PROCEEDINGS REPORT

BREAKFAST MEETING ON POLICY OPTIONS TO SUPPORT PRIVATE SECTOR INVESTMENT FOR CLIMATE-RESILIENT AGRICULTURAL VALUE CHAINS IN UGANDA

4th FEBRUARY 2016

PROTEA HOTEL, KAMPALA

In PICTURES

Dr. Sarah Ssewanyana, Executive Director of the Economic Policy Research Centre (EPRC)

Dr. Peter Ngategize, Director CICS, MoFPED

Mr. Paul Mafabi, Permanent Secretary, Ministry of Water and Environment

Dr. Annette Kuteesa, EPRC

Participants at the meeting during working group discussions

ACRONYMS

ACF	Agricultural Credit Facility
ASSIP	Accountability Sector Strategic Investment Plan
CICS	Competitiveness and Investment Climate Strategy
CRM	Climate Risk Management
EPRC	Economic Policy Research Centre
GoU	Government of Uganda
IISD	International Institute for Sustainable Development
IPCC	Intergovernmental Panel on Climate Change
MAAIF	Ministry of Agriculture Animal Industry and Fisheries
MDAs	Ministries Departments and Agencies
M&E	Monitoring and Evaluation
MoFPED	Ministry of Finance Planning and Economic Development
MWE	Ministry of Water and Environment
NDP	National Development Plan
PHH	Post Harvest Handling
PPP	Public Private Partnerships
PSI	Private Sector Investment
SMEs	Small and Medium Enterprises
UAA	Uganda Agricultural Alliance

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EXECUTIVE SUMMARY

A breakfast meeting to discuss policy options to stimulate private sector investment in climate-resilient agricultural value chains was held on the 4th of February 2016 in Kampala. It was organized by the Economic Policy Research Center (EPRC) and the International Institute for Sustainable Development (IISD) in collaboration with the Ministry of Finance Economic Planning and Development (MoFPED). The objectives of the meeting were:

i) To share the findings of a research project, 'Private Sector Investment in a Changing Climate: Resilient Rice Value Chains (PSI-Climate)' with policymakers and other stakeholders so as to raise awareness of climate impacts on agricultural value chains

ii) To introduce options for the private sector to support climate risk management (CRM) along agricultural value chains

iii) To identify openings in existing policies and policy development processes to support implementation of the priority options

iv) To discuss policy options to create an enabling environment for domestic private sector investment in CRM along agricultural value chains

Dr. Annette Kuteesa of EPRC presented the findings of the PSI-Climate project. The research was done through two case studies on domestic private sector investment: (1) investments in climate-resilient rice seeds in Northern Uganda in collaboration with the seed company, Equator Seeds; and (2) investments in financial services for rice value chain actors in Eastern Uganda in collaboration with the Centenary Bank. The presentation provided a synopsis of the research question, the study approach and a summary of the main research findings, including key lessons that are relevant for policy decision-making.

Following a discussion on the research approach and findings, the participants worked in three groups, focusing on seed-related policies, finance-related policies and the mainstreaming of climate change in agricultural policies, to discuss;

- The opportunities (in existing policies, policy development policies or program implementation) to put the project's lessons into action;
- The barriers (such as from unclear policy direction, gaps in coordination and lack of information) to putting the lessons into action;
- The steps that need to be taken to overcome the barriers and capitalize on the opportunities.

The key message from the discussions were:

1. Climate change impacts occur not just at the production level, but at all stages of the value chain – this is acknowledged by the government, but CRM strategies tend to focus at the production level
2. All actors along the value chain are inter-dependent – management of climate risks to the value chain needs to involve all actors

3. The private sector is a major investor in the agricultural sector and therefore has a key role to play in managing climate risks along agricultural value chains – they need to be involved in policy development and implementation processes that are relevant to this issue
4. The private sector is already playing a role in supporting climate risk management – for example by investing in financial products that help actors diversify income sources or by investing in climate-resilient seeds as illustrated in our case studies
5. However, more needs to be done to support climate-resilient value chains:
    - The private sector needs to move forward on putting the priority options identified in this project in place – they are win-win, benefitting both the private sector actors and the value chain actors.
    - The Government is already providing an enabling policy environment, however barriers remain and there are opportunities to influence to improve this and facilitate effective implementation to realize the potential of private sector investment.

1. INTRODUCTION

A breakfast meeting to discuss policy options to stimulate private sector investment in climate-resilient agricultural value chains was held on the 4th of February 2016 in Kampala. It was organized by the Economic Policy Research Center (EPRC) and the International Institute for Sustainable Development (IISD) in collaboration with the Ministry of Finance Economic Planning and Development (MoFPED). The event is part of a research process that is intended to promote the development and implementation of policies that create an enabling environment for private sector investment that supports climate risk management along agricultural value chains. The objectives of the meeting were:

1. To share the findings of the research with policymakers and other stakeholders so as to raise awareness of climate impacts on agricultural value chains
2. To introduce options for the private sector to support climate risk management along agricultural value chains
3. To identify openings in existing policies and policy development processes to support implementation of the priority options
4. To discuss policy options to create an enabling environment for private sector investment in climate risk management along agricultural value chains

The discussions were framed in the context of a research project on Private Sector Investment in a Changing Climate: Resilient Rice Value Chain Development (PSI-Climate), which focuses on domestic private investments in climate-resilient rice seeds in Northern Uganda and in financial services along rice value chains in Eastern Uganda.

