Workshop on Climate Change Agriculture and Food Security in East Africa

EXPLORING KEY RESEARCH OPPORTUNITIES & DEVELOPING REGIONAL SCENARIOS

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PICOTEAM
Institute for
People, Innovation and Change in Organisations

This report documents the CCAFS Regional Scenarios Workshop - Exploring Key Research Opportunities and Development - held from August 24, 2010 to August 26, 2010 in Nairobi, Kenya. THIS DOCUMENTATION IS MEANT TO BE A REFERENCE DOCUMENT for participants and provides details of what transpired. Essentially all results of the working groups and plenary sessions are reported as they were presented. It is not a synthesis report but a verbatim documentation of the proceedings and outcomes without interpretation.

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Abbreviations

ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
AU	African Union
CAADP	Comprehensive Africa Agriculture Development Program
CBO	Community Based Organization
CCAFS	Climate Change, Agriculture and Food Security
CGIAR	Consultative Group on International Agriculture Research
COMESA	Common Market for Eastern and Southern Africa
EAf	East Africa Region
EAC	Eastern African Community
ECA	Eastern and Central Africa
ESSP	Earth System Science Partnership
EU	European Union
FAO	Food Agriculture Organization
GHG	Green House Gases
ICPAC	IGAD Climate Predictions and Applications Centre
ICRAF	World Agroforestry Centre
ILRI	International Livestock Research Institute
IPCC	International Panel on Climate Change
KFSSG	Kenya Food Security Steering Group
MDG	Millennium Development Goal
NARIs	National Agriculture Research Institutes
NGO	Non Governmental Organization
NR	Natural Resource
PICO	The Institute for People, Innovation and Change in Organizations
REC	Regional Economic Community
R4D	Research for Development
SWOT	Strengths, Weaknesses, Opportunities and Threats
UN	United Nations
WB	World Bank

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Summary

'Climate Change, Agriculture and Food Security' (CCAFS) is a Challenge Program of the Consultative Group on International Agricultural Research (CGIAR). Challenge Programs tackle complex issues of overwhelming global and regional significance. As no single research organization has the ability to tackle such a problem, Challenge Programs bring the complementary skills and expertise of a wide range of institutions to address the issues. CCAFS opens up opportunities to research the interactions between climate change, agriculture and food security. The partnership between the international agricultural research and Earth Systems science communities creates unique prospects for seeking solutions to the problem of food security in a changing climate.

The workshop provided an opportunity for participants to discuss CCAFS theme objectives (risk, adaptation and mitigation) and possible strategies and approaches for achieving them. Participants identified key East African region specific research opportunities within the CCAFS nexus and actions areas. Essentially, there was a need to engage governments to influence policy, design and implement appropriate interventions strategy/plan for engaging in global discourse and actions, e.g. the development and effective use of such instruments as carbon markets. In addition, CCAFS should take stock of other initiatives involved in climate change, and develop strategies/plans for engagement. Attention was drawn to the fact that addressing climate change was not just about provision of access to knowledge, as the results must reach and be used by farmers. It was suggested that early warning systems be early and targeted. Participants felt that CCAFS opened an opportunity for addressing capacity gaps at all levels. Participants pointed out the need to engage communities in the identification of adaptation options. The need for improvement of water productivity, storage and integration with other components of agriculture was emphasized.

The workshop was seen as a first step towards developing a set of scenarios for the East African region that are coherent with global assumptions to ca. 2030, and which reflect plausible agriculture and food security development pathways under changing climate at local and regional levels. Further, it provided an opportunity for participants to identify a team of regional and national stakeholders who would be mobilized and sensitized to climate change adaptation and mitigation issues in relation to agriculture and food security.

Some of the major drivers with the highest level of uncertainties included: globalization; political stability; access to technology; access to land; access to water and markets. The four scenarios identified are summarized in the table below. Tentative names were assigned to these scenarios, but it was understood that firm titles will only emerge as the storylines get developed and characterization of attributes of each scenario begins to solidify. A process for further development of storylines on each scenario was initiated. A group of participants volunteered to continue with the storyline development for each scenario.

The four scenarios identified:

Extent of Regional Integration	**Proactive/Reactive***	
	Proactive	**Reactive**
Regional Integration	*Revitalizing East Africa*	*East Africa Smoldering*
Status Quo	*Hedgehog East Africa*	*EAC timed out*

**Proactive or reactive to: Environment, livelihoods, food security, engagement of the Asian 'tigers' (China and India); globalization*

PART ONE: INTRODUCTION AND SETTING OF THE SCENE

1.1 Background

Climate change is an immediate and unprecedented threat to the food security of hundreds of millions of people who depend on small-scale agriculture for their livelihoods. Climate change affects agriculture and food security; agriculture and natural resource use in turn affect the climate system. The complex and dynamic relationship between climate, agriculture and food security is influenced by economic policies and political economy. However, the relationships between all these factors and how they interact is not clearly understood. The Challenge Program on Climate Change, Agriculture and Food Security (CCAFS) is a 10-year research initiative by the Consultative Group on International Agricultural Research (CGIAR) in collaboration with the Earth System Science Partnership (ESSP) and other partners to facilitate new research on the interactions between climate change, agriculture, natural resource management and food security. CCAFS will in late 2010, morph into the CGIAR mega programme seven (MP7) on climate change. Its initial focus regions are West Africa, East Africa and the Indo-Gangetic Plains. CCAFS activities are designed around four strategic thematic areas: adaptation to progressive climate change; adaptation through managing risk; mitigation; and diagnosis and scenarios for making strategic choices. This report documents the proceedings of the workshop on Climate Change on Agriculture and Food Security in Africa: Research and Development Priorities and Scenario Development held at the Safari Park Hotel, *Nairobi* from the 24th-26th August 2010. A full list of participants is provided in Annex II.

The objective of the workshop was to inform key regional stakeholders about the climate change, agriculture and food security program and seek inputs into the ongoing R4D initiatives in the region, including identifying potential new activities. This meeting provided a platform for participants to explore the priority research and development priorities, as well as opportunities for strategic collaborations to generate new ways of working and to broaden dialogue between science and policy. Participants identified main drivers and areas of uncertainty, and considered a number of potential adaptation options for climate change, agriculture and food security. A significant part of the workshop (2 out of 3 days) was dedicated to discussing plausible scenarios for the Eastern African region

1.2 Opening

The meeting started at 0900 hours, with opening remarks from *Hezron Mogaka*. On behalf of ASARECA, the Climate Change Agriculture and Food Security Programme (CCAFS) and the CGIAR Centers, he welcomed participants to the workshop. *Hezron* informed participants that ASARECA was hosting the meeting, which would explore key research opportunities in relation to climate change, agriculture and food security in East Africa. He pointed out that, consistent with planned CCAFS activities in the region, participants were from Ethiopia, Uganda, Tanzania and Kenya. However, it was hoped that with time and depending on how the process evolved, there may be possibility to expand to other countries in Eastern Africa. *Hezron* asked the participants to feel free and enjoy the ambience at the hotel. He thereafter invited *Eldad Tukahirwa,* ASARECA Deputy Executive Director, to give his opening address.

Deputy Executive Director, ASARECA *(Eldad Tukahirwa)*

In setting the scene, *Eldad* provided an overview of ASARECA, a sub-regional organization which was set up fifteen years ago by the National Agricultural Research Institutions (NARIs), to facilitate the shared vision and goals for agricultural research in the sub-region. He informed participants that ASARECA coordinated and facilitated cooperation in agricultural research to produce regional public goods – networking amongst researchers in the sub-region. In addition, ASARECA facilitates cooperation in the ECA region in scaling out of agricultural technologies and innovations, mobilizing resources for research, and strengthening institutional and individual capacity for agricultural research.

Eldad pointed out that climate change posed a major challenge which required a shared vision on how to deal with. Accordingly, the collective action, coordination and cooperation by all the stakeholders concerned were essential. Ultimately, the building of both institutional and individual capacities, must aim to share the outputs. *Eldad* informed participants that there was a great affinity with ASARECA's being, in relation to what CCFAS proposed to do in the East Africa region. In this regard, ASARECA was pleased to be a co-organizer of the meeting. Participants were encouraged to thresh out issues in depth, which would begin to define paths for addressing the challenges brought about by climate change.

1.3 Workshop Objectives

The facilitator invited *Patti Kristjanson* to explain the background and objectives of the workshop. *Patti* informed participants that she was a member of the CCAFS team and that she is an ICRAF staff member Whereas the participants would hear more about the programme from *Sonja Vermeulen, Patti* pointed out that the CCAFS programme was relatively new, and had been running for a few months. CCAFS was carrying out a series of events with various partners and in various places to try and bring people together around the Climate Change Challenge. The stated objectives of the workshop were to:

- Inform stakeholders about CCFAS and initial ideas;
- Share information on on-going initiatives;
- Discuss program objectives, expected outcomes, strategies and opportunities;
- Identify national and regional partnerships and capacity development opportunities;
- Introduce rationale and process for developing storylines and scenarios;
- Identify actors and actions for further development of storylines.

Patti mentioned that a CD containing a lot of background information was in the participants' information pack. She hoped that participants would be able to use the large volume of information when they returned to their jobs. *Patti* stated that CCAFS was seeking new partnerships and new opportunities to work together in the region. As a result, they needed to know some of the priorities and needs in the region in relation to food security. The workshop would include exercises which involved the development of regional scenarios in day two and three, which *John Ingram* would talk about.

Executive Officer, University of Oxford GECAF *(John Ingram)*

John stressed that the more everybody shared ideas, the more they would all benefit from each other's experiences. He pointed out that the workshop was a start of a process, and should not just be considered an event. Instead, it was *John's* sincere hope that many of the participants would stay with it, and be part of the process. He stated that it was through intense engagement which would build the foundation for teams to work effectively together, take part in policy processes, and build capacity for resource managers and local researchers. *John* emphasized that he saw an opportunity for participants to share their current understanding, as well as their uncertainties, which was what the scenarios are about.

Recognizing the fact that climate change was happening alongside global changes in democracy and demography, *John* stressed the need to begin to explore these range of uncertainties and how they interact, as well as to tease out elements of some plausible futures. He encouraged participants to begin to establish a structure of moving the process forward. Further, a lot of the process was about team building. However, although everybody would not be part of the team, *John* hoped that the outcome of the workshop would enhance communication, as well as help and explain to people that have to make decisions, given those uncertainties. Based on their extensive experience in scenarios, *Andrew Ainslie*, *Polly Ericksen* and *John*, would be responsible for developing the scenario exercise during days two and three of the workshop.

1.4 Workshop Roles and Process

1.4.1 Meeting Process

The approach to the meeting was interactive, allowing room for an open, lively debate among participants in an informal environment. Maximum time was allocated for discussions in working groups as well as plenary discussions, with a focus on going in depth, advancing conceptual thinking, as well as sharing practical know-how.

1.4.2 Facilitation Team

The facilitator introduced PICOTEAM as a coalition of organizations operating in several African countries, as well as in Latin America. He explained that PICOTEAM supported individuals and organizations in their efforts to bring about change and innovation for sustainable development. PICOTEAM focused on fostering participatory learning processes in organizations and amongst stakeholders towards enhancing their performance, creativity and adaptability. They led organizations through institutional reform and change processes and had a proven track record in building the capacity of operational, management and strategic teams to improve organizational and individual performance utilizing a variety of participatory training, mentoring and coaching methodologies.

PICOTEAM envisioned a world in which people and their institutions bring out their full potential and creativity for their own prosperity and for a better society. The services offered by PICOTEAM include: Leadership and management skill

and competency development; Mentoring and Coaching; Strategic Planning; Project/Program Development; Project Implementation Support; Process Facilitation and Workshop/conference organizing – logistics. *Ed* stressed that his role in the workshop was to help participants reach their objectives by managing 'air time' and communication space, allowing all voices to be heard. Thereafter, he introduced his colleague, *Udo Mbeche* who was in charge of documentation of the workshop processes and outcomes.

