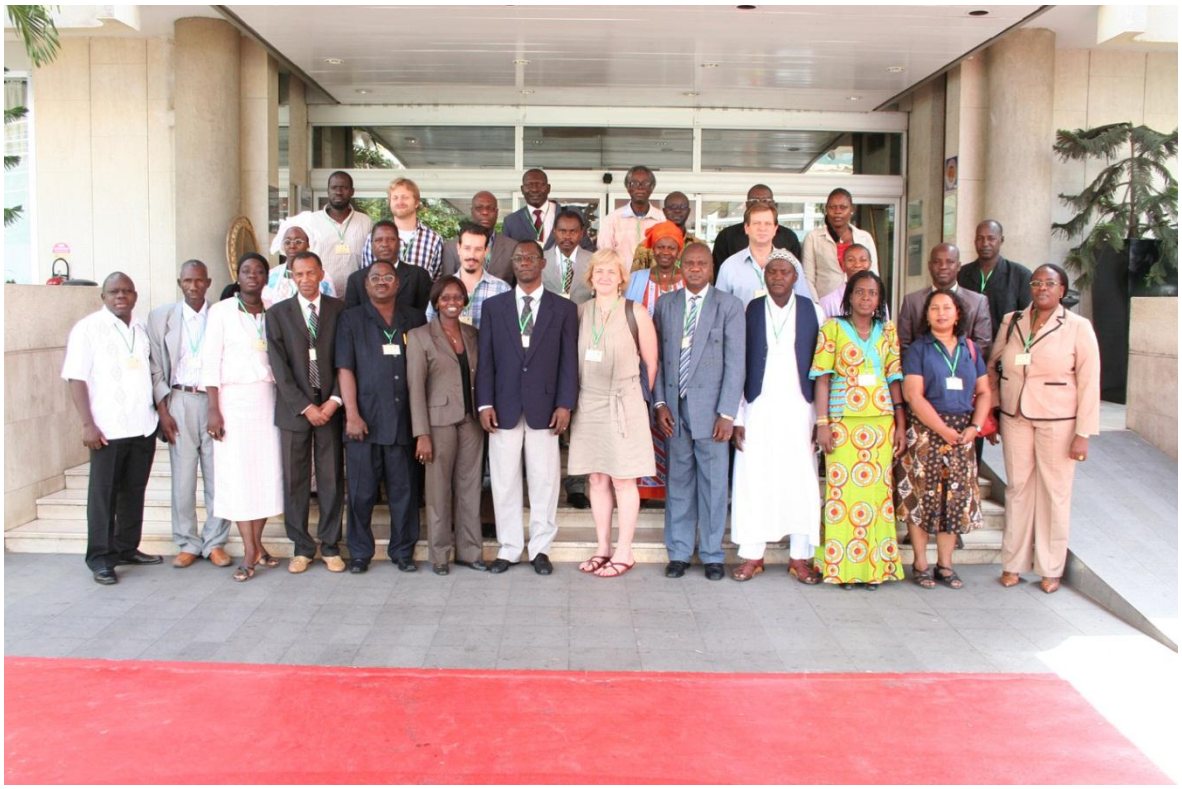
CCAFS WEST AFRICA REGIONAL SCENARIOS FOR FOOD SECURITY, ENVIRONMENTS AND LIVELIHOODS



2nd – 4th November 2011
Dakar, SENEGAL

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1. **Overview - CCAFS West Africa scenarios workshop 2, 2-4 Sept, hôtel Pullman Teranga, Dakar**

From 2 to 4 November 2011 the second CCAFS scenarios development workshop was held at the hôtel Pullman Teranga in Dakar. The workshop focused on developing plausible alternate narratives of the future of West Africa in terms of socio-economic and political change and the effects of these futures on food security, environments and livelihoods.

Organized by CCAFS and hosted by CORAF, around 40 participants from CCAFS countries in West Africa - Ghana, Sénégal, Mali, Burkina Faso and Niger- actively participated in the workshop. The Gambia was also represented on behalf of regional farmers' organization ROPPA. ECOWAS was represented through the principal programme officer for the Agriculture Productivity Programme. Other regional institutions included the FARA programme from Ghana, ACMAD in Niger and ICRISAT in Mali.

Participants came from policy and government, research, NGOs and CSOs, media and the private sector. These participants were trained in a wide range of disciplines connected to socio-economic and political change, food systems, environments and livelihoods.

The CCAFS team facilitators of workshop came from the Environmental Change Institute of the University of Oxford, ILRI and ICRAF in Nairobi and ICRISAT in Bamako. The workshop was highly successful and an ambitious set of objectives was achieved due to the great, diverse, driven and skilled group of participants attending the workshop.

This report provides a first overview of the content generated within the workshop, encompassed by presentations, discussions in plenary and in breakout groups per day.

First, the next section introduces CCAFS and the CCAFS scenarios process.

1.1 CCAFS context and scenarios strategy

CCAFS objectives

CCAFS: Climate Change, Agriculture and Food Security (CCAFS) is a major research partnership between the CGIAR and the global environmental change community (formerly ESSP). Its objectives are:

1. close critical gaps in the knowledge of how to enhance – and manage the trade-offs between – food security, livelihood and environmental goals in the face of a changing climate;

2. develop and evaluate options for adapting to a changing climate to inform agricultural development, food security policy and donor investment strategies;

3. enable and assist farmers, policymakers, researchers and donors to continually monitor, assess and adjust their actions in response to observed and anticipated changes in climate.

Its focus is on three initial regions, namely East Africa, West Africa and the Indo-Gangetic Plains. See figure 1 for a visual representation of the CCAFS framework.