The meeting held at the Protea Hotel in Kampala was attended by more than 70 participants from government ministries, departments and agencies (particularly in agriculture, finance and planning and environment), private sector (particularly agricultural banking institutions, seed companies, agro dealers and farmers), NGOS, donors, civil society organizations, media, and academia (see list of participants in Annex 2).

2. OPENING SESSION

2.1 Welcome Remarks by Dr. Sarah Ssewanyana, Executive Director, EPRC

In her opening remarks, Dr. Ssewanyana described the meeting as timely because it is in line with the adoption of the Sustainable Development Goals in September 2015 and the recent launch of Uganda's second National Development Plan (NDP) which contains much discussion on climate change issues.

The prospects of Uganda's agriculture remain a matter of great concern. The sector faces significant challenges, which include the deteriorating natural resource base, declining ecosystem services and reduced access to land due to the high population growth rates. It is likely to face additional pressures from the impacts of climate change which have severe consequences for entire value chains and household food security.

The Government of Uganda (GoU) has taken steps to mitigate the potential adverse effects of climate change by including food security and climate change as part of its policy agenda. The NDP II identifies agriculture as a potential source of increased national growth. Investments in the sector can enhance food security and lead to improved economic development. However realizing these benefits requires the development of agricultural value chains in a climate- resilient manner. Climate change affects the entire value chain, thus appropriate climate risk management practices are needed.

Rice is one of the priority enterprises that is identified in the Accountability Sector Strategic Investment Plan (ASSIP). It is both a food and cash crop and has potential to become an export earner for Uganda. The rice value chain provides employment for a variety of actors, offers substantial gross margins and options for supporting other industries.

The private sector is the largest investor in the agricultural sector yet many are ill-prepared to mitigate against climate risks and to make long-term integrated investment decisions. There is an absence of appreciation for value chain services. Securing increased and sustainable development requires understanding and ensuring that activities do not increase exposure to climate risks. Many investors are unaware of the opportunities for value chain development including climate resilience. It is also essential to note that many value chain actors provide services that cut across different stages of the chain.

She concluded by mentioning that this meeting hope to propose policy options to facilitate private sector decisions in this complex environment.

2.2 Remarks of Dr. Peter Ngategize, Director Competitiveness and Investment Climate Strategy, MoFPED

Dr. Ngategize clarified that this workshop process is part of the project's data collection and aims at gathering information on policy options that will encourage private sector investment in climate-resilient agricultural value chains. It is through partnerships that resilient policies can be developed. The recent launch of NDP II, the current political processes taking place in-country and the on-going budgetary processes (National Budgets must be approved by 1st July) all make this an opportune time to hold this discussion. Policy statements emerging from this meeting can feed into these processes and debates. The presentations to be made at the meeting are based on two case studies which focus on private investments in rice seeds in Northern Uganda and in financial services along rice value chains in Eastern Uganda. A broad range of stakeholders related to the rice value chains were consulted. Addressing climate change issues is critical in Uganda as it poses severe consequences for export earnings and household incomes.

2.3 Keynote Address: Mr. Paul Mafabi, Director Environmental Affairs, Ministry of Water and Environment

Mr. Mafabi began his keynote address by highlighting the extent of environmental issues in Uganda and highlighting linkages with climate change. About 64 percent of wetlands around the globe have been lost and consequently the services they provide have diminished. In Kampala the cost of cleaning water has increased fivefold. The latest report from the Intergovernmental Panel on Climate Change (IPCC) makes it clear that climate change is real. Uganda is one of the countries that is very vulnerable to the adverse impacts of climate change in terms of water resources and agricultural production both in the mountain and low lying areas. This level of vulnerability requires us to be better prepared.

The GoU has made a considerable effort to address the impacts of climate change. It has put in place the needed policy and institutional frameworks and has established a climate change unit and department to ensure a coordinated approach to climate change issues. The Constitution of Uganda guarantees food security and the right to a clean and healthy environment. Uganda's Vision 2040 underscores the need to harness the agricultural sector to realize its full potential for the benefit of the people and underpins the need to address climate change. The NDP II prioritizes the mainstreaming of climate change and natural resource development and promotes a climate-resilient economy. The Ministry of Water and Environment (MWE) as the mandated institution is coordinating climate change issues at all levels across the different sectors. Some of the actions taken by the Government include:

- Developing policy guidance on mainstreaming climate change in various development plans
- Development of a Climate Change Policy Framework in collaboration with Ministries Departments and Agencies (MDAs) and non-state actors
- Development of a National Climate Change Costed Implementation Strategy for Climate Change Policy and development plans for specific sectors to address climate change adaptation and mitigation
- Developing a Climate Change Resource Centre under the Climate Change Department to facilitate knowledge sharing
- Instituting a National Policy Committee to coordinate implementation of the Paris Agreement
- In collaboration with partners, MWE has undertaken economic assessment studies to assess the impact of climate change on sectors such as water, agriculture and energy. In agriculture, the study focused on food crops, livestock and export crops. It made an assessment of impacts of drought on agriculture in Uganda and possible future losses on these products. The key findings were:
    - There will be serious climate change risks to crops in different regions from 2013/2014, with largest impacts in the East and North for all crops.
    - Potential reduction in national production of cassava, maize, millet groundnuts etc. in all areas.
    - Impacts on livestock are expected from drought, floods and associated diseases.
    - By 2050, the value of the coffee crop could fall by 50 percent resulting from reduction in the area that could support its production due to climate change.
    - Estimates of impacts on tea and cotton growing show significant loss in value.
      If no action is taken, Uganda's agricultural exports and their value may be strongly affected with total costs in the range of 1.4 billion dollars by 2050.