1.4.3 Meeting co-management

Process Steering Group

Hezron Mogaka
Andrew Ainslie
John Ingram
Kevin Coffey
Caroline Kilembe
Tilahun Amede
Pattie Kristjanson
Ed Rege

A process steering group was formed; the group was tasked with co-managing the workshop, providing feedback on the process and helping ensure that things were on track, recalibrating the workshop program as necessary. It was envisaged that through this process, participants will take an active role; feel responsible for the success of the meeting and take ownership of the outcomes. The administration and logistics team was led by *Hezron Mogaka.*

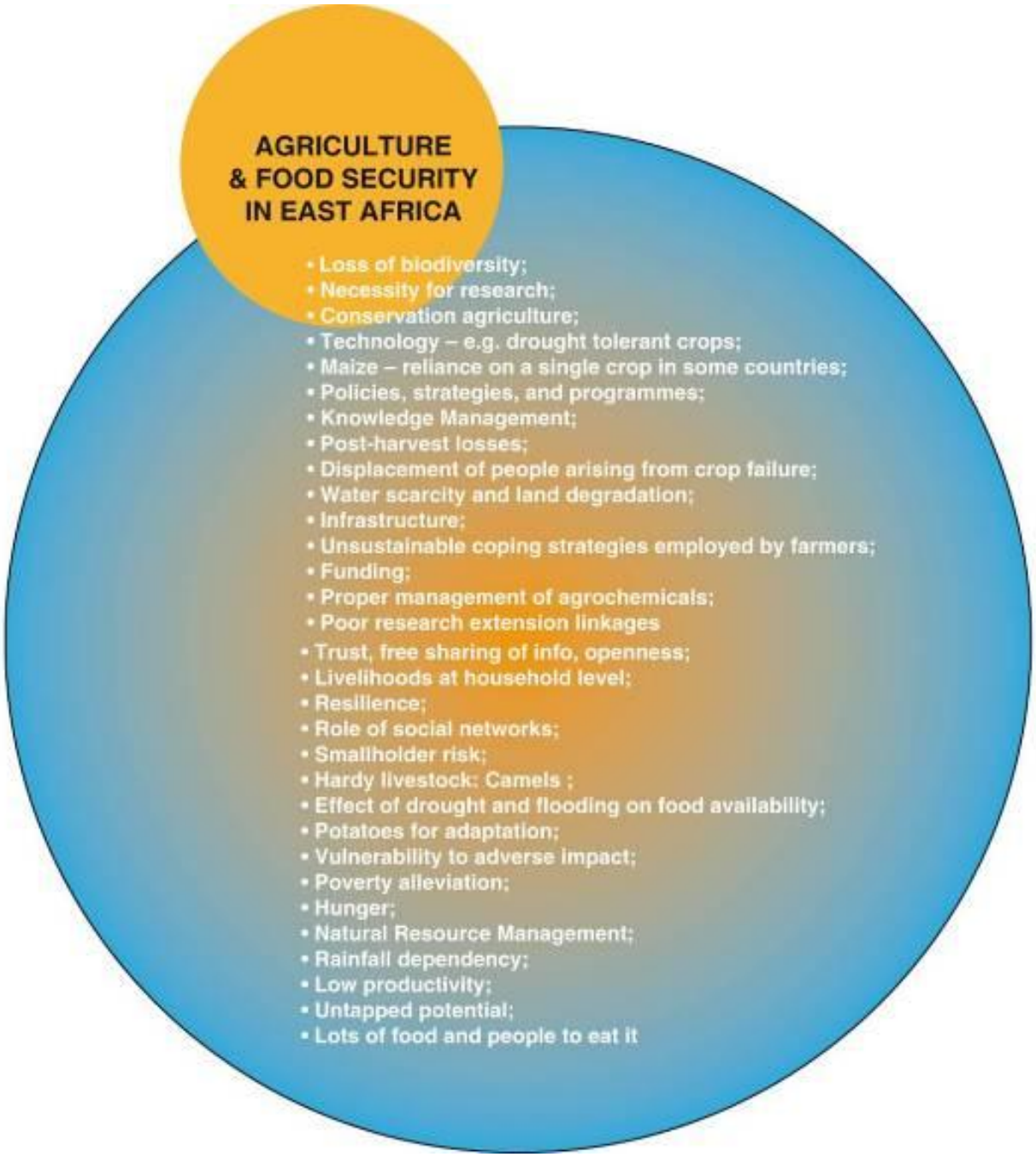
1.5 Getting to Know One Another

Working in groups, participants were asked to get to know each other. The task box guided the discussions.

- Full name, including preferred name
- A word or phrase that comes to mind when you think of agriculture or food security in East Africa.
- Think about the best team you have ever worked on and share 3 things that made it the best or most successful team?

Word/Phrases that come to mind when participants think of agriculture or food security in East Africa (See figure below)

Figure 1: *Agriculture or food security in East Africa*



Participants identified factors that make effective teams (Figure 2)

Figure 2: *Factors that make effective teams*

1.6 Participants' expectations and fears

As part of the introduction task, participants were asked to discuss and put on cards what they wanted to HAPPEN during the workshop (maximum of 3 cards) and what should NOT HAPPEN in the workshop (maximum of 3 cards). The results are in Figures 3 and 4 below.

Figure 3: *Participants Expectations*

Figure 4: *Participants Fears*

Comments/Remarks

Comment: What is the overarching objective of this workshop?

Response: Today is about helping to make sure that the CCAFS programme is not dwelling at an intellectual and abstract level, but that it is responding to key policies. We would like to get input from people who understand the region to ground the programme on the realities on the ground. The next two days are about building scenarios for East Africa; what are the possible ways things may go. The main objective is to form strong partnerships which will help drive the CCAFS programme as it moves on.

1.7 Meeting Programme Overview

Ed presented the programme overview and stressed that as the meeting goes forward, it would be a kind of living agenda that would be flexible, allowing adjustments provide space for emerging issues to be addressed. The workshop programme is summarized in Annex I.

PART TWO: AN OVERVIEW OF THE CHALLENGE PROGRAM ON CLIMATE CHANGE, AGRICULTURE AND FOOD SECURITY (CCAFS)

2.1 Introduction

In this session participants were introduced to the climate change, agriculture and food security program, which included ongoing R4D initiatives in the region to date. The key research opportunities in the areas of management of current climate risk, adaptation to future climate change and mitigation were identified, as well as possible areas of collaboration. A summary of the presentations which were made are available in Annex III.

2.2 Issues emerging from presentations

Climate Change, Agriculture and Food Security: Current CGIAR-ESSP Challenge Program & Proposed Mega Program *by Sonja Vermeulen*

Sonja introduced the CGIAR Challenge Program on Climate Change, Agriculture and Food Security (CCAFS) as a 10-year research initiative launched by CGIAR and the Earth System Science Partnership (ESSP). She mentioned that CCAFS was not a legal entity but a research program; a network that is growing all the time. Many of the participants may eventually be involved in the collaboration. The overall goal of CCAFS is to overcome the additional threats posed by a changing climate to achieving food security, enhancing livelihoods and improving environmental management. CCAFS is building on what people are already doing in the region and all over the world on these issues. Sonja's presentation is in Annex III a.

Comments/Remarks

Question: There are organizations in this room who are partners involved in the development of CCAFS. What are the rest looking out for? Is it how to engage them or what to bring on board? Is linking people and linking farmers with the carbon markets a part of this programme?

Comment: A lot of the discussions on climate change are at a global scale, yet some of the effects are actually solutions in some regions. For example, the use of fertilizer in Africa is an important tool in

mitigating climate change, and this is not reflected in your presentation.

Comment: The Consultative Group on International Agricultural Research (CGIAR) has a significant presence, but ownership is not coming out.

Ed: The three areas I hear you requiring clarification are: programme objectives; clear understanding of roles of participants in the process; and how we move forward from here. These will be flagged, and discussed after *Phil's* presentation.

Integration for Decision Making *by Philip Thorton* and *John Ingram*

Phil defined risk, adaptation and mitigation, and described the importance of the research theme on integration for decision making. Activities outlined included vulnerability mapping, databases and tools and the evaluation of outcomes. *Phil's* presentation is in Annex III b.

John explained that there were two types of scenario outputs. The first one consisted of formal outputs, which were sets of storylines developed around consensus. These storylines set the boundaries for what is possible from the adaptation point of view. The storylines help the CCAFS programme to define the bounds of possibility. The second output was based on a process of engagement which led to team building and partnerships. It involves the research teams which have a contribution to make and will also benefit from it. *John* stressed that whereas there were other collaborators who were not necessarily at the workshop, they would still be increasingly involved in the process, such as representatives of retails and the distributors of food storage. He stated that CCAFS would be looking to invite and engage them. The outcomes would be a whole range of different benefits including team building; communication methods to help the policy community understand the climate change phenomenon; as well as helping the research community understand how complicated the policy arena is. It was made clear that on the following day, participants would begin the process of developing these scenarios.

Towards Solutions: Strategies for risk management, adaptation and mitigation *by Patti Kristjanson*

Managing climate risks was the key message in *Patti's* presentation. This can be done by helping develop, and share existing field, farm and community level risk management strategies that buffer against climate shocks. In addition,

developing tools and strategies which avail information for managing risk via food delivery, trade and crisis response was very important. Participants were given a description of risk, adaptation and mitigation research thematic areas according to the CCAFS programme, which included their objectives as well as possible risk management examples in the region. Patti's presentation is in Annex III c.

Comments/Remarks

Comment: Currently, China is examining carbon implications of adaptation pathways, in particular the effects of low carbon pathways. Similarly, EAf may be looking at something different, like increasing fertilizer use or other kinds of yield advancement. Our theme leader on mitigation sees this as the key hypothesis for this area of work, which is sustainable intensification.

Comment: Land degradation and biomass growth for feed is very important, but for that to happen you must start with some sort of nutrients.

Ed: Context specificity is a big issue for climate change and we should not generalize.

Question: Is there anything on capacity building in risk mitigation and risk adaptation? How many breeders do we need to train to ensure that we have all the varieties we need?

Response: When we brainstorm on ideas or things which are needed, it is not purely about research rather it is about capacity needs, knowledge management needs as well as communication needs. Thus, we would like you to raise these issues.

Comment: In Ethiopia there is an ongoing debate about the source of energy for domestic use. There is a high demand for firewood and charcoal in the urban areas. What are the options to supply energy, to reverse the pressure and demand on biomass or forest areas?

Comment: The government of Tanzania is developing a national forest strategy document. They have carried out extensive stakeholder consultations, and have come up with a long list of challenges such as governance. How do you ensure that the money that comes from carbon markets trickles to the grass-root level? These are some of the issues which have to be addressed.

Comment: It is very important to think about policy harmonizing and frameworks (rules of engagement) in the carbon trade issue. Kenya is trying to develop a framework for carbon trade. Policy harmonizing relates to the energy demand. We have cases where one Ministry says uproot the gum tree, and another Ministry says

the reverse; that is why you need a harmonizing Ministry. Climate change did not just happen, the challenge is what are we doing with climate variability which is happening and is always happening? If you can deal with climate variability which you already know, the climate change challenge will be easier to engage.

Ed: **What I am hearing:** There are conflicting policies in the different arms of government, and if you are already adapting to climate variability and doing something about it, then getting engaged in climate change will be less challenging. There are underpinning institutional areas which need to be clarified. The issue is more about how do we come in. I would like us to have a discussion on that.

2.3 Differentiation of participants into stakeholder categories

The facilitator led the participants through a differentiation exercise whose purpose was twofold. First, the exercise would assist in mapping the stakeholder representation, whose contributions had implications on the workshop outcomes, including the implementation of those outcomes. Secondly, it would also bring out some issues that require more in-depth discussion to reach consensus. In order to get a feel of who was represented at the meeting and how this may have implications on the discussions, the participants were asked to move and group themselves according to the different categories, as indicated below:

- CGIAR
- NGOs/CBOs
- NARIs and University
- National Government Ministries or Departments
- International Development Agencies
- International Research Consortium
- Sub-Regional (Research) Organizations

Some observations

Ed: What do you think is happening with regards to the composition of the people in this room? From the CG-Centers, Regional programmes, government agencies, NGOs, CBOs, to international climate change outfits, what hits you?

Comment: When we are talking about the grassroots we are talking about broad organizations. How do we engage and interact? While it desirable to have all stakeholder categories engaged, it is often difficult to have productive discussions involving the entire range. It is hard to get the two extremes (e.g. farmers on one end and international agencies such the World Bank, FAO, etc) to engage meaningfully in the same room. Sometimes it is better to have separate discussions, bringing specific stakeholders at appropriate points.

Ed: Farmers are also quite variable in interest and capacity, and it is not easy to get an accurate and meaningful representation. That in itself is a challenge.

