

PARI 2019 Pre-Annual Meeting

Meeting Proceedings

Dakar, Senegal, 20-21 November 2019



This meeting was organized under the auspices of the Program of Accompanying Research for Agricultural Innovation (PARI) www.research4agrinnovation.org, a research program of Center for Development Research (ZEF), University of Bonn, Germany. PARI is supported with funding from BMZ. The logo of other partner organizations is appended























A. Background

The Program of Accompanying Research for Agricultural Innovation (PARI) brings together partners from Africa, India and Germany to carry out research activities that contributes to sustainable agricultural growth and food and nutrition security in Africa and India. PARI offers independent scientific advice to the special initiative of the German Government tagged "One World No Hunger" (SEWOH) which, among other activities, supports the improvement of food and nutrition security and sustainable agricultural value chains by setting up Green Innovation Centers (GICs) in 14 African countries and India. The PARIs research seeks to identify investment opportunities in the agricultural sector in the rural areas of Africa with the aim of improving food security, creating employment and income opportunities. The second phase of PARI covers the year 2015- 2019 and more recently, the program has been given a three-year extension to form PARI III. This extension offers a great opportunity for the program to cover crucial research issues that were missed out in PARI I & II. In this regard, a pre-annual planning workshop was convened from 20th -21st November 2019 in Dakar, Senegal to jointly design strategy and operational modalities for the PARI research activities for the three years. Specifically, the meeting was set to achieve the following objectives;

- 1. To present and discuss the scientific outputs achieved in the research clusters activities between 2018-2019, including challenges and lessons learnt.
- 2. To jointly identify thematic focus for the new phase of PARI.
- 3. To explore new research frontiers; discuss research outputs dissemination strategies.

This proceeding presents a summary of the different presentations and discussions from parallel group works that makes the meeting. The initials presentation summarizes the progress of PARI research action over time, followed by presentations of research outcomes from four research clusters. The group works highlighted the gaps in current PARI research and the research issues to be taken up in the next phase. The preset expectations of the meeting were to;

- Develop an agreed research focus and implementation roadmap for New phase of PARI.
- Craft out sets of deliverables and possible M&E system

B. Workshop Proceedings: Day One

1. Opening Remarks: Facilitator- Dr. Felister Makini

Dr. Yemi Akinbamijo the Executive Director of FARA represented by Dr. Oluwole Fatunbi- FARA

highlighted the following in its opening remarks

• It is evident that Africa is rising as there are considerable progress in agricultural sectors, but more

still need to be done to sustain the momentum.

The livestock component of the agricultural sector requires more attention as the demand for

animal protein is increasing; apparently more improved technologies and strategic policies and

infrastructure are needed.

• In addition, the growth in youth population and the resultant effect on the job market is a major

challenge the agricultural sector is expected to solve. Popular opinion favors the creation of

employment opportunities along the value chain of the different commodities.

• Furthermore, issues of seed and fertilizer remains a setback in the agricultural sector of the region

All these challenges inform that the need for evidence-based information to aid decision making

by technocrats as well as the policy makers.

The work PARI and its various research outputs is widely recognized and valued by researchers,

development practitioners as well as the policy makers.

Prof. Joachim von Braun- the Director General of ZEF, expressed the following sentiments in its

opening remarks;

• He acknowledges the deep commitment of the PARI stakeholders, and the efforts channeled to

deliver high quality outputs from the research efforts.

The Professor reiterated that PARI offers independent scientific advice to the special initiative of

the German Government on agricultural development in Africa and this is high on Germany

government agenda.

• Furthermore, PARI is well aligned to Africa's development agendas. It recognizes the various

countries national agricultural investment plan and growth pattern. Thus, PARI does not push

mere open-ended research agenda, rather, it provides support Africa's agricultural agenda from

technical and development point.

There was a significant meeting of African leaders in the German chancery expecting the compact

of the Africa participating countries, and this is 2020 industrialized and development economic

countries. Three countries were added to the current list of compact; Morocco, Tunisia and Ethiopia.

