area ha	Production / men kg	Production / women kg	Total Production /kg
Fonio	3.9	1.15	5.05	1997	323	2320
Bambara groundnut	8.5	0.75	9.25	4476	137	4613
Sorghum	0.75	0	0.75	391	0	391
Pearl millet	0.5	0	0.5	100	0	100
Cowpea	0.5	0	0.5	47	0	47
Corn /Maize	0.5	0	0.5	155	0	155
Total	14.65	1.90	16.55	7166	460	7626

In addition to the above seed production, the amounts of *Chorcorus* sp seeds collected were respectively for URG 1kg, Boumboro 0.7kg, Bolimasso, 0.5k, and Somo 0.5kg, so a total of 2.7kg. For *Amarantus* sp only 0.3kg has been collected.

DIVERSITY RECIPES FOOD RESULTS SEGOU REGION

Traditional recipes

Species	Culinary recipes							
Fonio	Fonio washed dried	Preccoked Fonio	<i>Djouka</i>	Fermented Fonio gruel with granules	Fonio paste or <i>Tô</i>	<i>Foyo</i>	Pancakes	
Bambara ground nut	<i>Fari</i>	Cooked bambara groundnut	Roasted grains with skin	Roasted grains without skin	Fermented Bambara groundnut gruel with granules	Bambara groundnut paste or <i>Tô</i>	Pancakes	Couscous
Tomato	Dry tomato							
Corchorus	Dry leaves	Flour						
Amaranthus	Dry leaves (green)	Dry leaves (red)						
Onion	Dry onion							

DIVERSITY RECIPES FOOD RESULTS SEGOU REGION

Species		Culinary recipes
Okra	Fresh okra sauce	Okra flour
African locust bean	African locust bean seed fermented Flour	
Soy bean	Soy bean flour	
Baobab	Fruit flour	
Tomato	Tomato paste	
Millet	millet paste or <i>Tô</i>	Millet flour
Cotton	Flour from graine de cotton	
Niébé	Cooked	

DIVERSITY RECIPES FONIO FOOD RESULTS



“To” from fonio flour, *“To”* from fonio grain, pancake and accompagnied sauces



To from fonio flour, pancake and fermented fonio gruel with granules



Fatty fonio

DIVERSITY RECIPES BAMBABARA GROUNDNUT FOOD RESULTS



To, gruel, couscous,
doughnuts, cooked and
roasted Bambara
groundnut



BISCUITS AND CAKE FROM BAMBARA GROUNDNUT



Cake 25% of Bambara groundnut and 75% wheat flour



Biscuits 50% Bambara groundnut flour and 50% wheat flour

BISCUITS AND CAKE FROM BAMBARA GROUNDNUT



Cake 25% of Bambara groundnut and 75% wheat flour



Biscuits 50% Bambara groundnut flour and 50% wheat flour

PRODUCTION OF BOOKLETS

- ❖ **Bambara groundnut and fonio processing units**
- ❖ **Two booklets have been produced for each (French and English version) to explain the importance of quality and hygiene in fonio and bambara groundnut processing businesses**

FI1.3 FARMER LED INTELLIGENCE TO SUPPORT LOCAL PRODUCERS

Moslikely in each site and check of project are resource farmers well trained to support their colleagues:

Sikasso region: 6 (3 men and 3women)

Mariam Dembelé, Marc Poudiougou, Drissa Sangaré, Yaya Bengaly, Wassa Sanogo, Djénéba Diallo

Segou region: 8 (4 men and 4 women)

Wari Jean Marie Thera, Samoussé Konta, Sanibè Diarra, Matjirè Dembélé, Sékéhan Dembélé; Lamine Koné; Mariam Koné, Kadia Koné

Total : 14

FI1.4 WEATHER INFORMATION FORECAST SYSTEM USED BY LOCAL COMMUNITIES IN TARGET AREAS

Each village site has a local rainfall measurement tool managed by farmers.

The project installed the following weather station

OUTPUT2 STRENGTHENED MARKET ACCESS FOR STRESS-TOLERANT AND NUTRITIOUS CROPS

FI2.1:Ségou:

Before project fonio and bambaragroundnut were cultivated on poor soils for only famine periods with few varieties (2 -3); yield 300 kg/ha for only self consumption.

With projet, more than 10 varieties are grown with yield of 800 kg /ha on fertile soil and its become a income source and diversification of food.variétés de chacune des 2 espèces qui sont cultivées sur des sols normaux.