Comment: The basket is too small. It is a good mechanism to influence the process, thus the next engagement should have more National Agriculture Research Institutions (NARIs), and should go beyond universities and research institutions. Universities are also not well represented. There is also a gap in the presence of policy and decision makers.

Ed: There is also the issue of appropriate. Sometimes we have a token person from a Government Department and claim that policy makers were represented; we need to ask if the right 'policy-makers' were really present.

Comment: The private sector is absent. In Tanzania the breweries and consumers of water in cities contribute financially to support those who live and manage the water catchment areas.

Ed: There are other omissions, such as agro-business and others who are on the production and consumption chain. However, we can see that many stakeholder categories are represented – better than many such meetings. Nonetheless, the private sector is missing.

Comment: I do not think there is any one process that can represent a very diverse group of participants. We have some great NGO partners who can help us with what is the appropriate process to engage farmers and that sort of thing.

Response: You do not go to the farmers and businessmen individually. There are umbrella bodies like private sector foundations or farmer associations which can represent these stakeholder groups.

Comment: The outputs of this workshop can be informative to policy makers.

Ed: Given what we have just discussed, how do we ensure that those who are not in this room are engaged? What are the roles of the people in this room? How are they engaged? We can now go back to the issues raised earlier: Firstly, you called for the clarity of programme objectives; Secondly, you would like a clear understanding of the roles and ownership dimensions of this programme. Lastly, there is need for a clear understanding of how we move forward from here. Can the process drivers of this meeting clarify the roles of the different stakeholders as we move forward?

Response: What we have been trying to do is to think a little differently about how we work and engage with the diverse groups in this challenge. You are here because you are interested in this topic and you want to contribute in this process. The scenarios exercise is a part of it; you will engage, get some ideas and take some of those ideas back to work with you. That is why we are doing it in a brainstorming session this afternoon. For instance, what if we challenge CCAFS to put most of the resources into capacity?

With regards to the roles of all the people getting involved, what is **this thing** and who owns it? The CCAFS programme will become clearer as we proceed. Likewise, the people who buy into the conversation and the delivery of the research become the owners of it. It is not owned by the University of Copenhagen (where the secretariat sits) or by the CG-Centers. This workshop is part of becoming engaged in the process.

Comment: CCAFS is a virtual network of people and there is a programme to be implemented, however it is still being worked out with different people in this region.

Ed: I hear one of the responses is that: You have been given an opportunity to be here, and this will spell whether or not you want to be engaged in the programme.

Comment: What are the priorities of the EA region? How are we going to align this with the policy decisions so that they can be integrated with the process?

Ed: Let me try to summarize what we have heard: There are other initiatives that exist, and we should be aware of them and see how what we are doing fits into it. The objectives are going to be clearer as we move forwards. Ownership is a result of your engagement

which will lead to roles, which should be a lot clearer at the end of day three.

2.4 Group work on CCAFS theme objectives

Working in groups, participants were tasked with discussing one of the themes: risk, adaptation or mitigation. Secondly, they identified whether the objectives as presented were applicable or relevant for the region, giving reasons why or why not. Thirdly, participants listed what they saw as the key R4D gaps and opportunities in the region for each of the themes.

Objectives of CCAFS Risks Theme

1. Help develop and share existing field, farm and community-level risk management strategies that buffer against climate shocks.
2. Develop tools and strategies that help us make advance information available for managing risk via food delivery, trade and crisis response
3. Provide knowledge, tools and evidence to enhance climate information and services to meet needs of farmers and other agricultural decision makers

Participants identified the following risks…..

- ❖ Food insecurity
- ❖ Conflict
- ❖ Increasing vulnerability
  - land degradation
  - Extreme events
  - Diseases
  - Pests
  - Impact of humanitarian relief on sustainability of the system

Participants agreed that effective institutional policy frameworks are needed for preventing and responding to shocks or risks. This includes community or cultural framework for livelihoods and risk management. Much is happening on the ground in the East Africa Region which should inform planning for risk research.

1. In response to the first objective, initiatives are in place for information sharing and risk management that need to be identified, evaluated and synergies, gaps identified, particularly government, NGO e.g. KFSSG (Kenya Food Security Steering Group); Vulnerability assessment and mapping; and Kenya disaster response team (Office of The President). In relation to the impact of humanitarian relief, the programme should consider the following:
   - Does it work? (i.e. timeliness, representation, etc.)
   - How does it impact the long-term sustainability of the food system?
   - Developmental relief
2. In response to the second objective, participants highlighted early warning systems:
   - Public government capacity to use information
   - Decision making inertia
   - Actor gap between early warning and action
   - Policy reform
3. High rainfall events
   - Water storage capacities at multiple levels
   - Flexible/responsive marketing systems

Participants emphasized that it was not about providing forecast information, but rather it was about increasing capacity to use and benefit from that information

- packaging
- Resources framework – knowing where the resources are and what they are.
- Skills

Objectives of CCAFS Adaptation Theme

1. Together work on strategies (breeding and management) for future climatic conditions, variability and extremes, including novel climates.
2. Enhance the use and conservation of species and genetic diversity (crops, livestock, fish, trees etc) for increased resilience and productivity.
3. Enhance adaptive capacity – identifying where changes in varieties, crops, livestock species will be needed and how best to help smallholders adjust and diversify.

The discussion on CCAFS adaptation objectives was divided into two groups.

Sub group A made the following contributions:

Adaptation Group A

1. Objective 1: The group agreed that the theme objectives were relevant. However, objective 1 needs to be expanded to cover other strategies beyond breeding.
2. Objective 2: The group agreed that it was important to enhance the use and conservation of species and genetic diversity for increased resilience and productivity due to the following reasons:
    - Region is vulnerable
    - Food insecurity still high
    - Increasing demand for food
    - Large percentages of communities in the region are small holders.

Key R4D gaps/opportunities

- Data inadequacies (quality, inconsistency) both spatial and temporal, in meteorology, yields, productivity, etc;
- Dissemination of climate/research information to communities;
- Underutilized crops (some times termed 'lost crops' in Africa);
- Incorporation of knowledge in management and conservation;
- Diversification of crops/livestock;
- Conservation of biodiversity;
- Capacity building (researchers, farmers);
- GMO concept.

Comments/Remarks

Question: To which group is the capacity building targeted at?

Response: There are so many researchers who do not appreciate the value chain. They need to incorporate risk issues in their risk design. Farmers need to understand adaptation, as well as the parameters of adaptation, so that they can be able to include these in their livelihood strategies.

Sub-Group B on Adaptation

Participants pointed out that ….

- All objectives are relevant but should be rephrased to make them clearer.

- Objective 3 should be broadened to support disaster management by farmers and supporting agencies.
- There should be additional objectives to address policies and governance.

Key Gaps R4D

- Emerging pests and diseases;
- Build capacity for junior researchers (breeders and agro-climatologists);
- Inadequate information on the impact of climate (other than rainfall) on smallholder farming systems;
- Forecasting and weather predictions are too generalized;
- Indigenous knowledge and cultural beliefs and practices have not been captured;
- Old agricultural zones have not been updated.

Opportunities

- The wealth of indigenous/local genetic diversities for both crops and livestock available in Africa;
- Available capacity from existing institutions on climate related issues e.g. ICPAC, NMA etc;
- Existing farmer group/organizations that can be integrated into scientific R & D;
- Availability of a range of technologies that can reduce the impact of climate change;
- Enabling environment for harmonizing policies across the region e.g. EAC/CAADP/ASARECA;

Comments/Remarks

Comment: Adaptation is about a lot more than generating resources. Has a decision been made, or is it still merely a candidate under consideration in the programme?

Response: Not all the research team could be here. We do not mean to stress the genetic side of it too much, so intervention areas go beyond the presentation.

Comment: CCAFS is supposed to be working on the intersection between agricultural science and climate science, which means we will not be doing breeding, but we shall be linking with other people who do breeding. We can contribute by identifying the limits in cropping systems, current cropping varieties, and helping the

breeders' better plan in the future. The neglected crops idea is something that is good which we should take on because there are a lot of opportunities. These are the niches which can feed into the genetic side.

Ed: The interface between agriculture and climate change is where the niche lies. Addressing the issue may come from breeding or other interventions

Comment: I look at these three as physical things which one would do with regards to changes in practice. Using existing things differently is another thing. The third thing is actually making interventions.

Comment: We are still going around in circles. The most important dimension of climate change for me is that there is either too much water or too little water. How can we manage our water better for short term and long term risks?

Comment: All adaptation measures should be subjected to social and environmental impact assessments. Take for example irrigation, a successful irrigation scheme may be beneficial to one community but may have serious implications on communities downstream.

Ed: Therefore what you are saying is that there is need to look at the impact of the actions you are taking, beyond just the geographical area you are examining?

Objectives of CCAFS Mitigation Theme:

1. Inform decision makers about mitigation impacts of agricultural development pathways and options for low carbon livelihoods;
2. Develop better ways to measure emissions from different farming systems and landscapes, and to monitor, report and verify them;
3. Understand how smallholders and vulnerable groups can participate effectively in carbon markets and benefit from their hard work that helps mitigate the impact of climate change.

Participants identified the following pathways and options for carbon livelihoods (mitigation)…..

1. Inter-sectoral harmonization of policies on green house gasses (GHS);
2. No agreed international framework for carbon trading;
3. Carbon markets should add value to agricultural projects and other objectives, e.g. increasing soil fertility, etc;
4. Means of verifying the amount of carbon sequestered in soils;

5. Limited methodologies for measuring the amount of carbon sequestered in the agricultural sector;
6. Thinking of other environmentally friendly activities e.g. beekeeping in the forests that would lead to better management of the agro-systems;
7. Focus has been more on the supply side without guarantee of the demand for the amount of carbon sequestered;
8. Weak benefit-sharing mechanisms;
9. Other environmental services e.g. water;
10. Capacity building and knowledge management.

Comments/Remarks

Comment: Each country must put in place a national policy framework and make rules and governance structures which will be a basis for carbon market.

Ed: Overall, from these discussions, what are the things which have hit you as the main things which need to be emphasized? Let us look at some of these now.

Key points from Group Work

1. Need to engage governments to influence policy and actions (incl. providing research-based policy evidence); need for research into how decisions are made by governments;
2. Call for East African governments to get together and develop strategies/plans for engaging in global carbon market;
3. The program should take stock of other initiatives involved in climate change and develop strategies/plans for engagement
4. Improvement of water productivity, storage and integration with other components of agriculture;
5. Should we introduce adaptation options top-down or identify options with communities and scale out options so identified;
6. Addressing climate change is not just about provision of access to knowledge; results must reach and be used by farmers;
7. Strategy for addressing capacity gaps – at all levels;
8. Under-utilized crops provide opportunity for adaptation to climate change;
9. Early warning systems/interventions should be: a) early; and b) warn – hence must be targeted;
10. There are many opportunities and gaps: priority-setting will be critical.

2.5 Decentralized Partnership Network on Climate Change, Agriculture, and Food Security *by Moushumi Chaudhury* and *Kevin Coffey*

Participants were introduced to a network analysis or mapping exercise which would assist CCAFS in building a knowledge platform in East Africa. The presentation given by *Moushumi* and *Kevin* emphasized the difference between centralized and decentralized networks. A quick example of IRI-Columbia Network was presented, including four uses of a decentralized network map. The presentation is in Annex III d. A questionnaire was handed out to participants. The questionnaire (see Annex III e) served to collect information on the collaboration/partnership network represented in the workshop. The purpose was; 1) to demonstrate the network mapping approach; and 2) map the extent of networks that exist in the region. Results of the analysis were presented on day 3 (see section 4.3 below).

Comments/Remarks

Comment: We all work with a lot of people in collaborative process. The question you are being asked is if you think about the challenge we are talking about, who are the key collaborators that you are now working with?

2.6 Open Space Discussion

Participants were invited to an open space discussion, in order to share information on ongoing initiatives on who was doing what, where related to climate change, agriculture and food security R4D in East Africa. Working in country groups, and using maps as a reference, participants examined the criteria provided by CCAFS in the site selection process, and gave their input.