- Professor Joachim, called on PARI stakeholders to promote and support the scaling of proven innovations. PARI researchers may not be able to carry out the scaling activities themselves but will be able to understand the extensive pathway to scale and inform the development practitioners and policy makers on the right action. He enjoins the researchers to learn from successful initiative such as solar based innovation for irrigation, draying and provision of clean energy.
- An appeal was made to the PARI partners to intensively partner with and communicate with the
 green innovation centers in the countries and share the information. There is need for
 establishment of communication modalities with the GICs. A structured approach on how we
 exchange and communicate experiences with the green innovation centers.
- Another topic to be seriously considered is the climate crisis and not just climate change but climate change issue across the themes.
- All PARI commitments must be completed by end December otherwise new contracts cannot be made for 2020. In addition, quality outputs are key to ZEF's delivery of outputs.
- He reiterated the objective of this meeting which was to map out the next three years of PARI. If
 there are gaps and research questions which needs to be addressed, the meeting was the right
 forum. And making it clear to partners that PARI is not restricted to 5 clusters, new clusters can
 emerge.
- Prof ended by expressing gratitude to all partners for their attention, efforts and commitment.

2. Proceedings and Outcome of Day One Activities

a. Highlights of 2018/2019 PARI Research Activities: Dr Fatunbi

- In agroforestry/ agro-ecology-organic agriculture of key should be opportunities and constraints of in the prospects of seed, fertilizer use as this is still part of core business.
- Livestock work- ILRI and other organizations have been asked to help with technical expertise. Livestock Seeds, quality control issues and low adoption are key issues to be addressed.
- There is need for holistic approach in our research, for instance look at food system which dwells on supply and demand side of the sector and includes economic and environmental aspects. The

clusters can position themselves in a food systems framework approach. The notion of food system is outlined in an important report of Africa and global. Soon there will be a summit on food systems in Rome, so it is not too late for PARI to align itself.

 There are efforts in incorporating bioeconomy and management of natural resources with agriculture.

b. Presentations on the Research Clusters: Facilitator Prof. Regina Birner

Progress report from the research clusters were presented and was followed by questions and comments from participants with corresponding responses.

1. RC 1: Targeting Innovation Investments

- i. The research cluster carried out three categories of investigations, (1). The first investigations examined the following research questions;
 - What is the potential of the agroprocessing sector to create jobs?
 - · Number and quality of jobs,
 - Where are the jobs located in the food sector?
 - Extent and nature of relationships among actors in the food system,
 - Differences across segments of firms (large/small, foreign/domestic-owned, formal/informal) in the food sector,
 - Factors that affect capital and labor employment, skills development and input sourcing,
 - Factors that leverage or restrict employment opportunities in the food sector
 - Focus on food and beverages.

The research activities were carried out in Ethiopia, and Ghana with support from ZEF and FARA.

- ii The second investigation examine the following research questions;
 - What are the investment opportunities for job creation in study country's postharvest food systems?
 - How can rural-urban market linkages be created to facilitate trade along identified priorities to stimulates job creation and promote rural development?
- iii AGRODEP Modeling with the following research questions;

- Identify investment opportunities in agriculture
- Identify infrastructure investments for rural development
- Assess whether the investments identified in (1) and (2) and their combinations can contribute to African commitments for agricultural development

Key Issues from Discussion

- i. Are linkages available among the informal sector which does most of the processing and the production sector to pull demand for needed quality and quantities?
- ii. Why indicate that external funding is more important than internal funding?
- iii. IFPRI's study showed that consumption of locally produced food is low and is not different from what pertains in other condition. This makes it important for us to consider Prof Von Braun's suggestion of considering the demand side as well. PARI needs to also focus on drivers of food choice.
- iv. What are the key **priority investments** in the study/analysis? (road & electrification) How about other key infrastructure like markets and storage facilities
- v. Cassava as a priority crop for Nigeria needs to be reviewed.