The National Climate Change Policy has identified adaptation and mitigation practices in agriculture. All value chain actors have a key role to play to counter the adverse effects of climate variability and change. This includes a role for the private sector in terms of:

- Financing for and providing climate-resilient technologies
- Promotion of climate- resilient crops
- Promotion of labor-saving technologies and use of sustainable land use practices
- Banks to offer attractive interest rates to enable farmers adopt climate-resilient practices
- Promote minimization of Post-Harvest Handling (PHH) losses through provision of technologies and transport
- More systematic approach to risk management in businesses
- Understanding current climate risks along the value chains
- Raising awareness and building capacity of key stakeholders along the value chains on climate risk management and technological innovations, providing technical advice on appropriate technologies
- The private sector should tap into international climate change financing arrangements.

3. PRIVATE SECTOR INVESTMENT IN A CHANGING CLIMATE: KEY FINDINGS

Dr. Annette Kuteesa of EPRC presented the findings of the PSI-Climate project. The research was done through two case studies: investments in climate-resilient rice seeds in Northern Uganda in collaboration with the domestic seed company, Equator Seeds; and investments in financial services for rice value chain actors in Eastern Uganda in collaboration with the Centenary Bank. The presentation provided a synopsis of the research question, the study approach and a summary of the main research findings. The full presentation is provided as Annex 3 of this report and the main lessons learned are outlined below.

Lessons learned on the role of finance in value chain CRM

- Financial services already contribute to supporting CRM by value chain actors
- Capacity to access and use climate and weather information for decision-making is a priority for value chain actors (this needs to be linked to market information).
- Financial service providers also require capacity building on CRM to support their clients and inform their investment decisions.
- Better CRM by value chain actors will also benefit financial service providers by reducing defaults on loans.

Lessons learned on the role of climate-resilient seeds in value chain CRM

- Value chain actors are already integrating climate concerns in their decision-making process when selecting rice seeds.
- To reduce the impacts of climate hazards on their rice activities and on their clients, seed companies need to invest in a combination of options because actors along the value chain are diverse.
- CRM priority investment of seed companies call for improved collaboration among various actors along the value chain (including seed breeders, stockists and distributors, media and other seed companies).

Lessons learned on integrating CRM in agricultural value chain development

- Climate change impacts the entire value chain
- The domestic private sector has a role to play in supporting CRM along agricultural value chains
- Integrating climate change into policies and strategies related to agricultural value chain development is critical for Uganda to achieve its development objectives
- SMEs and commercial banks must be involved in the process of integrating climate change into relevant policies and strategies
- Climate information (including historical observations, forecasts, and longer-term projections) is a necessary input for the mainstreaming process.

3.1 Summary of Plenary Discussion on the Presentation

Much of the plenary discussion on the presentation was on areas where participants noted a need to complement the research with quantitative data as well as additional knowledge or exploration to provide a basis for effective CRM. Most gaps identified by the participants were not addressed by the research because they were outside the scope of the study. The participants identified the following areas that require further study:

- Gender relations along the rice value chains and how they affect CRM.
- Why many rice producing households remain food insecure despite the assumption that income from the sale of rice will contribute to meet the food needs of the family.
- The effect of the labor intensive processes related to rice production (seed and pest management etc.) on children and women.
- How attitudes and mindsets (e.g. farmers are poor and require external support to solve problems) affects adoption of CRM. Changing mindsets is important for all value chain actors.
- Other factors identified that affect agricultural production other than climate change.
- How the leaning towards cheaper inputs (even when they will yield less results) affects the value chain actors' ability to adopt CRM. The study found that farmers need to be supported in their seed choice.
- What role the extension service is taking in providing CRM advice and their capacity to do so.
- The study identified crop diversification as one of the strategies that farmers use to reduce climate risk. However this finding seemed to be in contradiction to the previous UBOS surveys which show that farmers are growing less crops on their farms today than 20 years ago.
- The need to differentiate between climate variability and climate change.
- Whether farmer coping strategies such as encroachment on wetlands is a consequence of population pressure or climate change issues.
- Policy and institutional issues affecting CRM issues.
- The magnitude of climate change impacts on the different parts of the value chains and where it is most urgent to focus intervention.
- How the rice value chain activities impact on climate and how these impacts may be controlled. Where is it most urgent to intervene?
- There is a service delivery gap in authentication of weather information. Government should incentivize those that can provide accurate information. All value chain actors need access to climate and weather information and skills to use the information for decision making.