2.7 Clarification on Research Modalities

Sonja: Several people have asked questions about research modalities. Much of the research funding under CCAFS is going to be controlled at the regional level, and therefore until our Regional Facilitator, *James Kinyangi* is in place, decisions cannot be made. There will be some key long term research partners, both agenda

setters and implementers of the research. ASARECA will be under this umbrella, and others will be established as we develop. By 2011 you should be able to see where the investment is targeted and who the key partners are. Today is not a meeting about defining research partners, we have not developed our modalities far enough in order to answer that. However if you are interested, kindly keep in touch with us, and once *James* is on board, he will be the key person to approach.

Ed: To what extent will the regional people be involved in co-creating the process in the region? Will they just be consumers?

Response: The Regional Facilitator has this title because of the vision, to facilitate the process under co-partners.

Comment: We have not been very good in communicating research findings to the policy makers. We need to think about a strategy to make an impact on the ground, and the way people operate; we need an effective strategy to engage policy makers in these kinds of processes.

PART THREE: DEVELOPING CCAFS SCENARIOS

3.1 Introduction

In this session participants were introduced to scenario development and analysis within the context of the CCAFS programme. The sources of major uncertainties and knowledge gaps were identified, as part of a process to establish scenarios which reflect plausible agriculture and food security development pathways under changing climate at local and regional levels. The following presentations were made:

- **What are scenarios and how can they be helpful for thinking about agriculture and food security in the future?** *by John Ingram* and *Andrew Ainslie*
- **Millennium Assessment Scenarios** *by Polly Ericksen*

3.2 Expectations of the overall scenarios project within CCAFS

The key expectation of the overall scenarios project within CCAFS was to improve the assessment of the spatial and temporal vulnerability of agricultural and food systems to climate change at the regional level. Whereas four participants had been involved in scenario analysis at some stage, the main expectation of day two, as stressed by *John* was to help everybody get on the same page in terms of understanding what scenarios was all about. This included the types of scenarios and their uses, how they were developed, including what one could get out of them. *John* envisaged that by the end of the day, all participants should be comfortable with scenario analysis, and begin to map out three to four scenarios for the future.

Regional Scenarios

Plenary: What are scenarios and why are we doing them?
Working Groups: What are major driving forces for food security and agriculture/land use in EA? Major uncertainties?
Plenary: Report back and agree on major drivers and uncertainties.
Working Groups: Establish 3-4 plausible futures for EA food security and agriculture/land use.
Plenary: Report back and agree on 3-4 plausible futures.

It was made clear that this was the start of a process, and not just a one off workshop which would deliver a polished product. There would be a follow up meeting as well as a period of work in between. By the end of this workshop, the process drivers hoped to establish a strong skeleton for plausible future for food security and agriculture in East Africa, as well as identify some individuals who would take the process forward, and work with it and get full ownership of it.

3.3 What are scenarios and how can they be helpful for thinking about agriculture and food security in the future? *by John Ingram* and *Andrew Ainslie*

According to the Millennium Ecosystem Assessment (2005), scenarios are plausible and often simplified descriptions of how the future may develop, based on a coherent and internally consistent set of assumptions about key driving forces and relationships. Scenarios are not forecasts of future events, nor are they predictions of what might or will happen in the future. The full presentation is in Annex III e.

Issues arising from the Presentation

Question: If scenarios are not forecasts or predictions, what are they?

Response: They are stories of the future. They are plausible storylines of what might or could happen. It is not to say what will happen. They are technical definitions; they are a series of plausible stories about how the future may unfold. They are driven by expert opinion, and that is where we are all involved. Once we establish what some of the uncertainties are, we begin to cluster ideas around these uncertainties.

They are good for letting you explore a question which is of interest. Scenarios are driven by key sets of assumptions, which allow us to explore how things may be different, because of uncertainties. It lets you take forward a world view for a set of assumptions, based on what would happen if the world unfolded in a certain way.

Question: How much does it rely on the past? How does it link the past and future?

Response: If one accepts that the stories we are developing are based on expert knowledge, as our knowledge is based on the past. They start today, and the conditions today have been determined by the past. Scenario is used by different people in different ways, but the purpose is to get us on the same page on, as to what we mean by scenarios in the context of CCAFS.

Question: We are familiar with using models for predictions and projections. How then can scenarios not be predictions or projections?

Response: There are discrete methodologies for each one of them, and we can look at the examples of global level scenarios. Indeed, there are very many ways of doing scenarios, and every exercise takes a different approach. You can have a scenario that is a purely qualitative analysis or a quantitative analysis, or have a blend of both of them at various points of the exercise. The qualitative parts help to frame the debate, and the modeling comes later on. Newspapers present scenarios as normative ideas of what is good and bad. In the case of plausible futures, some will look better than others, but they will have tradeoffs. The storylines we seek to develop will not say this will be the perfect future, and the other will be a disaster. We have a few examples which I hope will help,

and if they do not we will return to your questions at the end of this presentation.

Millennium Assessment Scenarios and Food Production *by Polly Ericksen*

Polly presented an example of a global-level scenario called the Millennium Assessment, including scenario storylines namely: global orchestration; order from strength; adapting mosaic and techno garden. See Polly's presentation in Annex III f.

Question: From any of the examples *Polly* has presented, does anybody think any of the plausible futures are impossible?

Question: How is it used?

Response: This presentation is about a scientific exercise used by the Millennium Ecosystem Assessment (MA). It generated a lot more research on the issue of tradeoffs, and created a research agenda that has stimulated us in being here. It answers questions like how are you going to manage increasing agricultural productivity? The other link is how much the scenarios are taken up by policy and decision makers.

Comment: Examples of scenario exercises were designed for specific purposes. We are talking about agriculture, climate and food security in East Africa; we felt it was important to put on the table the latest examples, and argue the case.

Question: Agriculturalists hope that things will change for better, and resources used efficiently, so that 2030 will be something else. Have you considered that in your scenarios of climate change?

Response: What is coming out is that there is very little chance that we will be able to mitigate this effect. If you talk to people who are dealing with climate change at the IPCC level the global averages of surface warming are almost zero. What happens after, what we decide to do with the emission projection is entirely up to us. These have nothing to do with the impacts of agriculture, but are projections on emissions.

Ed: We assume that we take this as given, that what *Phil* presented earlier is the situation we have with regards to the climate in the future. By 2030 there will not be those big differences, and there are no assumptions.

3.4 Group Work on Major Driving Issues and their Uncertainties

Working in groups, participants were tasked with identifying the major driving issues and their uncertainties for East Africa's food security and land use. The task box below guided the discussions.

What are the major driving issues and their uncertainties for EA food security and agriculture/land use? Identify 3 sets of top 5 drivers and nature and magnitude of uncertainty.

Comment/Remarks

Ed: Kindly unpack what the drivers and uncertainties are.

Response: What has gotten us to where we are? What are the major drivers of agriculture, food security and land use? What are four things which determine food security in EA? What are the key things which have gotten us where we are in terms of land use? Does the EA community really get going such that pastoralists can get their livestock moving around?

Comment: How do you want us to measure the uncertainties?

Response: It is qualitative at this stage. Say we had population as a driver, and then we would say we are pretty confident that the numbers will go up.

Question: Suppose you ask slightly different questions will the scenarios be different?

Response: Yes, absolutely. The scenarios would be different if the stakeholders were different. You know the key issues that you want to explore to achieve the CCAFS goal. Due to the fact that there are some unknowns then it is an opportunity to see what will happen with the plausible futures.

Ed: Just to remind you all: We are not looking for the most correct, desirable or acceptable future.

Question: How often should we revisit the scenarios?

Response: Over the next year or so we hope that this will produce all the outputs. Over that period of time there will be a chance to revisit the storylines and make corrections if you like. But we are talking about a visioning for the next twenty years, what we need to do is think about getting the best we can today at this workshop about exploring the plausible future given these sets of assumptions.

Comment: We are not going to develop four storylines and then tick one and say that this is true. That is not the point of this exercise. We want to discuss how the future may turn out, and it is the energy and creativity extracted in this process that is important.

Report Back: Group A

Participants identified key drivers for future food security and agriculture or land use, which they categorized into key, medium and low in terms of their magnitude (See Table 1 below).

Table 1: *Key drivers for future food security identified by Group A*

Key drivers for future food security	
Main drivers	• Land tenure • Future political stability across the region • Globalization and its effects
Demography	• Population growth • Urbanization
Political/Social/Economic	• Political and social stability • Human health – HIV/AIDS, malaria • Donor pressure and change in policies • Change in geographical politics
Economic trade policy	• Changes in subsidies • International trade • Regionalization in the EAC • Intensification • Changing food prices
Technology	• Use of and access to technology • Changes in energy prices • Investments in Research
Physical Environment	• Investment in physical infrastructure • Pests and diseases • Irrigation
Secondary Drivers	• Poverty/Income • The role of the private sector • Land degradation • Role of small holders

Report Back: Group B

Participants identified energy provisioning, regional markets and droughts and floods as the main drivers (See Table 2 below).

Table 2: *Key Drivers for future food security identified by Group B*

Key drivers for future food security	
Main drivers	• Energy provisioning • Regional Markets • Droughts and Floods

Secondary Drivers	• Pastoral Systems • Cooperation of regional water bodies (Lake Victoria, Nile Basin) • Food type plans to increase staple crops • Fewer farmers • Donor generosity • The regional market as well as Africa is becoming more organized and politically assertive • More processed Food • Land tenure security • Private sector in agricultural technology • Increased regional infrastructure

Report Back: Group C

Participants in group C identified technology and demography as the main drivers of food security and agriculture/land use in EAf (See Table 3 below).

Table 3: *Key drivers for future food security identified by Group C*

Key drivers for future food security	
Main Drivers	• Technology • Demography
Legal/Regulatory Drivers	• Politics • International Patents • Subsidies • Global conventions • MDGs • Feed Safety Regulations • International agreements that constrain development for transboundary resources
Demography	• Population increase • Migration • Decreasing arable land
Political	• Governance

Economic	• Industrialization • The private sector • Regional integration • Markets • Income level • Infrastructure • International Integration • Food Aid
Technology	• New improved seeds and other inputs • Land and water technologies • ICT • biotechnology
Environment	• Temperature Variation • Topography • Water Scarcity • Desertification • Agro-biodiversity • Aquatic resources • Natural disasters • Rainfall variability • Land degradation
Social Drivers	• Lifestyles • Beliefs • Practices

Comments/Remarks

John: You have identified governance and political stability; land tenure/resource tenure and access to resources, how is that going to change? Everything that has been said is very important, and directions of their change are known. The uncertainty is greater for some and lesser for others. We want to explore the plausible futures given that the drivers can go this way or that way. It is a question of how we distill may be three or four of those major drivers, where we just do not have a feel of how it is going to happen. The two that struck me were governance (political stability) and land tenure. Were there any others that people noticed as common across the working sessions?

Ed: If you were given time to think about importance and uncertainty would you consider that to be a very difficult task? We can from

this long list identify the main drivers as political stability, resource tenure, globalization and access to technology?

Following the above discussion, the key drivers with the highest level of uncertainties were identified as……

- ❖ Globalization
- ❖ Political Stability
- ❖ Access to technology
- ❖ Access to land
- ❖ Access to water
- ❖ Markets

3.5 Group Work on Plausible Futures for the East African Region

Working in groups, participants were, in this second round, tasked with establishing two to four plausible futures for the East African Region. It was made clear that flexibility was necessary in the approach. Also, participants needed to think about the key messages coming out of this, and identify the similarities in the storylines. Thereafter, they would begin to flesh these out. The task box below guided the discussions.

> Establish 2-4 plausible futures for East African Region (EAf):
> What are the major features of each scenario?
> - skeletons for 2-4 scenarios
> - names for each scenario

Report back: Group A

The group identified **governance** and **political stability** as the major drivers. If disintegration occurred for some reason, a host of things would happen. One pathway was no change; where there was much stronger political stability and generally things improve. Either government stayed the same or government gets better. Another major area was the interaction with the global community. Either East Africa basically looks inwards and concentrates on East Africa or the region looks outwards and engages with the global scene. The following scenarios emerged from this:

Scenario 1: *'Ugali'*

Governance remains the same, EA looks inwards: Over the next 20 years the climate will change and there will be over 150 million people in the world, but those are not uncertainties. The sustainability is questionable, access to land is likely to go down; increased worry about elections, conflicts on resource utilization – the system is being run the same way, but being exposed to greater stress.