2. RC2: Mechanization and Skills

The mechanization cluster investigated the following research questions,

- (1) How sustainable are state-led mechanization efforts compared to market-led mechanization efforts?
 - Comparison of 150 beneficiaries of government tractors and 150 owners of privately bought tractors
 - Unique feature: physical examination of tractors
- (2) What are social, economic and environmental effects of agricultural mechanization?
 - Gendered Focus Group Discussion (FGD) using Participatory Impact Diagrams
 - Approx. 40 FGD in each country
- (3) What are opinions and policy beliefs about policy instruments and effects related to mechanization, youth and digitalization?
 - Survey different types of stakeholders (government officials, researchers, farmer groups, development partners etc.)
 - Approx. 50 respondents in each country

- (4) What is the state of knowledge and skills development institutions for agricultural mechanization?
 - Survey of approx. 20 institutions in each country

- i. Can we conclude that mechanization lead to yield increase?
- a. Mechanization is only used at land preparation. There is a positive correlation between yield and mechanization
- ii. Would mechanization be useful in reducing youth unemployment?
 - a. Mechanization can expand land, yields, manufacturing venture, etc but there is not yes or no answer
 - b. The flow of capital- you need maintenance, spares so all this is an opportunity for youth engagement (value chain)
 - c. Innovative efforts for tractors to create job demand
- iii. Efficiency of animal traction considering that the cost of maintenance is high compared to the time the animal traction is in use.
 - a. Culturally some countries use animal traction
- iv. Family size vs use of tractor
- v. How do you do with the risk of farmers, laborer and service provider?
 - a. Possibly the role of ICT and financial institutions can come into play
 - b. If farmers rely on service providers and come late the effects are huge on the farmer
 - c. Digital approach might help- upfront payment of the service
- vi. The sample size is randomly selected though few so not all farming systems might be represented
- vii. The scope of the study was more on mechanization not animal traction. Some farmers are too small to use tractors but that was not dwelled much. Farmers will keep animals because they have many other uses and cultural aspect
- viii. Skills- very few institutions are offering skill development in mechanization
- ix. Given that most farmers in Africa are small scale farmers that produce on small land and are poor. Using tractors privately might not be affordable and profitable for smallholder farmers. So the question should be what kind of ownership type or service provision model would work best in Africa to reach small scale farmers and provide them services in a way that is profitable and efficient for them

- x. Country efforts- Benin- government is buying mechanization to put in centres where farmers can access. Same applies to Mali- they are trying to organize young people in clusters where they can train farmers
- xi. The team should consider assessing the status of equipment and availability of mechanization training infrastructure. For example, what physical capacities are necessary to offer such programs? Not only human skills; status of access to the needed equipment along the value chain.
- xii. What is the effect of the location age, gender, land seasonality on the use of animal traction?
- xiii. Are the country data survey instruments comparable?
- xiv. What is the working hypothesis for the mechanization study?

3. RC3: Digitalization in Food and Agriculture

The research activities were carried out in Ghana, Nigeria and Kenya. It examined the following research questions;

- 1. What is the status of and readiness for ICTs in agriculture in Kenya, Ghana and Nigeria?
 - Status of ICT infrastructure, hardware and use
 - ICT regulatory framework in terms of authorities, policies and regulations
 - Available ICT-enabled services in the agriculture sector along the entire value chain
- 2. What is the potential for ICT4Ag services to improve the functioning of input, output and financial markets?

- i. What is the state of evidence of the use of applications among smallholder farmers in the countries?
 - a. Level of ICT among smallholder farmers. Eg seed information offered by certain companies thus fake seed information etc or varieties for different agro-ecologies
 - b. Scale- almost 400 different apps being used by 33,000 farmers. 42% of farmers knows about apps
- ii. How does competition and liberation in licensing help enhance penetration?
 - a. Liberalization of ICT service providers- there is monopoly and little element of competition in Kenya. The market is liberalized only that some companies have not been competitive enough.
 - b. For Nigeria & Ghana, the policies liberalized the market

- c. Appropriate positive competition is important but it's more of regulatory issue.
- iii. To what extent did the study look at policies aiming at reducing the cost of search?
- iv. How much are farmers adopting the offline apps?
- v. The focus on the ICT and how it serves smallholder farmers was great. In the next phase look at how ICT serves the intermediary level eg how ICT serves extension workers, processors etc
- vi. Government taxation on ICT needs to be reviewed in the next phase
- vii. Skills on search needs to be looked at
- viii. Government does not implement regulations properly. Poor regulations do not help anybody.
- ix. Universal access funds being explored in other countries
- To enhance adoption of apps- farmers must perceive the importance of the APP so knowledge creation is key.
- xi. How can ICT be used as a tool to strengthen agricultural production?
- xii. What was the working definition of ICT in the study? Digital technologies specifically mobile technologies

4. RC4: Youth Engagement

The Youth cluster research activities were undertaken in Ghana, Ethiopia, Benin and Malawi. The key research questions include;

- ii. What are the large-scale youth employment initiative implemented in rural economies since 2000 and what have been their outputs and outcomes?
- iii. What are the most promising youth employment opportunities that have remained under/untapped in the rural areas of the study countries?
- iv. What are the required enabling environments to exploit such opportunities?