Responses to some of the key questions

- What the research team presented is a very brief summary of the research findings, and the team has information that is disaggregated by actor and by climate risk
- Many of the issues raised (gender, quantitative data, etc.) are beyond the scope of the study, which focused on the role of private sector investment in supporting climate risk management along agricultural value chains
- It is true that in the adaptation community we tend to use climate information as short-hand for climate and weather information, including observed trends, short and medium term forecasts and longer term climate projections
- The best starting point for building capacity to deal with future risks and changes is to understand current risks and how people are managing them
- In the absence of good data, it can be very helpful to explore the reality that people on the ground are dealing with, and what we heard from the people we interviewed is that they are dealing with more uncertainty in rainfall patterns and in some cases they report that extreme weather events are occurring more frequently
- The study highlights the need for actors – including both value chain actors and service providers such as financial institutions - to have access to climate and weather information to make good decisions – the lack of data highlighted is a limitation on this, so perhaps this is something to discuss during the policy discussions
- This links back to the issue of attitudes and the fatalistic, relief-oriented mentality – people need better information and skills to use it in order to empower them to make better decisions and plan for the future
- The process that the research team applied involved the identification of a range of different options through an experts dialogue, and then prioritization of the options through a multi-criteria analysis
- It is true that it would have been great to bring the private sector actors together in dialogue with the value chain actors, but unfortunately resources and logistics did not allow this.
- Weather index insurance was one of the options identified through the workshop, however it was not prioritized by the different value chain actors or by the bank. The research team suspect that on the side of the value chain actors this is because they did not really understand how it would work. On the side of the Bank, this is something that they are interested in exploring and there is a government-led initiative on weather index insurance, which is something to keep an eye on.

4. WORKING GROUPS

Following the presentation, the participants worked in three groups (seed- related policies, finance-related policies, and integrating climate change into agricultural policies). Each group was asked to discuss;

i) the opportunities (in existing policies, policy development policies or program implementation) to put the project's lessons into action
ii) the barriers (such as from unclear policy direction, gaps in coordination and lack of information) to putting the lessons into action
iii) the steps that need to be taken to overcome the barriers and capitalize on the opportunities

The synthesis of the group discussions is presented in the tables below.

Seed- Related Policies
Opportunities
There are policies under development where climate change still needs to be incorporated or could be better incorporated: ▪ Seed Policy draft exists (MAAIF) – there is an opportunity to influence ▪ Agricultural Extension Policy is being developed by MAIIF ▪ Climate Change Policy is in place, but detailed strategies still being developed (the need for regulations was noted)
Policy Barriers
• Lack of regulations or incentives for breeders to develop climate-resilient seed varieties • Climate considerations are not included under the PPP Act. • Lack of appropriate communication on climate change to all stakeholders
Steps to Overcome Barriers and Capitalize on Opportunities
• Stakeholders (such as the Uganda seed Traders Association, agro- dealers etc.) should lobby MAAIF for the completion of the necessary policies and regulations concerning seed. • Extension services should inform better decision-making about climate-resilient seeds • Ensure key actors are able to provide inputs into the Agricultural Extension Policy. One way is by attending the relevant fora such as the on-going Agricultural Extension Policy validation workshops. • Prepare popular versions of the Climate Change Policy to better communicate its content to different stakeholder groups. • Lobby MAAIF for the quick development of regulations under the Plant Variety Act 2014) • The Climate Change Department at MWE must ensure that MDAS include climate change issues in their plans. • Lobby for the integration of climate issues under the PPP Act. • Translate policies into different languages to make them accessible. • Develop SHORT documents to share evidence and policy options to create an enabling environment for integrating climate change in seed-related policies

Mainstreaming climate Change in agricultural policies
Opportunities
• Completed policies: o Climate change policy o National Development Plan • In progress: o National Irrigation Policy o Climate Law o Agricultural Extension Policy o Water for Agricultural Production (under review) o Climate-Smart Agriculture Program (developed, not fully implemented) o Public-Private Partnership (PPP) Act
Policy Barriers
• Agricultural Extension Policy o Lack of commitment to implement it o Limited capacity for agricultural extension services (resources, financial, human) o Coordination of issues o Inadequate enforcement o Limited gender mainstreaming
Steps to Overcome Barriers and Capitalize on Opportunities
• Create by-laws at the local government • Promote information sharing and networking among the different institutions • Have an M&E system to facilitate data collection and accountability • Equip the centers with the right data collection technology and communicate weather information • Expedite the climate law • Establish and strengthen early warning systems • Develop educational courses on climate change issues • Capitalize on the PPP by facilitating the private sector to invest in areas that help to mitigate climate change effects such as water for production • Improve linkages between the private sector and research

Finance Related Policies
Opportunities

• The scope and number of guarantees (especially from the Agricultural Credit Facilities- ACF) should be increased. Capitalize on the on-going ACF reviews to achieve this.
• The Uganda Agricultural Alliance (UAA) which brings together agriculture financers is a potential home and advocacy platform for the national policy on agricultural finance.
• The new Accountability Sector Strategic Investment Plan (ASSIP) is a potential framework for strengthening provision of weather information and providing a budget for it.
• Agricultural Finance Platform – brings together government, private sector, NGOs, research
  o Already advocating for an agricultural finance policy and better coordination of government efforts on agricultural finance
  o They have a strong interest in climate risk management
• A National Adaptation Plan (NAP) – roadmap still under development so opportunity to influence. Stakeholders should be made aware of the MoFPED Agricultural Insurance Scheme. The scheme is supposed to provide subsidies on agricultural insurance products.
• Climate Smart Agriculture programme – seeking resources to implement