Scenario 2: *'Nyama Choma'*
Governance improves, but there is still a notion of cultural identity: The EAC fully working, with fully functional governments across the region, and land tenure and the institutions are working and more regional accords come to play.

Scenario 3: *'Carbon Markets'*
Regional emphasis: More concentration on regional markets; common currency, common markets for various products; investments are coming in and also the possibility of the cultural identify of EA is strengthened. In this scenario government gets a lot better and links to the carbon market.

Scenario 4: *'Big Mac'*
Global Emphasis: Access to common markets; Opportunities for movement of people and ideas, improved communication and better technical transfer etc. In this scenario government stays the same and links to the international world.

Report back: Group B
The group identified the most important driving factors as integration and governance. The table below summarizes the scenarios identified.

Table 4: *Scenarios identified by Group B*

Scenario 1: Unstoppable East Africa
• East African community is highly integrated, functioning well. There is political instability within some countries, but the EAC is able to intervene. There is expanding markets and market opportunities –

increased role for the private sector, increased value addition;
- Easier movement of goods;
- EAC has ability/capacity to deal with food crisis and natural disasters;
- Stronger negotiating power international trade organizations; climate change talks etc;
- Can finance its own infrastructure + its upkeep

Scenario 2: East Africa Timed Out

- The EA community is collapsing;
- The forces of globalization are stronger than ever but regulated by some polarization between countries in the region, in terms of global alliances and regional conflicts;
- Inefficient resource utilization – water, infrastructure, energy – more water depletion; domination by some countries;
- Conflicts between different nationalities who had settled in different countries;
- Some countries become dominant – Kenya and Ethiopia – individual countries may innovate and progress well, but most are left behind;
- Poverty levels will be very high;
- Limited foreign investment;
- Private sector will run away – shrinking markets;
- Negotiation power of the region has lessened significantly.

Scenario 3: Markets on a Rampage

- There are expanding markets and market opportunities;
- There will be market dominance by the Asian Tigers (China and India) difficult to other foreign and locals to enter and compete;
- There will be more access to appropriate technologies and skills and transfer knowledge;
- Land, water, labor productivity for resources, access to land;
- Decrease in employment for locals;
- Less regional cooperation;
- Increased local skills;
- Increased income and taxes;
- Weakened regional cooperation;
- More corruption, less stability, dictatorship tendency;
- Weakening policies, restrictions;
- Influx of substandard products;

• Over exploitation of natural resources

Comments/Remarks

Question: What is the assumed relationship with the international community in the case of the first scenario by the group?

Response: We assumed that the region will not separate itself with the global community, it will continue as it is. Nonetheless, the changes will be in the region.

Comment: Governance is part of regionalization. If there is bad governance there will be segregation. If there is good governance there will be strong regional integration.

Report Back: Group C

The group identified that political stability was critical, and so was regionalization. They examined whether governments were proactive about solving the issues related to access to land and water, and looked at how fast markets developed. The following table illustrates the storylines which emerged.

Table 5: *Scenarios identified by Group C*

Scenario 1: Blossoming
❖ Political stability is being achieved, and it is not just business as usual, there is an improvement. ❖ Regional integration happens and the EAf government is formed. ❖ Access to water, land policy issues is sorted out, and there is rapid regional market development.
Scenario 2: Dooming
❖ Increase in political instability: Somalia unresolved – triggers civil and international unrest. ❖ There is no regionalization. ❖ Limited improvements in access to water. ❖ Limited resolution of land issues. ❖ Only weak national markets
Scenario 3: Struggling
❖ There is political stability but the egos of the EAf leaders prevent them

from having regional markets however, there is cooperation on water.

- ❖ National land policies sorted and implemented.
- ❖ There is slow regional market integration (bilateral)
- ❖ National markets develop

Scenario 4: Not born yet

- ❖ There is political stability and regional market integration. However, no cooperation on access to water

Comments/Remarks

Ed: Think about the similarities, and where there is internal consistency in the logic, as we try to get the best out of the mix. What hits you as some fantastic scenarios which you do not want to lose?

Comment: Political stability is key factor which determines all the scenarios existing in EAf. Second group focused on regionalization and was embodied in the discussion. We should concentrate on stability as a significant driver and place the similarities then we can come up with scenarios.

Comment: We were doing this with CCAFs, thus I was expecting to see more linkages to CCAFs agenda. In the first two groups, the scenarios hinge more on markets and not necessarily on food security. The third group at least mentioned the issues on land and water which are linked to the CCAFS agenda.

Response: That is a valid observation. What we accepted yesterday, is that whereas there is a climate change signal, it is not uncertain, in fact it will be fundamentally embedded in all the scenarios. How that plays out is the question, although only a relatively small temperature increase is predicted over the next couple of years. It is evident that in some groups they started to talk about the consequences of the drivers, as opposed to the drivers. Some went a little further with the storylines.

Comment: With issues related to land and water, the proactivity will decline or increase. In scenario three, by doing all this, conflicts will also increase. Unpacking this information is required.

Comment: The component of technology and policies is not coming out clearly. They are important but missing. As we start articulating the landscape created by these scenarios, we need to see policy

interventions playing out or not and likewise, if there is technology absorption or not.

Comment: There is a similarity in terms of the logic. We are not doing this work out of context, but rather in order to start engaging with the governments and private sector within the EAf, which makes quite a lot of sense. We will be required to take home some explanation, thus they have to be relevant so that when we explain them they are accepted and not dismissed. So I can now see the animal emerging from the silhouette.

Comment: Many of us are involved in strategic planning exercises where you have to carry out a SWOT analysis. This is a good use of using scenarios as a tool, in strategic planning.

Comment: We discussed the five or six drivers, but stability was a determining factor. If stability is there, everything is positive. If it is not there all we have listed will not be augmented. That is what determines what will be implemented

Comment: We can have four scenarios starting with political stability focusing on governance, then regional integration and globalization.

Question: I am a bit unclear about what the groups have placed inside the package of globalization. What is their understanding of globalization?

Question: If you have globalization and stability in two axes. Given that we are about food security and agricultural development, will we miss the environment completely? It could be a huge contribution we would make.

Response: We do not have to have two axes.

Ed: Plus or minus axis, or proactive and reactive with regard to environmental and climate change issues? We will come back to the definition of globalization in a minute.

Comment: Land and water were defined as drivers yesterday, but that does not equate with environment, because we equated them to rights. So we should take caution on that.

Ed: It is important to better define the climate change dimensions which need to go in there.

Comment: Its not the climate change dimension, it is the climate and environmental policy which is missing and that was noted yesterday. These need to be considered as we go forward.

Comment: Policy is a big thing. There are policies about conservation, those in response to climate change, and land ownership amongst others. It

is vital to make sure that you have the right policy focus in the dialogue.

Comment: We emphasize so much about policies that we forget about the full set of instruments that are used as a package. We need to think about the way the document will find its way to implementation.

Ed: Let us come back to the globalization issue.

Comment: Our group discussed globalization importance in terms of the flow of ideas and markets. The regional integration can happen in a more or less globalized world. EAf is more inward or outward looking, but those are different decisions which have to be made.

Ed: The globalization box has many things in it, 'BIG MAC' has arrived in town, that is enterprise, and movement of trade, information flows. However, the instruments that are global in nature are also functional, for instance Kyoto. Hence, it is not just entry into other peoples market, but vice versa, which includes the international community cooperating more, and addressing big issues in a systematic way. Is there anything else missing?

Response: Partner relationships, East African entities and development partners outside the region.

Comment: The region becomes strong and deals with the global perspectives to enjoy the benefits.

Ed: On one hand there is the regional thing of people and governments working together, but there is also the issue of how globalization affects what is happening. This is not clear in the presentation.

Comment: The African Union (AU) is not featured anywhere. The driver is political stability and the outcome is regional integration.

Comment: We were globalized because of IT, and due to the fact that we are looking at one market and the issues in it. Thus, let us unpack it and define globalization.

Ed: A well integrated regional entity and one that is not integrated has not been defined. One of the scenarios I've seen emerging is that we are comfortable with a future where there is a regionally integrated entity in the EAf. The other is either we stay the same or we really get better.

Comment: I would just like to remind everybody of the purpose of scenarios. It is not the world we want to see or the one that we do not want to see. We want to organize scenarios whose contrasts are interesting to evaluate food security, agriculture and climate change.

Question: Where there is political disintegration is it a useful storyline to develop?

Comment: The regional body should have all the tools to manage the political disintegration if it happens.

Ed: Are we comfortable to keep the regional status quo at the moment?

Response: Yes.

Comment: We can have a scenario where a region is integrated, and well functioning. However, there is an inward looking situation where each country is perfecting things, but still acting as separate entities.

Comment: Regional integration is not necessarily perfect, the instruments are there, but the countries are not behaving. This is what is happening today.

Ed: Does this add a new dimension or can it be picked from the regional status quo?

Comment: It is in there, we just have to make sure it features.

Comment: The 'tiger scenario' is another one. We can add more definitions to it.

Ed: Is the tiger scenario an interesting scenario which contrasts with what is emerging here?

Comment: The tiger will have influence only if the regions are integrated. If we go for the scenario that political stability and regional integration is there, then it will work. Where you can still speak of the tiger effect, but only when the region is functional and integrated.

Comment: The tigers are trying as much as possible to come into the region. When we are more integrated it is easier for them. In a context where regional integration prevails then you can factor in the tiger effect when articulating the scenarios.

Comment: The tiger is a major driver, how the region handles it is uncertain, but by and large their desire to get in is not uncertain. What is missing is the resource management.

Comment: We are talking about the proactive 'tiger' and the reactive 'tiger', but how we respond to the 'tiger' effect is not certain.

Comment: Another scenario is regional status quo plus globalized (i.e. reduced subsidies, increased markets, and fair play in trade).

Comment: I do not think that can ever happen, because the world will always be polarized. Thus, I do not see it as a plausible future.

Ed: Proactiveness is taken in the context of how we relate to environmental issues?

Question: How do you deal with the response to the tigers?

Response: Investment related to Tigers, is happening in the region, the issue is how do we manage it? During the 21st century, Europe and the US will become increasingly marginalized, and that is a given. The issue is how does the region react or respond?

Comment: It is integral in this governance issue. Steady progress but nothing major in the next 20years. You get some really dynamic leaders they will put in place policies which will deal with the tigers.

Ed: The proactive government will deal with a lot of issues concerned with the tiger attack, because they engage them, they can deal with it proactively. We can define proactive and reactive to include the other threats and opportunities in the region.

Comment: For regional integration to increase, it comes with governance. There are two regionalization options and two governance options. I can see that proactive and reactive can be defined. It sounds that we need to have proactive and reactive to the tigers, and globalization as well as environmental issues.

Ed: We must know where governance, good or bad lies. We must understand what proactive and reactive contains. I'd like this defined in groups right now in a buzz.

Comment: Remember that you want to define proactive and reactive constructively to help develop two to four scenarios where we have interesting, contrasting outcomes for food security and agriculture.

3.5.1 Definition of regional integration, good governance, status quo and proactive/reactive within the context of EAf

Working in groups, the participants defined regional integration as…….