- 1. How were counterfactuals selected?
 - a. Three major approaches to get control;
 - i. Look at list of beneficiaries
 - ii. Then follow up in the communities and do a snowball sampling approach
 - iii. The non-beneficiaries were selected through stratify them according to age and then randomly select
- 2. Are the initiatives diverse enough for comparison basis?

3. How well the interventions implemented based on looking at other variables beyond

employment?

4. How was the program or initiative defined, selected and prioritized?

5. Labor working paper 188 of ZEF – lessons can be learnt from Tunisia which has a lot of youth

engagement

6. Did the study look at the apprentice's schemes offered to youth?

7. It could be best if the best programs were defined though that needs an econometric analysis.

Develop some framework that permits to identify best long-term and short-term programs

8. How much youth unemployment has these initiatives contributed?

9. When we have land problem how can the youth be engaged?

10. Did you also consider TVET as area of focus in your initiatives?

11. Suggestions from Prof Joachim: rank all the programs for the various country into best 5 and be

open and honest in the process.

3. Parallel Working Groups

Participants went into their cluster working groups to identify the gaps in the current research

questions in their clusters. Four groups were formed from the five research clusters as cluster 1 and 4

were merged.

DAY 2: 21st November 2019

Parallel Working Groups: Additional Research Questions

The continuation of the cluster working groups to review outcomes from the discussion on day 1

commenced. The group discussed and come out with possible research agenda for each cluster. This

session provides key issues that emanated from each group presentation.

Research Cluster 1&4 Presentation: Key Points

1. Key findings that we can build on

Main types of interventions:

Training focusing on soft and technical skills, but quality remains an issue

• Access to finance – interest rate, collateral, loan cycle, but loans too small

Land access

- Current youth initiatives remain relatively vague and there is a disconnect between policy planning and implementation
- Most initiatives are too small in scale to create the desired effects
- Current youth initiatives are not generating good quality jobs
- Cost effectiveness?

2. Research topics to be continued

- Identifying the type of interventions that produce the best result in job creation and good quality jobs
- Identifying circumstances under which such interventions work best
- labor market effects crowding out other jobs?
- Which policies work for skilled vs unskilled youth?
- Community level effects
- Economy-wide effects
- Cost per job
- Methods:
 - Typology of interventions youth and general interventions
 - Micro/ meso level survey and quantitative analysis
 - CGE modeling

3. New research topics

- Entrepreneurship and job creation
 - Determinants and effects on job creation
 - Risk and resilience of entrepreneurs
 - Sustainability of business activities
 - Women entrepreneurs
 - · Specific constraints for the youth
 - Digitalization
 - Skills
 - Effect of jobs on welfare and wellbeing
- Methods:
 - Descriptive analysis based on secondary data LSMS data
 - Activities, sectors and productivity
 - Case studies to identify success stories in each country and the success factors
 - Quantitative survey
 - Econometric analysis

Questions/Response & Comments Session

Key Questions

- i. Are farmers entrepreneurs too?
- ii. Sustainability issues
- iii. Need for age categorization ie who gets affected more by a certain constraint

Key Comments and Responses

- Sustainability is not only about the number of years they have been sustained, look at the
 economy, it is also to check if they have a sub-technological way of creating jobs for youths
- It might be of use to segregate the youth. The youth and technology are very much interrelated.

 We must design research questions and narrow down our interest.
- We should look at innovation as interventions, farmers should not be excluded and anyone who
 is working on their own.
- There should be focus on youth in entrepreneurship and agriculture, so that it will look more of agro – production process.