Policy Barriers
• Lack of an agricultural finance policy/strategy • Finance sector has limited understanding of climate issues and how they impact agriculture • Difficulty of packaging climate messages in a way that speaks to finance people • Challenge of implementation (for example the CSA program is not being rolled out at scale), not enough programs handling climate change issues that reach large numbers of farmers. • Need clarity on role of public vs. private sector in finance for climate risks • Confusion about the most strategic areas to invest in to reduce climate risk (e.g. appropriate infrastructure)
Steps to Overcome Barriers and Capitalize on Opportunities
• Prepare short, simple messages on how to reduce climate risk that can be shared with key decision-makers • Identify champions (institutions and individuals) that are well-connected to policy processes, provide them with information and messages • Increase participation of climate champions in Agricultural Finance Platform • Improve/ increase communication among and with investors to improve trust • Strengthen groups i.e. working groups at all levels in the chain e.g. farmers groups • Institutional mapping to understand who is doing what on CRM and agricultural finance and who needs to be better connected • Influence resource allocation for CSA program to ensure that finance plays its role • Provide a platform for communication between concerned ministries. • Ensure that climate is part of the budgeting process (based on gender experience and lessons learned)

5. CLOSING REMARKS

5.1 Julie Dekens, Senior Researcher, IISD

Ms. Dekens summarized the main take-home messages from the research project:

- Climate change impacts occur not just at the production level, but at all stages of the value chain – this is acknowledged by the government, but CRM strategies tend to focus at the production level
- All actors along the value chain are inter-dependent – management of climate risks to the value chain needs to involve all actors
- The private sector is a major investor in the agricultural sector and therefore has a key role to play in managing climate risks along agricultural value chains – they need to be involved in policy development and implementation processes that are relevant to this issue
- The private sector is already playing a role in supporting climate risk management – for example by investing in financial products that help actors diversify income sources or by investing in climate-resilient seeds as illustrated in our case studies
- However, more needs to be done to support climate-resilient value chains:
    - The private sector needs to move forward on putting the priority options identified in this project in place – they are win-win, benefitting both the private sector actors and the value chain actors
    - The Government is already providing an enabling policy environment, however barriers remain and there are opportunities to influence to improve this and facilitate effective implementation to realize the potential of private sector investment
- The project team aims to develop policy briefs as an outcome of this process.

5.2 Paul Mafabi, Director of Department of Wetlands, MWE

Mr. Mafabi made the following key points:

- Some participants questioned whether some of these issues are really about climate change. Mr. Mafabi encouraged participants to move on from this debate as it is clear that climate change is happening.
- The National Meteorological Authority is mandated to improve the dissemination of climate and weather information. This dialogue highlighted the need to improve accuracy and timeliness of the information, as well as dissemination. There is a need to strengthen and widen networks of weather stations in order to obtain more accurate information.
- Need to build the institutional capacity of the Climate Change Department and improve coordination between different actors.
- The Ministry of Finance has demanded that all ministries, agencies and departments should mainstream climate change in budgets. The MWE is developing a monitoring framework to track how this is happening and its effects.

- The formulation of the National Climate Change Law must be expedited so that it can operationalize the policy already adopted by the government.
- Need to widen the dissemination of the guidelines for mainstreaming climate change into the development process and to address the issue of coordination (who is coordinating this process) linked to it.

5.3 Dr. Okasai Opolot, Director of Crop Production, MAAIF

In his closing remarks, Dr. Okasai outlined his lessons from the discussions and the immediate implications for MAAIF:

- Climate change impacts on agriculture are real and not just at production level (e.g. heavy rain leading to post-harvest losses in beans and maize). Mitigation measures are a necessity.
- Need for more data and analysis to provide evidence of the impacts of climate change in order to increase the priority placed on CRM by decision-makers.
- Information and knowledge sharing is critical – including how to capture information and knowledge and share it most effectively
- Among the policy options identified in this meeting, all have some relevance for the agricultural sector. They are emphasizing integration of climate change into agricultural programs and policies, but need to do more. Uganda has made some progress by formulating agricultural sector guidelines for integration of climate change into action plans and district action plans. However there is a need to progress to the next level by ensuring that the action plans are implemented.Upstairs the Ministry of Agriculture is discussing the extension policy – if we miss climate change in that policy it will be a missed opportunity – need to link these discussions
- Climate-resilient crop varieties are already available, but more needs to be done to get them out and in use. The laws that facilitate the dissemination of these technologies must be passed. An example in case is the biosafety law. Action must be taken to lobby the release of technologies that help farmers mitigate against climate change risks.
- Coordination between ministries needs to be improved to address climate change as a matter of urgency
- Need to do M&E, impact assessment on the options to ensure we are scaling up the right things
- PPPs help to place the private sector in its right role in agriculture, including for CRM
- Agricultural financing is still a grey area – Centenary Bank is very courageous to put money into agriculture, need to lobby the other banks to invest in agriculture, all along the value chains
- Need a forum to brainstorm on agricultural finance
- Agricultural insurance – efforts and pilots are occurring, he is involved in those discussions, but unclear what the impact of insurance will be - how many smallholder farmers are compensated for impacts of climate hazards? – insurance policies – new area, needs to be interrogated
- Next steps
    - Policy briefs – spot on

    - Need to do more to inform policymakers about the details of the findings (this is the case study briefs)

- Coordination between the ministries (MAAIF, MWE, MoFPED etc.), research and other actors should be enhanced. Impact assessments should be conducted for all interventions.
- Private sector actors should be directed to their rightful roles in developing agricultural interventions on climate change. The law on PPPs has facilitated this.
- On agricultural financing he mentioned the need to lobby commercial banks for financing the private sector to exploit investment opportunities along the value chain. A home for agricultural finance must be identified and the impacts of agricultural financing opportunities for farmers assessed.
- There are several on-going discussions on agricultural insurance. However many do not capture the key issues, such as the number of smallholder farmers that are successfully compensated for impacts of climate change but focus on number of farmers registered.