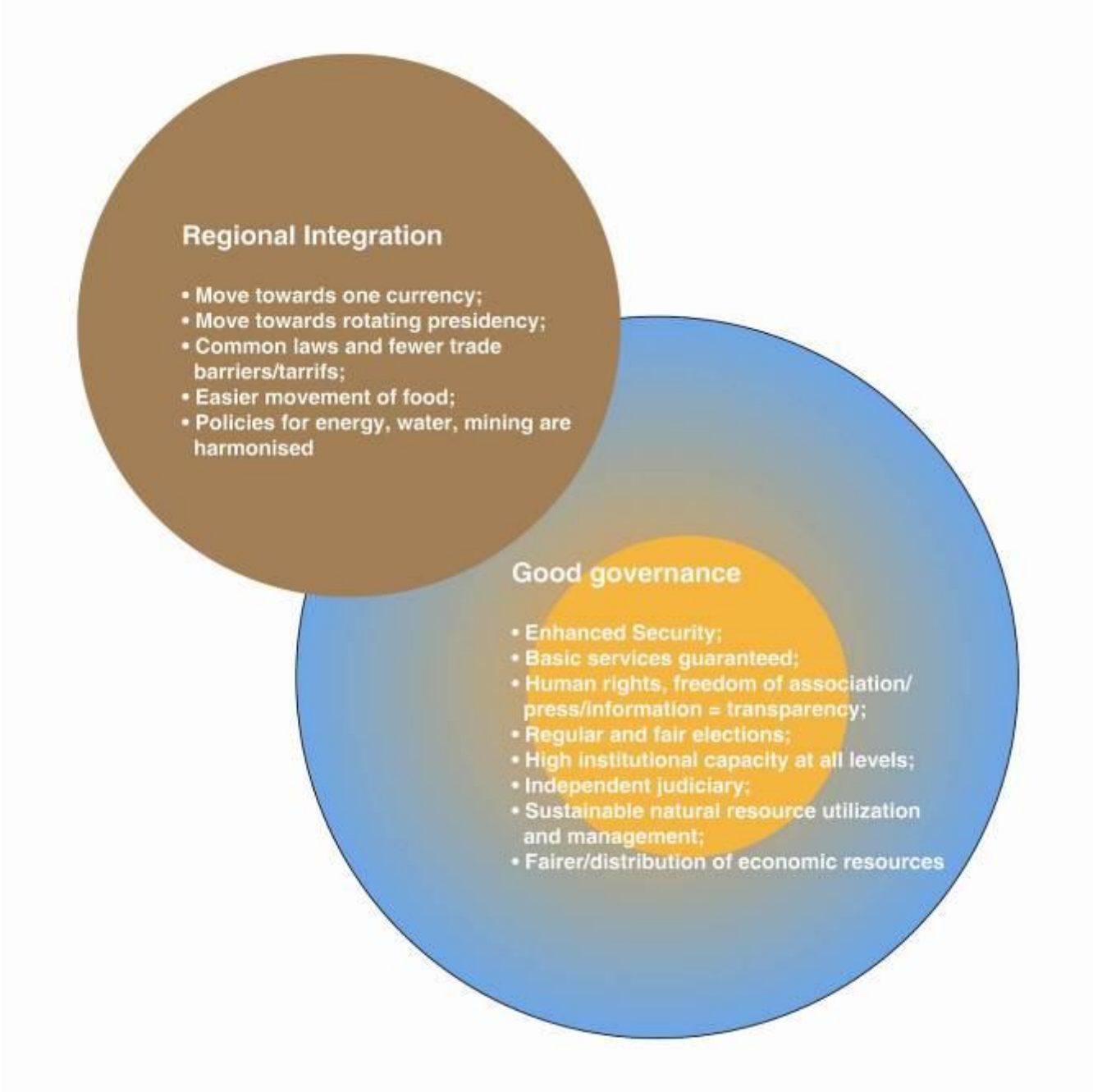
- The region comprises Kenya, Uganda, Tanzania, Ethiopia, Rwanda and Burundi.
- In 2030, the region would be defined by eleven countries to make up the East African Government;
- Having common markets and open borders;
- Having joint agreements on conflicts.

Status quo was defined as…….

- The poor implementation of 5 country EAC;
- Rigidity of individual governments;
- Conflicts are unresolved without outside help;
- Continued poor governance and corruption in the individual countries and in the region.

- ❖ Working separately;
- ❖ Things remaining the same;
- ❖ Meetings of convenience
- ❖ Low political stability

Figure 5: *Definitions of regional integration and good governance*



The outcomes of proactive/reactive were defined under the headings…..

- Environmental

- Livelihoods
- Food Security
- Tiger Attack
- Globalization

Specifically:

- Proactive: Region-wide proactive approach to implementing regional accords for environmental management – improved productivity at different scales; improved food security
- Reactive: Do nothing approach – Result: Resource degradation
- Either reactive or pro-active to Tigers and degree to engage as defined above depends on level of integration. The outcomes include:
  - ❖ Appropriate technology transfer
  - ❖ Capacity enhancement
  - ❖ Increased investment

Comments/Remarks

Ed: Can you have status quo but proactive? Can we have good governance and regional integration, but proactive individual countries?

Comment: What do we mean by status quo? I do not see any country in the region waiting for things to happen. Are we saying that under the status quo scenario things could stay exactly the same to 2030?

Comment: The discussion is about better integrated region, or the same level of disintegration. The scenario exercise was envisioned to discuss the region as a unit; the question is the degree of integration.

Ed: In status quo scenario, not much will have happened in terms of integration, but the individual governments would be continuing to do what they always did. I can see the difficulty of imagining a status quo while being proactive at the same time?

Comment: Having the regional integration and reactive does not seem plausible.

Response: What drives regional integration is economic growth. There is nothing that is motivated by environmental management. You could have regional integration and be proactive on tiger attacks, and in dealing with globalization and food security issues, but yet unable to deal with environmental issues.

Response: There are bodies like COMESA which focus on markets and trade issues, with little attention on environmental issues *per se*.

Comment: It is highly plausible. Europe and USA have been regionally integrated for two hundred years, and they cannot resolve their environmental issues. Being proactive economically does not guarantee environmental management because that is the state of the world today.

Response: We should not borrow the global perspective as a model towards regional integration in terms of the approach to environmental management issues. We have an initiative in Lake Victoria which is being managed as a block, and is not driven by markets or trade. When we are talking about regional integration we should not just be seeing the perspective we have of the East African community, but see it in terms of the entire economic block.

Comment: There is currently tension between Ethiopia and Kenya because of a dam. Economy is very important, but some of the environment includes cross boundary resources, and managing them presents unique challenges..

Comment: The EAC's defining element is national resources and the environment. At the ministerial level they are dealing with economic issues, water, fisheries, amongst others, and all those committees have equal power.

Ed: You have described the various actions that governments are taking collectively in the region, that are not necessarily related to economics and market, but are more about natural resource management. The Lake Victoria Commission was about the hyacinth, but was it a proactive or a reactive decision? To what extent are these actions proactive as opposed to reactive? In a status quo we can stay commission after commission, but responding when things have happened.

Comment: Let us focus on the scenarios exercise. These are not are normative scenarios. It is very difficult because you are so intent on the future you want to see in East Africa. What we are trying to do are exploratory scenarios. Hence, you have to shed a little bit of the normative scenarios which contain your hopes. There re a lot of initiatives to get environmental management to work in the region; however, what I am arguing is that we should make interesting contrasts between economic integration and environmental outcome. They are not necessarily the world you want to see. Plausible means it could happen, it does not mean that it should or it will. It is deliberately looking for contrasts. Ultimately, we are going to assess food security against these contrasting realities.

Response: I believe that regional integration is driven more about the future. It becomes a bit strange when you are talking about the perfect regional integration which has no vision.

Comment: It is not where we want to be, but mapping how the future may come out. The point of the exercise is to define the environment or world over a number of possible pathways. The question is the plausibility of the matrix on the board.

Question: What informs integration, even if it is from an ecological point of view?

Comment: This is an exploratory scenario which has no preference for some place.

Comment: I am looking at presenting this exercise to the Ministers in East Africa who are in charge of regional integration. We are doing this work within a certain context, so that it informs policy. That is why I am reacting to all of this.

Response: A lot of us in this room have had advocacy or advisory role with governments. When we go in there we say I think this is going to happen, and I will tell you why. If you take these scenarios to the Ministers it will be a disaster. So you have to take yourself away from that hat that you usually wear. You have to take this and say, now if you choose this, it looks like this. Now integrate that information and make some decisions.

Ed: If we can agree that we are not talking about predictions or the desired future, then we can open up our minds to this new way of presenting plausible futures.. Let us see whether we have sufficient understanding to be able to move to the next stage as we proposed. Are we comfortable with that proposal?

Comment: I know there is a move to get down to three, but there are various ownerships to the four, so why don't we work on the four.

Response: None of those four has a great likelihood. They are not forecasts of what will happen, and they are meant to be plausible futures. None of them are perfect, there are trade-offs based on livelihoods, environment and food security, and that is what CCAFS is about. They are not what is going to happen; they are systematic, coherent scenarios of what could happen, given certain systematic drivers.

Andrew: I would like to propose that we put down political and economic regional integration as clearer titles replacing status quo so that the environmental things are not confounded in there. All the quadrants would then be possible.

John: We need to split into these future worlds. We already have some valuable definitions. We are here to come up with coherent and internally consistent futures which are distinct from each other, and are explained in terms of where we sit in terms of these uncertainties. We need to achieve the beginning of the storylines that describe these future worlds. We do not need to complete it, but we need to leave this meeting with a common vision of what these four worlds will look like. We need to populate these quadrants with some characteristics of what this world will look like. None of them is perfect; they have all got good and bad, but we need to list their principle attributes. Try and stick as best as we can within these boxes.

Polly: Talk about how you get started on that path and what it might look like in 2030. Look at the scenarios which were presented earlier, which should give you some ideas of how to frame the attributes you are looking for.

3.5.2 Development of storylines

Working in four groups, participants were tasked with developing storylines which reflect plausible futures for food security, agriculture/land use, which included listing their principle attributes.

Report Back: Group A

Participants in this group developed a storyline called Hedgehog East Africa. The table 6 below summarizes the principle attributes of this scenario.

Table 6: *Storyline developed by Group A*

Hedgehog East Africa			
Timeline	**Event**	**Markets**	**Outcome**
2011	• Referendum • Sudan Civil War	Bilateral opportunities for trade	Humanitarian Crisis; Environmental Degradation
2015	• Re-strategizing among countries • New alliances	Within regional and internationally, decreasing food	DIY adaptation

		security	
2020	• AU, EU, UN pressures	Increased smuggling, displacement and migration	
2025	• The GASA tight block • Uneasy Peace	Increasing opportunity for the tigers; More trading; Opportunistic	Competition for tiger investment
2030	• Other 5 reacting	Economic growth stagnant or decreasing	

Report Back: Group B

Participants discussed the scenario for the status quo and proactive approach, and named it **"EAC timed out".** In this scenario:

1. EAC making policies but implementation is difficult, poor;
2. Governments making own policies that are working nationally, but conflict with one another regionally;
3. Some of the policies may be driven by awareness of EAC policy;
4. Civil Society groups recognize problems/issues and self organize as pressure management groups around public goods important to them.

Food Security

- Countries establish food banks to strengthen/bulk in regional bank is lost;
- Commodity based private sectors self organize to take advantage of market opportunities but because of fragmentation/competition cannot gain good market access in region;
- Regional market access falls into the hands of large players, less informal partners;
- Increase in contract farming;
- Staple crops not reaching markets;
- Proliferation of bilateral agreements on critical issues e.g. diseases, pests across borders without benefits of full integration (markets);
- NGO proliferation and filling roles normally played by private and public sectors: food aid, soil conservation, conflict resolution.

Livelihoods

- Governments addressing MDG, lost benefits on shared resources;
- Grass is greener on the other side phenomenon leads to instability at national level; the poverty indexes are improving;
- Better off countries benefit from brain drain, but suffer from influx of unskilled labor;
- EAC does not regionalize, but there are others that might take the ball and run

Tiger Attack/Globalization

- Governments are acting alone, but might be forced to come together;
- Countries competitively attracting tigers but have less power because Tigers are playing the countries against one another. Less individual and collective chance to take advantage of tiger offerings;
- Regional markets are less functional due to the Tiger drawing off resources.
- Inability of EAC to act decisively in negotiations for region, especially climate change negotiations.

Report Back: Group C

This group developed a storyline called East Africa Smouldering. Table 7 below summarizes the principle attributes of this scenario.

Table 7: *Storyline developed by Group C*

EAST AFRICA SMOULDERING
Outcomes
▪ Common policy for foreign investment ▪ High political security ▪ Displace local businesses ▪ Common financial year across countries ▪ Creates employment but ignores labor legislation ▪ Land grabbing/foreign investment, causes conflict over land; ▪ Functional EAC; ▪ Common market; ▪ Common stand; quality of goods; food safety; ▪ Common approach to infrastructure – roads, rail, energy, food storage, ports, water and navigation, telecommunications; ▪ Agreement on sharing resources; ▪ EAC harmonized policies; ▪ Free movement of goods and people

Group D

The group focused on political and economical regional integration. Proactive was identified as environments, livelihoods, food security, tiger attacks and globalization. In this scenario, institutions do not all function properly because they are reactive, hence they do not get the best deals in trade negotiations. In addition, the tigers are here and we are trying to react/respond to the negative consequences of their investment. Land grabbing/foreign investment causes conflict over land; pushes mitigation of the agenda; increase total food production, but much is exported "home".