Research Cluster 2 Presentation: Key Points on Mechanization and Skills

Key findings to build on:

- Quantitative studies on the impact of mechanization to corroborate the findings from qualitative (impact diagrams) studies) ----- Kenya, Benin, Nigeria
 - Yield, profits, efficiency etc. by mechanization type
- Animal draught power vs. mechanical traction economics of owning animals vs. hiring tractor services ---- Mali, Benin, Nigeria
- Mechanization beyond the farm/land preparation but on the farm: processing, feed/livestock, chopping
- Tractor utilization vs. tractor and equipment demand
- Check the collected data to analyze tractor equipment/attachment
- Skills: given low level of skills, what can be done?
- Risks to smallholder access to mechanization and innovations ----- Mali
- Determinants of agricultural mechanization -----Nigeria
- Mechanization technology preferences and attributes by farmers ---- Benin, Nigeria
- Mechanization in agricultural product processing ---- Benin

Research to continue

• Importance of local manufacturers / fabricators ---- Kenya, Benin

- Unexpected impacts of mechanization:
 - Obnoxious weeds spread
 - Unemployment for women
- · Linkages between mechanization and climate change: ----- Benin, Kenya, Mali, Nigeria
 - Conservation agriculture (what machinery)
 - Energy requirement (renewable energy)
- Linkages between mechanization and the youth:
 - To what extend will it attract the youth to agriculture?
- Linkages between mechanization and gender?
- Formal and informal training for farm technicians, machine operators
- Mechanization in food processing (food system approach) & agri-food systems
- Linking machinery imports to training programs
- How to improve tractor importation: ---- Kenya, Mali, Nigeria
 - Political and enabling environment
 - Spare parts and fuel
 - Communicating these results to policy makers and relevant ministries; policy dialogues, workshops

Future Research Topics

- 1. Animal draught power vs. mechanical traction vs. 2 WT
 - Best option for smallholder farmers what to promote where?
 - Economics of owning animals vs. hiring tractor services
 - Quantifying impacts of mechanization: yield, profits
- 2. Linkages between mechanization and climate change
 - Conservation agriculture (what mechanization needs?)
 - Energy requirement (renewable energy)
 - Economics of solar-based irrigation (pumps)
 - Implements for climate smart crops (e.g. sorghum)
 - Mechanization in Agro-forestry systems
 - Climate change adaptation and mitigation
- 3. Policy engagement- policy dialogues:
 - How to improve tractor importation
 - Political and enabling environment
 - Spare parts and fuel

 Communicating results to policy makers & relevant ministries; policy dialogues, workshops

Questions/Response & Comments Session

- i. Skills development is missing in the presentation
- ii. The research has dwelled much on tractor and neglecting other mechanization
- iii. Value chain analysis in mechanization should be considered
- iv. Group approaches in mechanization should be considered
- v. If climate change is considered, then there is need for considering resilience

Research Cluster3: Digitalization Presentation

Research Questions

- 1. How are ICTs used by intermediaries? How to farmers use ICTs to engage with intermediaries? What is the impact on transactions costs, efficiency, sales, losses, product quality etc.?
 - Incl. extension, input suppliers, marketers, farmer organisations
- 2. How are ICTs used in the processing industry (informal, formal)? What is the impact?
- 3. How do you measure digital literacy? What is the level of digital literacy among farmers and intermediaries?
- 4. How is data that is collected by digital services protected, managed and used?
- 5. What is the type, quality and usability of information provided via digital services?

Method:

1. survey of intermediaries, processors and farmers.

Method:

- collect and analyse information given out by digital services/ WhatsApp groups over 1 year
- KIIs / FGDs to assess perceptions of quality and trust in digital services?

Discussion: Questions/Response & Comments Session

- i. Prof referred to if ICT to target intermediaries of smallholder farmers
- ii. In talking about digital literacy, skills not only from the users
- iii. Digital data protection and digital literacy?
- iv. Quality control has been talked about how about quality assurance
- v. Digital readiness

- vi. We want to develop strategy to foster dissemination of results to policy makers- so possibly let's start looking from the end. Foresight analysis of the digitalization of typologies of farmers?
- vii. What will be the future of digitalization? Should we target the intermediaries, or should we target the farmers?
- viii. What will be the future of digitalization? Should we target the intermediaries or should we target the farmers?
 - a. About the intermediaries, India report has information on that otherwise it's important to look into it.
 - b. Who uses ICT, how they use it and its associated cost i.e. Cost of ICT/ search of information is important to determine.