5.4 Dr. Perter Ngategize, Director CICS, MoFPED

- A report will be produced, taking on board the comments received within the confines of the research. The dissemination will be through information papers and policy briefs.
- A small group will be organized between now and June to discuss emerging opportunities.
- One such opportunity is the budget call circular which requires all accounting officers in the various MDAs to capture climate change. There is need to track MDAs' responsiveness to this. The issue of a "home" for agricultural financial services is important. The public sector no longer has the lead on financing agriculture.
- Addressing the challenge of agricultural finance (service delivery, risk sharing etc.) will take PPPS. The MoFPED has created a Financial Services Department, staffed with a commissioner which is a potential home for financial agricultural services.
- A rice platform where different stakeholders can regularly share information would also be useful. When you meet in this type of forum, you realize there are many others working on similar issues to you and this can provide a basis for dialogue and collaboration.

6. ANNEX 1: WORKSHOP PROGRAMME

Time allocated	Activity	Responsible person(s)
7:30- 8:10 am	Arrival and registration of participants	Kasumba Geofrey/ Eunice Kirabo
Opening session: Edmond Kizito		
8:10-8:20 am	Welcome remarks	Dr. Sarah N. Ssewanyana Executive Director, EPRC
8:20-8:30 am	Remarks by MoFPED	Dr. Peter Ngategize Director CICS, MoFPED
8:30-8:50 am	Keynote Address	Mr. David O. Obong, Permanent Secretary, Ministry of Water and Environment
Second session: Edmond Kizito		
8:50-9:20 am	Presentation of findings of PSI Climate project, focusing on: • The implications of climate change for the rice value chain (very briefly) • The priority options for private sector investment to enable climate risk management along the value chain • The opportunities and challenges in implementing these options	Dr. Annette Kuteesa –EPRC Ms. Julie Dekens –IISD Ms. Angie Daze –IISD
9:20- 10:00	Q&A on presentation	All
Breakout session : Edmond Kizito		
10:00-12:00	How can the GoU support private sector investment for climate resilient agricultural value chains? Three groups: • Integrating climate change into policies • Finance-related policies • Seed-related policies	Moderators: Dr. Annette Kuteesa – EPRC Ms. Julie Dekens –IISD Ms. Angie Daze –IISD
12:00-12:10	Summary of key points from the discussion	Ms. Julie Dekens –IISD

12:10-12:30	Way forward and Closing Remarks	Mr. Paul Mafabi, Director Environment and wetland - MoWE Dr. Opolot Okasai, Director of crop resource- MAAIF Dr. Peter Ngategize, Director CICS-MoFPED
	End of program	

7. ANNEX 2: PARTICIPANTS LIST

No	Name	Position and Organization	Telephone
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18	Cletie Lukusa	Marketing and Product Development Officer IFPRI	0782884230
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20	Martha Ojok	MWE	0822172695
21	Akiko Sato	Project Advisor, JICA	0775260490
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29	Angie Dazé	Associate, IISD	
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31	Edward Katende	CEO, UAA	0703679000
32	Nangulu Moses	Executive Director, UNADA	0772633333
33	Frank Kasaige	Editor, Observer	0701716457
34	Ortega Ian	Reporter	0788551121
35	John B Kaddu	Makerere University	0772453778
36	Madina Goloba	Research Fellow, EPRC	0717960057
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38	Carol Kasoke	EPRC	
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40	Fiona Ibudi	Research Assistant, MoFPED/CICS	07826734488
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45	Sam Lakwenyero	EPRC	0704132264
46	Koicasi Roland	Kora Communications	0772412347
47	Paul Tafuba	Intern	0701705253
48	Chris Ssemakula	Reporter/Anchor, Record TV	0772667966
49	Wakabi Eric	Reporter, WBS TV	0703175636
50	Ssebunya Wycliff	Reporter, Radio One	0782579917
51	Babalandi.J	NTV	0752807921
52	Nyakaisiki Carole	EPRC	0772882398
53	Evans Nakhokho	Head Agri-Business Centenary Bank	0772545230
54	Ndhaye Moses	KFM/Dembe FM	0772882126
55	Teddy Alako	Senior Economist, MoFPED	0775162965
56	Serinah Nugaizi	Millennium Promotions Ltd	0772523966
57	Ruth Kabanya	Senior Research Officer, NARO	0772646916
58	Kalanguka Kayondo		0772420060
59	Richard Ssendege Mubiru	Senior Research Officer, Parliament	0392960431
60	Miriam Katuze	Research Analyst, EPRC	0712644536
61	Eric Ssewanyana	Economist, MoFPED	0772374734
62	Alon Mwesigwa	Writer, Observer	0754010803
63	Moses Kakel	Reporter	0782507579
64	Patrick Okello	Director Of Agriculture & Environmental Status, UBOS	0772521294
65	Okello Tonny	Managing Director, Equator	0782622080
66	Esther Namukasa	Research Officer, Parliament	0772378573
67	Robert Bwenta	Journalist, UBC TV	
68	Sam Paul N.	Journalist, NBS TV	0701540400
69	Kasadha Samuel	Journalist, Record Radio	0774680066
70	Otar James	VOT	0773430592
71	Ssemambo Muhammad	Senior Climate Change Officer, MWE/CCD	0704993344
72	Martin Tumuhereze	Research Associate, MAAIF	0782244937
73	Dr. Okasai Opolot	Director of Crop Resource, MAAIF	0772589642
74	Dr. Peter Ngategize	Director, CICS MoFPED	0772824718