Table 8: *Storylines developed by Group D*

Revitalizing East Africa	
Timeline	**Outcome**
2011	5 countries EAC
2015	Ethiopia joins
2020	Single Currency; Nile Basin agreement implemented
2030	National policy still to be implemented for access to land, access to

	water

Additional Outcomes

- In this scenario, areas devoted to food crops increases, and productivity gains are higher, because people adopt technologies, are more competitive, as well as commercially oriented;
- Cash crops for export bring in more employment and revenue because value addition in region;
- Rural poverty starts to decline by 2020;
- Bio-safety standards improved, food safety improves;
- Malnutrition decreases;
- Consequences of agricultural growth for environment;
- Common favorable policies guiding investments by the TIGERS;
- Regional grain reserves established (drought protection) 2020;
- More support by governments to agriculture (CAADP).

Comments/Remarks

Polly: Are these stories different enough that we will have some contrasting futures for agriculture, food security and opportunities for climate change mitigation?

Response: Yes. If you take Hedgehog Africa and East Africa timed out you will get some contrasts.

Comment: Hedgehog's rationale is for convenience or self-interest, and the one on Revitalizing East Africa is because they have a common vision.

Polly: What about East Africa Smoldering and East Africa timed out? Can we see how we may get a different food security situation in both the stories? Did anyone hear anything in the storylines which they thought would not happen that way?

Comment: In the group which came up with East Africa Smoldering, we struggled with the question: if you regional integrated would you cope with the tigers or not? Are you organized in terms of engaging trade with the rest of the world? I feel that this is inconsistent. We started with a functional East Africa.

Comment: Maybe you can get good negotiations on the trade levels, and the way you manage livelihoods, environments.

Comment: What is very intriguing is that in each of these worlds there is good and bad stuff. This will be teased out when we take this forward, because maybe the conversation was focused on food security on one stage for instance.

Polly: In our group we were really committed to regional integration happening effectively, but we were not getting our single currency until 2020. Even by 2030, we decided that national policies on land etc would still be decided at the national levels. Not only where will we be in 2030, but how we will actually get there is helpful. You have building blocks, but you need to do research on where we are now, and the next vision is that you would run them through some models. They are great for taking your consistent assumptions forward. At this stage it's really about logically saying how I will get up to 2030.

Comment: Agriculture, population growth and environmental impacts go together and we must treat them as interacting. It is dangerous to discuss them alone, as we shall forget that we interact. Thus, we need to remind ourselves that there is synergy between these things.

Comment: In addition to what we have been discussed in groups, we are being exposed to a common set of natural stresses such as population growth, temperature rise, climate variability, emergence of the tigers, and the assumption that the globalization phenomenon is going to stop. All of these are in a common framework, and they all need to respond to that common framework.

Comment: We had a lot of interaction between the facets we are considering, as well as along the timeline. We tried to regroup again in order to be able to cope with those changes within the timeline, thus there was a lot of moving back and forth.

Comment: This is really fascinating. In the next reiteration it would be useful to spell out who would be the winners and the losers.

PART FOUR: SCENARIO ROADMAP

4.1 Introduction

The next steps and actions after the scenarios workshop were outlined and discussed.

4.2 Organizational Network Analysis and Summary

On day 1 of the workshop *Kevin* and *Moushumi* made a presentation on network mapping and analysis and asked participants to fill questionnaires on their institutional partners and collaborators. This was subsequently analyzed and results of the organizational networks analysis presented in this session. *Kevin* presented the results of the organizational network analysis. The purpose of the network analysis was to assist participants in the identification of key organizations working in the region. He pointed out that it would enable a better understanding of an organization's position within the set of organizations working on food security, agriculture, and climate change in the region. Similarly, he stated that the analysis would enable an understanding of where organizations are located in relation to key partners. It was also a start of a process for creating possible strategic linkages (See Figure 6). The following emerged from the analysis: 107 Key Partners; 89% of partners were within CCAFS network (94); 13 Organizations were outside of the network.

Figure 6: *Collaborative Networks*

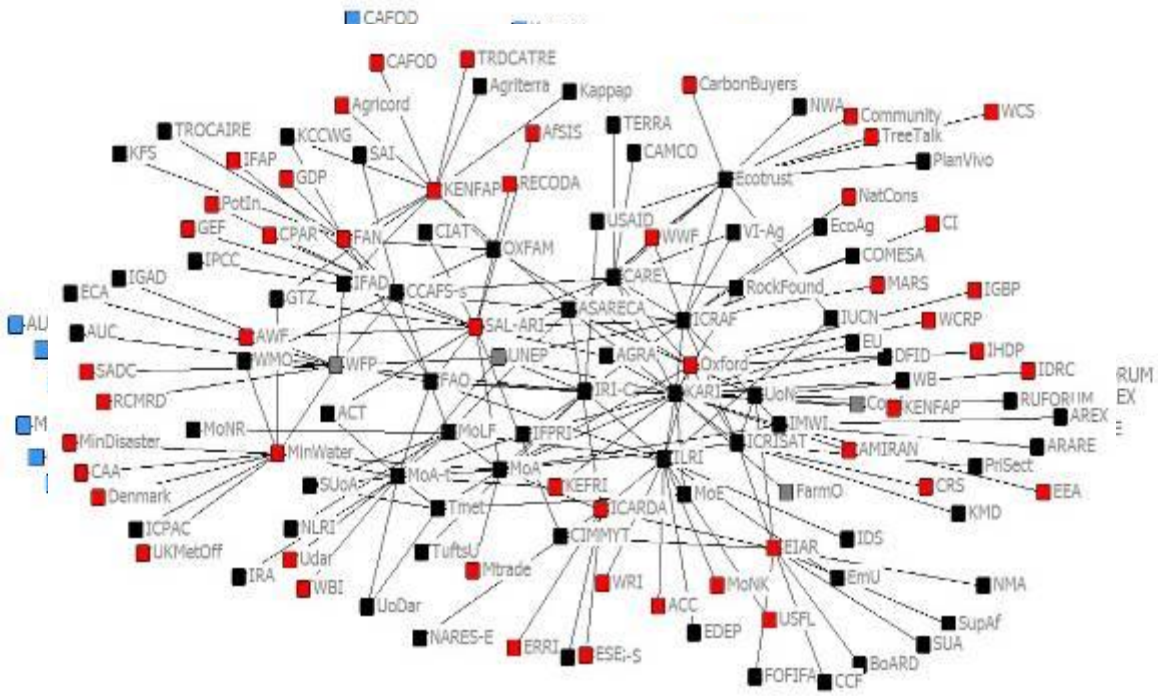


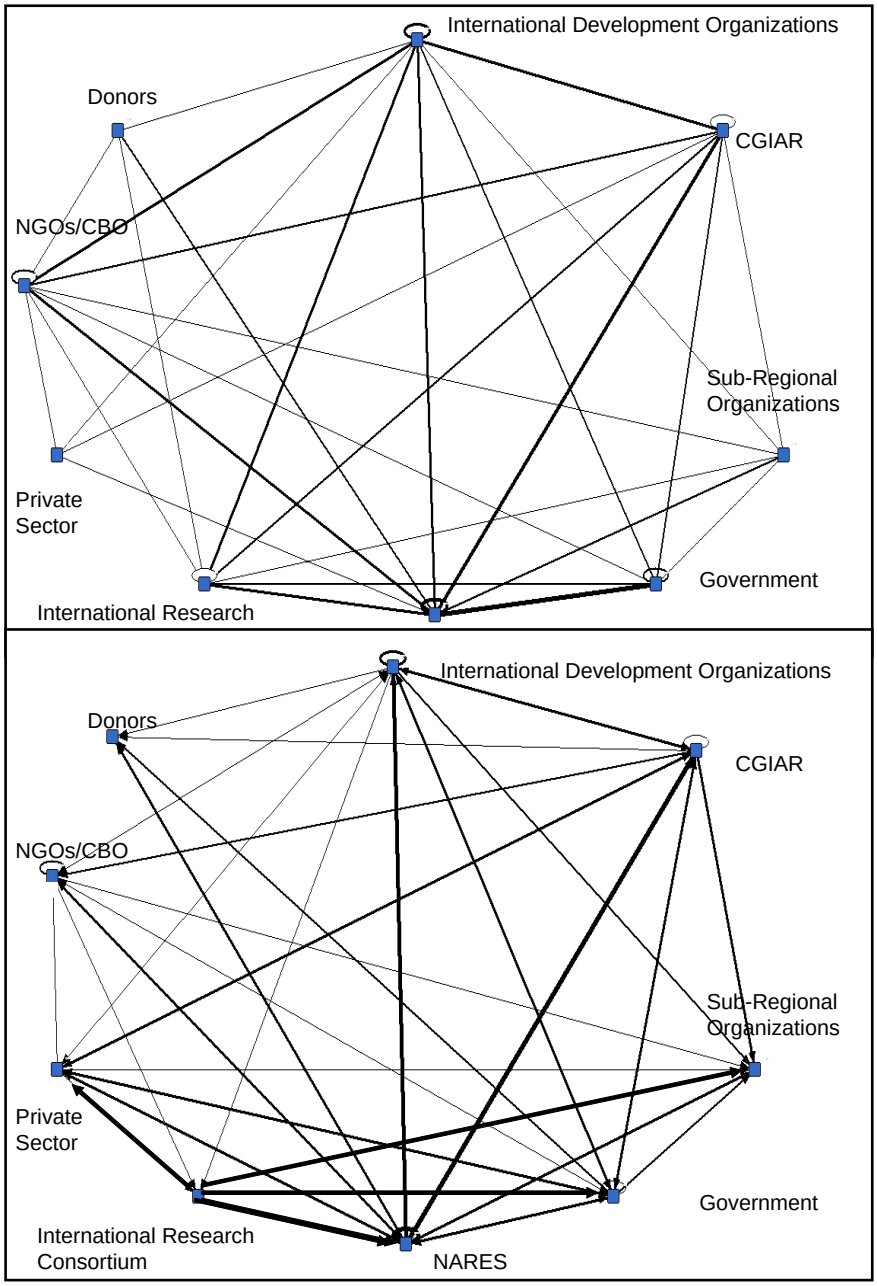
Figure 7: *Key Partners*

Aggregate Analysis

On the basis of the differentiation exercise done earlier in the workshop, the mapping used the same aggregation as the stakeholder categories: NBOS/CBOS; International Development Organizations; Donors; Private Sector; International

Research Consortium; NARIs, sub-regional organizations; governments; and CGIAR (See figures 8a-b below).

Figure 8a-b: *Structure of Partnerships across the groups*



In summary, *Kevin* concluded that participants already work together in an interwoven network. He pointed out that the partners which CCAFS wanted work with were working with the participants' partners, and so on. He encouraged participants to think constructively about mechanisms and strategies

to increase the communication of ideas through this close-knit network, to help reach the CCAFS goals.

Comments/Remarks

Comment: How do you reconcile the fact that the strength of relationships differ considerably between partners: from those you need to get work done to those you engage as a requirement, say by donors?

Kevin: I agree. We are trying to get that by listing the key partners, but I do not think you can map that at this time. There are some partners that are more critical to your work than others, thus you have to think strategically about that as well.

Comment: We could follow this up with a real survey which would entail answering twelve questions about the real collaborators. This was just a first step.

Question: There are missing arrows in the network analysis. Is it because we do not see the need to work with those partners, or is it because we tried and it failed? There might be a valid reason.

Kevin: This kind of analysis is an opportunity to investigate these sorts of things. If you see it and it doesn't seem right, it is a good opportunity to analyze it further to uncover what is really happening.

Comment: CGIAR does not have an arrow with the donors.

Kevin: This is because of the way the question was phrased. We know that is really not the case.

4.3 CCAFS Regional Scenarios Roadmap for East Africa

Andrew pointed out that the participants had made very good progress during the workshop. On behalf of the process drivers, he thanked everybody involved for staying and being engaged in the process. He stated that CCAFS would like to establish a core team to help develop the stories in the next phase. He emphasized that even if one was not a core writer, everyone was invited and hopefully would be involved in the process as it continues. He requested those interested in being part of the core writing team to put down their names, indicating which scenario they were interested in. He informed participants that the **next workshop** would be held in ***Tanzania*** from the **5th to the 8th of October 2010**.