Parallel Working Groups: Missing Research Questions

The participants were grouped not according to their clusters this time but just randomly to work on general missing key issues in all the current research clusters as well as issues that cuts across the clusters. The groups were also given an option to suggest if a new cluster is needed for their suggested research gap or not. Questions were given to the groups to guide the presentation of information.

Group One: Additional Research Topics

Relevant Research	Issue	Cluster
Livestock	Missing data, technologies	New cluster
	Sustainable intensification	
	Climate smart livestock	
	Women and youth in poultry	
	Pastoralism, large scale, production, feed	
	and disease	
	Social conflict with other land users	
	issues.	
Access to credit for agricultural	Link to digitalization etc	Cluster 1 &4
activities		
Agricultural insurance	Feasibility, efficiency, promotion, trust	1&4
	issues	
Nutrition	Extent of nutrition informing agricultural	Cross-cutting
	policies, E-messaging on infant, women	
	nutrition, nutrition and gender, national	
	awareness (CL3)	

Post harvest management	Data on commodities, value chain,	Cluster 1& 2
	emerging and working technologies,	
	adoption	

Group 2: Additional Research Topics

Missing Research Topics				
A. Inputs • Input subsidies	 B. Production Agro-ecology (organic) farming Role of medium scale farmers 			
 C. Markets Rise of super markets and hypermarkets Consumer preferences Effects of globalization Markets and trade 	 D. Others Post-harvest loss Food and nutrition security Governance issues Regional seed policy harmonization Land grabbing Food and feed safety Land tenure / land security /optimal land size Resilience of smallholder farmers Livestock VC / crop-livestock integration Emerging issues in agric. due to CC Sustainability of food systems Entrepreneurship Gender 			
Newly Proposed Research Clus	sters			
Livestock Cluster	Livestock value chainCrop-livestock integrationFood and feed safety			
Market Cluster	 Rise of supermarkets Consumer preferences Effects of globalization Markets (inputs and outputs) Regional trade 			

Group 3: Additional Research Topics

Missing topics

- State and future of extension services / public private service delivery
- Finance for food and agriculture sector => cross-cutting issue
- Access to land / Middle-scale farmers

- Food system transformation / Food demand projections / Agroprocessing / Supermarket revolution => cluster on its own
- Trade integration along the value chain
- Political economy of GMO
- Urban agriculture
- Post-harvest losses
- Capacity building => cross-cutting issue
- Climate change => cross-cutting issue
- Gender => cross-cutting issue
- Livestock =>cluster on its own

DISCUSSION ON PARALLEL WORKING GROUP

- 1. Which research topics of relevance to African food and agriculture are missing
 - a. Common issues are livestock, post-harvest management, medium scale farmers, trade, gender and agri-finance
- 2. Do we need more research clusters or we integrate missing topics within existing clusters?
- 3. Are there any cross-cutting issues that need to be considered in all the clusters?

Comments & responses

- A research cluster could be established for livestock
- Consumer assessment and awareness research is key
- Nutrition should be looked at like a culture- there is need for nutrition sensitive agriculture.
- Medium scale farmers were a topic for most groups and the suggestion was that it should be a cross-cutting issue.
- Agricultural finance eg crop insurance

C. Progress in Policy Communication of PARI 2018-19

RC5: Improving the Policy Context and Contributing to Evidence-Based Policy Process

The objective of research cluster five is to foster effective policy engagement to disseminate PARI findings. A presentation on progress in policy communication was made by the FARA team. The presentation explicated the various efforts made over the reporting period 2018-2019. FARA has used various means to communicate research result from PARI; it has mentioned the outcomes of PARI is over 21 high level for a within and outside Africa. The publications from PARI over the period is also more than 20 including books, research reports, policy briefs etc. PARI also organized two national

policy dialogues in Malawi and Benin, where research reports were shared with the broad stakeholder's group in the agricultural sector. The social media reach of PARI has also increased significantly following investment in communication unit in FARA. The Facebook reach is over 15,000, twitter 45,000, LinkedIn 6,000 and Instagram 800. Two video documentaries are in progress to be released in early 2020.

The AERC- Increasing Research Impact Through Capacity Building: Capacity Strengthening in Policy Analysis Through Partnerships also made a key presentation highlighting the following.

- Tracking of policy interventions
- Influencing national and regional policies/ investments
- Leverage points for policy influence and change.