Sikasso; **Introduction and promotion of the two species**

FI2.2: vegetable production system increase in each site with diversification food

OUTPUT3 ENHANCED CAPACITIES OF FARMERS AND OTHER VALUE ACTORS TO CONSERVING AND USING AGROBIODIVERSITY SUSTAINABLY

FI3.1: 5-10 (8 farmers' networks members in the villages sites have been strengthened in term of capacity bulding/training in seed production, agriculture practicies, inovative plateforme plan and work, food processing, value chain to face climate change negative effects

OUTPUT3 ENHANCED CAPACITIES OF FARMERS AND OTHER VALUE ACTORS TO CONSERVING AND USING AGROBIODIVERSITY SUSTAINABLY

FI3.2: 3000- 5000 (at the beginning all the village sites receive weather informations and also diffuse to others farmers through local radios and national and TV. Now with none acces to weather information through the new weather station, so we use local rainfall measurement tools in each village and the data are forcasted through national radio and TV listen by all producers (at least 70% of mali population estimated to more 15 million). These informations are accompanied by advice from the national meteo station, agriculture extension office and research institutions.

OUTPUT3 ENHANCED CAPACITIES OF FARMERS AND OTHER VALUE ACTORS TO CONSERVING AND USING AGROBIODIVERSITY SUSTAINABLY

FI3.3: 300- 500 (in each village site there is an association of plant genetic resource management holding biodiversity registers).

This experience has been extended to 20 villages whose number of farmers is around 520 (50% each men and women).

OUTPUT3 ENHANCED CAPACITIES OF FARMERS AND OTHER
VALUE ACTORS TO CONSERVING AND USING AGROBIODIVERSITY
SUSTAINABLY

FI3.4: 40- 50 practioners/researchers in NARS

OUTPUT3 ENHANCED CAPACITIES OF FARMERS AND OTHER VALUE ACTORS TO CONSERVING AND USING AGROBIODIVERSITY SUSTAINABLY

FI 3.5: referred to output 1

FI 3.6 : referred Bioversity International

FI3.7: - PAPAM project with wich a very good synergy has been established;

- Lux development which participate in seed and food recipes organized in Segou region;

- Inter cooperation Swiss in San;

Etc.

OUTPUT4 PROOF OF EVIDENCE OF ROLE OF AGROBIODIVERSITY IN NUTRITION; INCOME AND ADAPTATION TO CLIMATE CHANGE PROVIDED WITH RECOMMENDATIONS FOR SUPPORTIVE POLICIES FOR ITS ENHANCED USE

FI4.1: One scientific paper work is going on
Others are planned

FI4.2. There is a strong need to revise the on going ECOWAS/CILSS and UEMOA seed law and rules to consider local variety seeds commercialisation. This started since all Bambaragroundnud seed produced are from local varieties and certified by seed laboratory.

FI4.3: there is an informal collaboration with ASAP through PAPAM project. Monitoring activities and share information and documentation are going on.

VALUE CHAIN ANALYSIS

- ◉ Recognition survey done in project villages last March
- ◉ Activity aim at identifying actors of the value chain of fonio and Bambara groundnut, interaction between them and constraints they are facing.
- ◉ Preliminary results indicate the following:

DIRECT ACTORS OF FONIO AND BAMBARA GROUNDNUT: PRODUCERS

- ◉ Small-scale farmers with very limited plot cultivation
- ◉ Low representation of females producers in production activities: 20% for fonio and 25% for Bambara groundnuts
- ◉ 40% of product is for sale which are paddy fonio, milled fonio and Bambara groundnut seeds)

DIRECT ACTORS OF FONIO AND BAMBARA GROUNDNUT: PROCESSORS

- ◉ Small-scale processors with aim of home consumption
- ◉ Not yet familiar with transformed products of fonio
- ◉
- ◉ Middle-scale processors organized around unions in Tominian and San (UACT and UTC)

DIRECT ACTORS OF FONIO AND BAMBARA GROUNDNUT: TRADERS

- ◉ Mobile traders (collectors) made by:
 - local traders
 - external traders
- ◉ Retailers in local and urban markets
- ◉ Whosalers in local and urban markets

INDIRECT ACTORS OF FONIO AND BAMBARA GROUNDNUT

- ◉ Local NGOs (ASEM and CAAD)
- ◉ Input suppliers (seedmen, fertilizer suppliers)
- ◉ National / international organizations (IER, agriculture sector, Bioversity International, etc)
- ◉ Transporters

- ◉ Aim: capacity building mostly on production / crop cultivation aspects
- ◉ Low or limited capacity building on marketing skills

POSSIBLE VALUE CHAINS TO BE EXPLORED

- ◉ Paddy fonio
- ◉ Milled fonio
- ◉ Washed and dried fonio
- ◉ Bambara groundnut seed
- ◉ Bambara groundnut fried seed
- ◉ Bambara groundnut boiled seed (borogo)

INVENTORY OF PROCESSING UNITS

La minoterie El Hadji Moussa TRAORE

EKT « Entreprise Krepadi TRAORE



○ in KolALA region

Cèsiri / San , AOPP /UACT Fonio processing Unit, UAPAD processing Unit in Tominian

TRAINING

- Training of 200 people with 75 women and 125men through weekly field meeting regularly involved in diversity field activities
- Training on seed and food quality and



Thank You For Your attention