Moving forward, the core writing team would be commissioned to flesh out the basic storylines. Each team would have a coordinator and one or two other

writers. Resources would be made available for undertaking this task; the task should take approximately fifteen to twenty days of work, and a those involved would be on some kind of contract. The core writing team was responsible for coming up with a document about 8-10 pages long.

Andrew stressed that some desktop research would be required with economists and people in the sector. During the next workshop, in Tanzania, the teams would continue the process of introducing the storylines and refining them further. An attempt had been made by CCAFS to get additional people who were not in the scenarios workshop, but should be involved in the process. The workshop would examine the storylines (number of axes, consistency and internal logic) and try to polish them up. Thereafter, the same set of core writing teams would be asked to refine the storylines further. By the end of the year CCAFS hoped to have a report which would document the entire process, including this workshop.

John pointed that from CCAFS point of view, it had been a really productive workshop. Further, he stated that he got a really positive sense that people got a fairly good understanding of the meaning of scenarios, which was not the case at the start of the workshop. This included the practical aspects that CCAFS wanted to instill, including the major uncertainties and the major components of the storylines. *John* stated that the emerging storylines were good and that they were going to get better. He singled out the stakeholder differentiation exercise which he felt showed a wonderful and diverse balance in stakeholder representation at the workshop. He hoped that CCAFS as well as all the stakeholders present would continue to build that interaction now and over the next couple of months, into the next couple of years. John emphasized that he hoped that the participants would all feel part of the CCAFS process, pointing out that there were more exciting things to do. In summary, he thanked *Ed, Polly, Andrew, Phil,* the logistics team and all the participants for a job well done.

Participants who volunteered to be part of the core writing team were:

Scenario	Volunteer
Regional Integration and Proactive	*Joseph Methu; Patrick Keetiem; Cromwell Lukitoro*
Regional Integration and Reactive	*Mponda Malozo; Anna Mwanaymilo; Jackie/Hezron/Sarah and Pauline*
Status Quo/Proactive	*Habatamu Admassu; Caroline, Tilahun A;*

	Sarah; Pauline
Status Quo/Reactive	*Kevin Kinusi Kenyangi; Lyimo Herbert*

4.4 CCAFS Next Steps

Reminding participants that CCAFS had two objectives – research and policy - *Sonja* informed participants that CCAFS was going through an internal (CGIAR) change process that will transform it from a 'Challenge programme' into a 'Mega programme'. The process is to be completed and CCAFS launched in December as a Mega Programme. In terms of research, CCAFS was undertaking baseline surveys, identifying sites, developing protocols and using ASARECA country studies for the theme work. The scenario write up was also a priority under research. Table 9 below highlights some of the key events relevant for CCAFS, especially its policy objective.

Table 9: *CCAFS Next Steps*

WHAT	WHEN	WHERE
CCAFS Second Scenarios Workshop	5th – 7th October 2010	Dar es Salaam
PANAFRICAN Workshop on agriculture, food security and climate change	5th-8th September 2010	Addis Ababa
NEPAD meeting on climate change	8th-9th September 2010	Addis Ababa
African development forum on climate change	10th-15th October 2010	Addis Ababa
Hague Conference (follow up of the PANAFRICAN workshop)	1st-5th November 2010	Hague
Cancun COP1	6th-4th December 2010	Cancun

CCAFS was preparing the background paper for food security, agriculture and climate change to be presented at the Hague conference. *Sonja* requested that those participants who would like things tabled or to attend, to kindly get in touch with them at the Secretariat. She pointed out that she had structured this information around events and communication products at the regional and

international level. CCAFS hoped that they would engage at national and sub-national levels in the future.

It was pointed out that CCAFS was still narrowing its key research questions in the areas of risk, adaptation, and mitigation, as they were broad. *Patti* emphasized that CCAFS was not reinventing the wheel, but rather the initiative was building and adding value to existing research. She pointed out that the baseline survey was a bit misleading in the sense that it would go on for the next two years, and focus on households. She stated that CCAFS would start in a few sites in each of the four countries, and as their partnerships strengthened, they would figure out where the research questions are that need to be answered. Participants were requested to inform CCAFS of any exciting research questions which they thought was of importance to the region, or to their country. *Patti* pointed out that it was a process, and that participants had already been a lot of help to CCAFS through this workshop.

CCAFS intended to share information from this workshop and build on it, thus they would put workshop reports up on CCAFS website and share it broadly with partners. *Patti* stressed that they wanted to get away from the traditional way of doing projects and disappearing thereafter. She urged participants to assist in putting together a framework for risk, adaptation and mitigation as a document for each country, which ASARECA was leading. Thereafter, IFPRI would flesh this out and add more data to the shell reports developed by ASARECA.

At the end of the session, *Ed* informed participants that PICO would deliver the **workshop report** to ASARECA on the **10th of September 2010**. Further, he stressed that the documentation was meant to be a reference report capturing what was discussed and what came out of the workshop. As a result, it would not be synthesized, but would be a verbatim report. It would be submitted to ASARECA for onward circulation to participants and other stakeholders.

4.5 Workshop Evaluation

The workshop evaluation was undertaken in the form of questionnaires. Each participant individually filled out a form individually. The responses received are highlighted in the section below:

What I appreciated most about the workshop…..

- Facilitation skills and skills in summarizing ideas, structuring of cases and presenting in attractive and meaningful way
- Thinking and thinking out of our boxes, and the new way of looking at other scenarios
- Collective participation and teamwork;
- Very good facilitation by Ed. A pleasure to work with him and *Udo*, as well as *Hezron* and *Rachael.*
- Excellent time keeping
- Better understanding of CCAFs goal and objectives
- The effort by the organizers to ensure that everyone appreciated the entire scenario building process.

What I appreciated least about the workshop was (please suggest how this can be improved)…

- The lack of public address system, which limited effective communication/clarity;
- Workshop Program. It was open-ended;
- Explanation on ownership of process
- The venue "casino" was actually poor. I wish we had changed it before the start of the workshop. Acoustics were poor and the background noise was bad**.**
- There were dominant solutions on economic issues

Suggestions on how this could be improved

- Involve policy makers as we brainstorm, has much to do with policy.
- Give examples from concerned member countries
- Need to have stronger government representation

After this workshop, I will….

- Continue to be part of CCAF; continue site selection; hold stakeholders workshop and do similar exercises
- Continue participating
- Engage in the write up
- Keep in touch with people met here
- Continue to engage
- Improve the strategies of food security and climate change
- Try to implement what I learnt and give feedback about the workshop to my institute.
- Dedicate more time to fully appreciate scenario development process for effective participation in the subsequent workshops.

4.6 Closure

On behalf of PICO and his colleague *Udo, Ed* thanked the participants for a very interesting and engaging workshop. He stated that the fireworks during the workshop indicated just how important the topic was to participants. He extended his appreciation to ASARECA and CCAFS for giving PICOTEAM the opportunity to get involved in this important process and indicated that he had learnt a lot through the process. He invited *Hezron* to give his closing remarks.

Hezron invited two participants to share a word or two before the closure of the workshop. *Sarah Mubiru* extended her appreciation to all the participants for an interactive workshop, which she had truly enjoyed. She pointed out that she had been inspired by listening to people's ideas and thoughts, and had learnt a lot. She thanked CCAFS for introducing the participants to the programme and getting them involved. Further, she assured CCAFS that participants would continue to share ideas. Finally, she thanked ASARECA for organizing the workshop and bringing all participants together.

On behalf of his fellow participants, *Charles Lyamchai* thanked the organization for a very participatory and interactive workshop. He requested the participants to keep up the spirit and stated that he looked forward to meeting them again.

Andrew thanked *Hezron* for co-organizing the workshop for CCAFS. He extended his appreciation to *Rachael Namuzibwa Musisi* for handling the administration and logistics excellently, and *Patti* for putting things together. He thanked the participants for taking up the invitation to be at the workshop, and *Ed* for his excellent role as a facilitator, and guiding everyone through this process.

Hezron wrapped up the workshop, by pointing out that the event was not his, but for everybody, terming it as teamwork. He pointed out that the response they had received from participants was enormous and very encouraging. The way in which the participants had kept their energy level high throughout the workshop was highly commendable. Moving forwards, the challenge lay in how the participants would keep the fire going, for what was needed in East Africa was sustained focus on some of these issues.

Hezron emphasized that climate change was not something new. Yet, had the interventions been sustainably put in place, then participants would not have been at the workshop. He encouraged participants to believe in what they were

doing. He thanked *Rachael* and *Azzenath* for their efforts which had enabled the participants to attend the meeting, and extended his appreciation to the CCAFS team for the partnership. He congratulated *Ed* and PICO, for one of the best facilitation processes, adding that he hoped it would be a measure of the report that they would use. Seemingly, he requested PICO to deliver a report which matched the spirit which had been translated at the workshop. *Hezron* urged participants to work hard for creating impact, and wished them a safe trip back to their destinations.

Appendix I: *Workshop Programme*

Day 1		
WHEN	**WHAT**	**WHOM**
0900	• Welcome Remarks • Opening statements • Introductions and differentiation, expectations of participants • Programme and Process Summary	*Hezron Mogaka* *Eldad Tukahirwa* *Ed Rege* *Patti Kristjanson, John Ingram and Ed Rege*
1030	**TEA/COFFEE BREAK**	
1100	• Introduction of CCFAS • Definitions: risk, adaptation and mitigation; integration for decision-making research theme and the scenarios exercise (15mins) • Description of risk, adaptation and mitigation research thematic areas (objectives and examples), and sharing of information gathered to date	*Sonja Vermeulen* *Philip Thorton and John Ingram* *Patti Kristjanson*

	• Plenary discussion	
1300	**LUNCH**	
1400	• Identifying key research and other collaborative opportunities in current climate risk, adaptation to future climate change and mitigation – group work	
1500	• Report back from table groups and discussion	
1600	**TEA/COFFEE BREAK**	
1615	• Building a CCAFS knowledge platform in East Africa – introduction to network analysis/mapping and group work (45 mins)	*Moushumi Chaudhury and Kevin Coffey*
1700	• Adjourn	*Ed Rege*
1800	• Open discussion on CCAFS site selection process and progress	*Patti Kristjanson*
1900	**COCKTAIL**	
	Day 2	
WHEN	**WHAT**	**WHOM**
0900	• Recap of Day 1	*Ed Rege/Pattie Kristjanson*
0915	• Introduce scenarios and case studies (20 mins) • Plenary discussion (questions and clarifications)	*John Ingram and Andrew Ainslie* *Ed Rege*
1030	**TEA/COFFEE BREAK**	
1100	• Break-out groups (20 mins) • Report backs and discussion	*Andrew Ainslie, John Ingram and Polly Erickson* *Ed Rege*
1300	**LUNCH**	
1400	• Incorporating the 'surprises' that the future holds into our scenarios • Begin to develop skeleton storylines in three break-out groups	*Andrew Ainslie and Polly Erickson* *Andrew Ainslie and John Ingram*
1600	**TEA/COFFEE BREAK**	
	• Continue with storylines	*Andrew Ainslie and John Ingram*

1710	• Adjourn	*Ed Rege*
Day 3		
WHEN	**WHAT**	**WHOM**
0900	• Recap of Day 2	*John Ingram*
0915	• Report back from each group – presentation of skeleton storylines • Plenary discussion – unpacking the EA storylines	*John Ingram/Ed Rege* *John Ingram/Ed Rege*
1030	**TEA/COFFEE BREAK**	
1100	• Breakout groups to further develop the storylines	*Ed Rege*
1230	• Report back from storyline break-out groups and discussion	*Group Rapporteurs*
1300	**LUNCH**	
1400	• Scenario Roadmap – writing groups to further develop the storylines; timetable and scheduling of tasks; dates and venue for next workshop	*Andrew Ainslie*
1430	• Breakout groups	*Ed Rege*
1530	**TEA/COFFEE BREAK**	
1545	• Network analysis – report back	*Moushumi Chaudhury* and *Kevin Coffey*
1600	• Way forward and wrap up • Workshop evaluation	*Ed Rege* *Ed Rege*
1630	• Close and departure	

Appendix II: *List of Participants*

No	Name	Title	Organization	Email address
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46	Sonja Vermeulen		CCAFS	
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48	Udo Mbeche	Program Officer	PICOTeam	udo.mbeche@picoteamea.org

Appendix III: *Presentations*

All presentations are in **Appendix III** in a separate document which forms integral part of the documentation of this workshop.