- How can AERC work with PARI to strengthen the national policy
- What is the most effective way to communicate the results to policy makers? How do we get the attention of policy makers?
- Does AERC train researchers too in certain skills?
- Influence policy- example of Ghana
 - Aflatoxin control- funding and strategic partnership
 - o Funding on biofortification agenda. Partnerships with key regional institutions
- There is no linear relationship between policy and research
 - There is naivety that we are assuming research is equal to policy
 - There are a number of issues on the same subject reaching a policy maker so which one does a policy maker take
 - O How do we make a difference?
 - Do not expect impact same day- policy maker listen but might not take it into use immediately
 - o How can PARI get integrated in AERC outputs?
 - AERC is interested in the digitalization of the PARI research cluster
 - Where is NARS engagement in AERC? University research is usually for academic purpose but not to the grassroots but NARS work on real issues. How can NARS benefit from AERC?

- NARS are part of the AERC. Sometimes there are institutions that the AERC knows and they tend to go to them disregarding the ones they do not know.
 We can be proactive in also approaching AERC.
- How to influence policy- there is need for time. The grassroot people should understand the problem, build capacity of parliament as well. The parliamentary committee should also listen from people from grassroots.
- PARI might not be an immediate response for emerging issues in the AU but the research questions we do, the research should be from the regional and national agendas
- Governments do have their agendas therefore there is need for solicitated information from government
- PARI might not have long term experience with governments. Maybe they need to compare and partner with organizations what have been working on similar topics.
 PARI is part of the process
- PARI can produce good research
- There is need for a better understanding of who policy makers are? African policy makers don't look into the future but immediate issues ie those that are at the threshold of creating crises.
- o Every policy is organic- the policy maker would like to see the effect
- There are a lot of capacity building, public opinion eg training of journalists, farmer organizations can also influence policy change.
- The policy influence is there but there is an issue of attribution. Of course, some impacts are not direct
- Malabo declarations was in the process of reviewing so as we think of new research areas, we
 can leverage the gaps identified by the continent. FARA-PARI can be positioned in that aspect
- Communication to various stakeholder is key- farmers, policy makers, other scientists, extension workers etc.
- There is need for engagement of stakeholders from beginning. For instance, research results dissemination workshops apart from the dialogues
- Need for targeted approach with governments and other relevant organizations eg civil society, farmer organizations etc

CLOSING REMARKS

National partners rep- Dr. Adegbola B. Patrice

- Gratitude goes to PARI and government of Germany for the resources for research and development and for the opportunities to work with Germany partners.
- Further gratitude was for the additional 3 years of PARI research.
- In addition, there is opportunity for technical backstopping from ZEF to enable us to achieve better results. He emphasized that partners from Germany (ZEF and Hohenheim) have contributed significantly to what the project have achieved in the past 5 years.
- The wish is that this working relationship will continue and even be enhanced to achievement of better results. On behalf of the national partners, he expressed his thanks.

• International partners- Prof Regina Birner

- Gratitude to FARA, ZEF and BMZ for such an effective meeting which has been insightful
- The workshop gave us an opportunity to have an insight and review all work done by all the different cluster teams.
- PARI is a special project due to the way it is set up it gives flexibility to identify research areas identified together with partners.
- o PARI is designed as a partnership program of equal partners.
- Thanks to Joachim von Braum to convive the BMZ for additional funding
- o There has been a lot of capacity building in the GICs, new partnerships formed
- Looking forward, the outlook is that there is exciting new avenues

Internal evaluator- Dr Amadi

- Clearly the program is relevant to Africa
- We should be able to deliver as we have the support, opportunity and Prof Joachim will do anything to support Africa therefore we need to use this opportunity.
- The program has been revolving very well and the hope is that the next phase will be more exciting

FARA

- Gratitude to BMZ for funding African development. Germany is one of the countries which is truly interested in developing Africa
- Thanks to the people of Germany for their taxpayers money
- Thanks to ZEF and FARA teams for technical backstopping

- Thanks to the partners for being committed and doing very well, for making Africa proud through their delivery of outputs
- Please note that the deliverables are due by 31st December 2019 and submit to FARA by 15th December, 2019. Please remember that your misbehavior is reflected of the whole continent.
- He then invited everybody to a dinner which was schedules for 18.30hrs.