75	Wamala Musa	Coordinator Food Security Forum, Parliament Of Uganda	0772527559
76	Ssekitoleleko Victoria	Chair, UAA	0753545182
77	Nassanga Lilian	Head Finance, UNCCI	0779246804

8. ANNEX 3: THE PRESENTATION

WELCOME

Breakfast Meeting: Policy options for private sector investment to support climate-resilient agricultural value chains

EPRC ECONOMIC POLICY RESEARCH CENTRE

IISD International Institute for Sustainable Development

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Meeting Objectives

1. To share the **findings of the research** with policymakers and other stakeholders to raise awareness of climate impacts on agricultural value chains
2. To introduce **options for the private sector** to invest in climate-resilient agricultural value chains
3. To identify **openings in existing policies and policy development processes** to support implementation of the priority options
4. To **discuss policy options** to create an **enabling environment** for private sector investment in climate risk management

The project

Title: Private sector investment in a changing climate: Resilient rice value chain development (PSI-Climate)

Research question

How can domestic private sector investments support climate risk management (CRM) along agricultural value chains in Uganda?

Expected results

1. SMEs and domestic commercial banks in Uganda have **evidence** of the **opportunities to support climate risk management along agricultural value chains** and of the **benefits** for their business operations
2. The government has a set of **policy options** to support climate risk management by SMEs, domestic commercial banks and other actors along agricultural value chains

The approach

Qualitative, participatory, engaging different rice value chain stakeholders

- **Focus on rice value chains** – one of the priority crops for the Government of Uganda in terms of improving food security and household income
- Research conducted through **two case studies** on domestic private sector investment:
  - Equator Seeds Ltd., a domestic seed company investing in new rice seeds in Northern Uganda
  - Centenary Bank, a commercial bank providing financial services for rice value chain actors in Eastern Uganda

Key Steps	Purpose	Activities
1. Climate analysis	Analyzed impacts of climate hazards on rice-related activities and current responses	Semi-structured interviews with value chain actors (input providers, farmers, millers, traders, transporters), Centenary Bank, Equator Seeds and service providers
2. Private investment impact analysis	Analyzed benefits of private sector actors' investment in supporting CRM, also identified challenges	Semi-structured interviews with value chain actors
3. Identification of private sector investment options to support CRM along the value chain	Identify potential options to increase contribution of private sector investment to CRM by value chain actors	Workshop with experts in seed sector and agricultural finance
4. Prioritize private sector investment options to support CRM along the value chain	Identify the priority private sector investment options from the perspective of value chain actors, Centenary Bank and Equator Seeds	Multi-criteria analysis (MCA) with value chain actors, Centenary Bank and Equator Seeds to identify CRM priorities and private sector investment options to support these
5. Identification of policy options	Identify policy options to create an enabling environment for private sector investment in CRM	Analysis of key policy documents; Policy dialogue (this meeting)

Climate change impacts in Uganda

- **Observed climatic changes (based on data since 1960)**:
  - Increased drought frequency and intensity
  - Rising temperatures
- **Projected changes up to 2080**:
  - Rising temperatures
  - Decreased rainfall in most of Uganda
  - Change in seasonal rainfall distribution (but not clear how)
  - Increased frequency and intensity of extreme weather events

What is climate risk management (CRM)?

A process of reducing the negative impacts associated with climate hazards

Examples of climate hazards:

- Extreme weather events (such as droughts, floods)
- Rising temperatures, changing rainfall patterns

Rice value chain in Uganda

	Inputs	Production	Processing	Marketing	Consumption
ACTIVITIES	• Supply of inputs (seeds, fertilizers, pesticides) • Extension and after-sale services	• Land preparation • Planting • Application of fertilizers and pesticides • Weeding • Harvesting • Threshing • Winnowing • Drying	• Bulking • Transporting • Loading and off-loading • Quality control • Milling • Packaging	• Sorting • Quality control • Packaging • Transport • Sale	• Purchase • Transport • Cooking • Cleaning
ACTORS	• Seed companies • Agro-dealers • Farmers sharing and selling seeds • Government and NGOS providing inputs	• Individual farmers • Farmer groups	• Village assemblers • Producer organizations • Brokers • Millers	• Traders • Wholesalers • Transporters • Retailers	• Individuals • NGOs • Government institutions
SERVICE PROVIDERS					

Example: impact of flood on rice value chains

Inputs	Production	Processing	Marketing	Consumption
• Reduced quality of rice seeds • Delayed deliveries of rice seeds	• Reduced yields • Destruction of crops • Reduced quality of rice crop • More time and labor spent for weeding, harvesting and drying	• Reduced volume of rice available for milling • Poor quality of rice crop • High moisture content increases breaking at milling • Delayed deliveries	• Destruction of transportation routes • Product losses due to rotting • Higher transportation costs	• Reduced food availability • Higher food prices

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Reduced income

Responses to climate impacts

Common responses across both case studies

- **Livelihood/income diversification** is a key strategy to manage risks associated with climate hazards
- Some input suppliers, farmers, millers and traders keep **buffer stocks** of rice
- Consumers substitute **other staples** for rice
- Some responses may not be sustainable in the long term, for example:
  - Relocating rice farming activities
  - Growing vegetables in the swamps
  - Selling off assets

Finance Case Study
Eastern Region, Centenary Bank

What is important to Centenary Bank to manage climate risks?