ZEF

- This was was an engaging group
- Some people have been present from day 1. At this point is when the structure works and the outlook on the next phase is great
- The good thing is we know each other at this point and it helps to work together.
- Please be reminded that the ZEF deadline for the 2019 deliverables is 31st December so let's try to submit reports on time.
- o Everybody was wished a safe journey back home

Annex 1: List of Participants

	Contact person	Contact institution	Country	Email	Telephone
1	Dr ADEGBOLA B. Patrice	INRAB	Benin	patrice.adegbola@yahoo.fr	+229 97354056
2	CRINOT Fabrice Desirée G.J.C.E.	INRAB	Benin	fabcrinot@yahoo.fr	(00229)97 74 08 65
3	Alpha Oumar Kergna	IER Mali	Mali	akergna@yahoo.fr	+223 76 35 67 48
4	Abdoulaye Nientao	IER Mali	Mali	nientaota@gmail.com	+223 82 o1 28 28
5	Prof Chris Daudu	ARCN/ IAR	Nigeria	chrisdaudu@yahoo.com	
6	Prof. Dayo Phillip	ARCN	Nigeria	dayophillip@gmail.com	+2348037136628
8	Johnny Owusu-Arthur	CSIR-STEPRI	Ghana	jonnieowusu@gmail.com	
9	Dr. Rose Omari	CSIR-STEPRI	Ghana	rose.omari@yahoo.com	

10	Dr. Tigabu degu getahun	PSI	Ethiopia	tigyget@yahoo.com	+251911306602
				tigyget14@gmail.com	
11	Asaminew Lemma	PSI	Ethiopia	asamenewlema@gmail.com	
12	Dr. Felister W. Makini	KALRO	Kenya	felister.makini@kalro.org	+254 020 4183324
13	Dr. Lawrence O Mose	KALRO	Kenya	lawrence.mose@kalro.org	+254 724067987
14	Timanyechi Munthali	DAR Malawi	Malawi	timanyechi.24@gmail.com	+265997250517
15	Sera GONDWE	LUANAR		sgondwe@luanar.ac.mw	
16	Dr. Meriem OUESLATI ZLAOUI	INRAT	Tunisia	meriem.zlaoui@gmail.com	
	FARA				
17	Fatunbi A. Oluwole	FARA	Accra	ofatunbi@faraafrica.org	+233240140548
18	Boadu Paul	FARA	Accra	pboadu@faraafrica.or	
19	Yemi Akinbamijo	FARA	Accra	yakinbamijo@faraafrica.org	
20	Christoph Essikpe	FARA	Accra	cessikpe@faraafrica.org	
	ZEF/Germany Universities		<u> </u>		

21	Dr Heike Baumüller	ZEF	Germany	<hbaumueller@uni-bonn.de></hbaumueller@uni-bonn.de>	+491756665778
22	Dr. Oliver Kirui	ZEF	Germany	okirui@uni-bonn.de	+ 491601825250
23	Dr. Zaneta Kubik	ZEF	Germany	zkubik@uni-bonn.de	+49 228 73 1860
24	Dr. Bezawit Beyene Chichaibelu	ZEF	Germany	bchichai@uni-bonn.de	+49 228 731841
25	Mr. Thomas Daum	Uni Hohe	Germany	thomas.daum@uni- hohenheim.de	+49 (0)151 156 98287
26	Prof. Regina Birner	Uni Hohe	Germany	Regina.Birner@uni- hohenheim.de	
27	Prof. Joachim von Braun	ZEF	Germany	Jvonbraun@uni-bonn.de	
28	Prof Admassie	ZEF	Germany	aadmassie@yahoo.com	
	IFPRI/AGRODEP				
29	Olawale Olayide	IFPRI/AGRODEP	Nigeria	waleolayide@yahoo.com	
30	Assane Beye	IFPRI/AGRODEP	Senegal	beyassane@hotmail.com	
31	Amy Faye	IFPRI/AGRODEP	Senegal	amy.faye1@gmail.com	
32	Lulit Mitik	IFPRI/AGRODEP	Ethiopia	lulit.mitik@gmail.com	
33	Marivoet, Wim	IFPRI/AGRODEP	Senegal	< <u>W.Marivoet@cgiar.org</u>	