- Reducing loan defaults caused by climate hazards
- Increasing stability of agricultural incomes
- Building capacity on climate risk analysis and CRM options to inform decision-making by the Bank and its clients
- Increasing access to finance for rural people, including those who are vulnerable to climate risks
- Cultivating longer-term relationships with clients to increase trust and enable risk management

What is important to value chain actors to manage climate risks?

Farmers, Millers, Traders and Transporters (all Centenary Bank clients)

Diversification of crops, products and income sources	• Finding another way to pay my loan when the crop fails • Combining rice production and processing with other types of crops
Informed decision-making, planning and preparedness for shocks	• Knowing when to plant and sell rice for best results • Growing enough rice to sell and save some cash
Ensuring rice supply and quality	• Maximizing income from rice • Accessing drought-tolerant and/or early maturing rice seed varieties

Priority options for investment by Centenary Bank to support CRM along the value chain

Based on multi-criteria analysis by value chain actors and the Centenary Bank

1. Training for value chain actors on how to analyze climate risks and options for climate risk management
2. Disseminating weather and seasonal forecasts to value chain actors on the radio and/or by mobile phone
3. Offering a better interest rate for value chain actors who implement particular CRM activities

Opportunities and challenges for implementing priority options for investment by Centenary Bank

From the perspective of Centenary Bank

Opportunities	Challenges
• The bank considers risk management a priority and part of its core business • Centenary Bank already has communication channels that could be used to disseminate climate and weather information	• Providing climate information and training on climate risk management are new areas for the bank, so will require capacity development, partnership and/or additional funds • Transaction costs are high for both clients and the bank • The bank needs information and tools to analyze risks with clients to inform decision-making about services (such as interest rates)

Seed Case Study
Northern Region, Equator Seeds

What is most important to other value chain actors in obtaining rice seeds?

Farmer cooperatives, commercial farmers and agro-dealers (getting seeds from Equator Seeds)

Climate risk management	• Drought tolerant/less water intensive seeds • Early maturing seeds • Pest and disease resistant seeds
Quality of rice seeds	• Quality seeds (purity, germination, moisture content)
Quantity of rice produced	• High yielding seeds

What is most important to seed companies to manage climate risks?

Equator Seeds and other seed companies interviewed

1. **Timely supply** of new rice seeds
2. **Awareness raising** of clients on the benefits of climate-resilient rice seeds
3. Capacity building of farmers on **conservation agriculture**

Priority options for investment by seed companies that support CRM

Based on multi-criteria analysis by value chain actors

Actors	Priority options
All value chain actors, including seed companies	• Working with **stockists and distributors** located closer to their clients to improve their access to new rice seeds • Working with other seed companies to develop **local radio programmes** to inform clients about the new rice seeds (benefits, stock available)
Seed companies only	• Working more closely with **rice seed breeders** to support the scaling up of foundation seeds
Other actors (but not seed companies)	• Organizing new rice seed **demonstration plots**

Opportunities and challenges for implementing priority investment options

From the perspective of Farmer cooperatives, commercial farmers, agro-dealers and seed companies

- **Stockists and distributors** can contribute to improving the linkage between seed companies and farmers but need to be trained to provide relevant information on new seeds
- **Radio programs** on agronomic practices (including on seed variety characteristics) and market information already exist for farmers in local languages
- **Seed demonstration plots** need to be located closer to the stock shops
- Receiving climate information from seed companies was perceived as a priority very differently across chain actors (some do not trust the information they received)

Lessons learned on the role of finance in value chain CRM

- Financial services already contribute to supporting CRM by value chain actors, for example:
  - Credit facilitates diversification of income sources
  - Savings provide a buffer when shocks occur
- Capacity to access and use climate and weather information for decision-making is a priority for value chain actors (this needs to be linked to market information)
- Financial service providers also require capacity building on CRM to support their clients and inform their investment decisions
- Better CRM by value chain actors will also benefit financial service providers by reducing defaults on loans

Lessons Learned

Lessons learned on the role of new seeds in value chain CRM

1. Value chain actors are already integrating **climate concerns** in their decision-making process when selecting rice seeds.
   - But various trade-offs involved between climate resilient characteristics and other characteristics (aroma, high value)
2. To reduce the impacts of climate hazards on their rice activities and on their clients, seed companies need to invest in a **combination of options** because actors along the value chain are diverse
   - Example: combine radio programs and demonstration plots
3. **Stockists and distributors** have a key role to play in supporting CRM along the value chains (e.g. info about new seeds, storage) .
4. CRM priority investment of seed companies call for **improved collaboration** among various actors along the value chain (including seed breeders, stockists and distributors, media and other seed companies)

Lessons learned on integrating CRM in agricultural value chain development

1. Climate change impacts the **entire value chain**
2. The **domestic private sector** has a role to play in supporting CRM along agricultural value chains
3. **Integrating climate change** into policies and strategies related to agricultural value chain development is critical for Uganda to achieve its development objectives
4. **SMEs and commercial banks** must be involved in the process of integrating climate change into relevant policies and strategies
5. **Climate information** (including historical observations, forecasts, longer-term projections) is a necessary input for the mainstreaming process

Thank you!

AQUESTIONS & ANSWERS