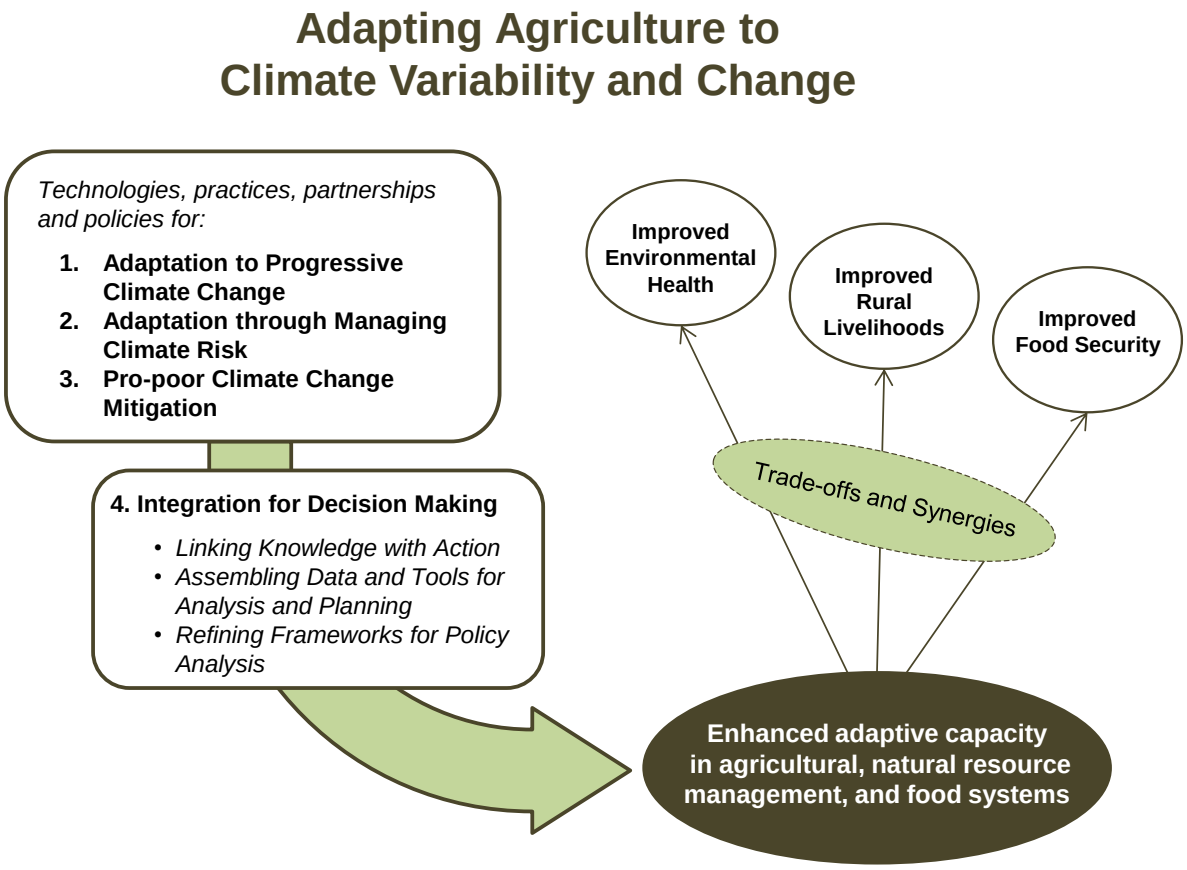

Figure 1. The CCAFS framework.

1.2 CCAFS scenarios objectives

Within the CCAFS programme, participatory scenarios are being developed and used for each region, as part of the themes "Linking knowledge with action" and "data and tools". The objectives of the scenarios activity are:

1. to evaluate key uncertainties for regional food security, environment and livelihoods under conditions of global environmental and socio-economic change as seen from a range of societal perspectives;

2. to develop regional capacity for governance and decision-making in the face of uncertainty.

In terms of these objectives, the development and use of the socio-economic scenarios functions as a platform for the exchange and application of knowledge and experience between (CCAFS) researchers and policy makers, private sectors, NGOs and other societal actors. Because scenarios allow for the capturing of uncertainties and systems complexity in a coherent and plausible yet surprising and challenging fashion, scenarios are also a tool for generating shared engagement.

1.3 Why scenarios?

The future of interacting food systems, environments and livelihoods is highly complex and uncertain, there are many different stakes at play and conditions change quickly. In this context, predictions are not viable. However, we still need to face this complexity and uncertainty without being pacified – scenarios are a communal, creative response to this challenge that draws on sharing of experiences and new insights between participants from across sectors and disciplines.

Scenarios focus on capturing key future uncertainties in alternate, plausible 'what-if" stories about the future, told through narratives, numbers, images and other formats. It should be emphasized that scenarios are not predictions, but instead explore multiple plausible futures without making a judgment about which future is more likely. Scenarios are instead tools to re-think and re-organize the presence under considerations of future uncertainty :

- Scenarios help consider future uncertainties without getting lost in the multitude of possibilities
- Scenarios present concrete stories that are able to bring together very different perspectives and types of information
- Scenarios bring the future to life and make it imaginable
- Scenarios help stretch preconceptions
- Scenarios help think consistently about the future

1.4 CCAFS regional scenarios process

The CCAFS regional scenarios process follows several basic steps –see figure 2. These steps reflect the need for a distinction between exploratory socio-economic scenarios (focusing on what *can* happen) and normative scenarios/visions (focusing on what *should* happen) and the value that both exploratory scenarios and visions have to offer if used together.

These steps are also based on the notion that the relevance of scenarios should be tested and improved by actually using them.

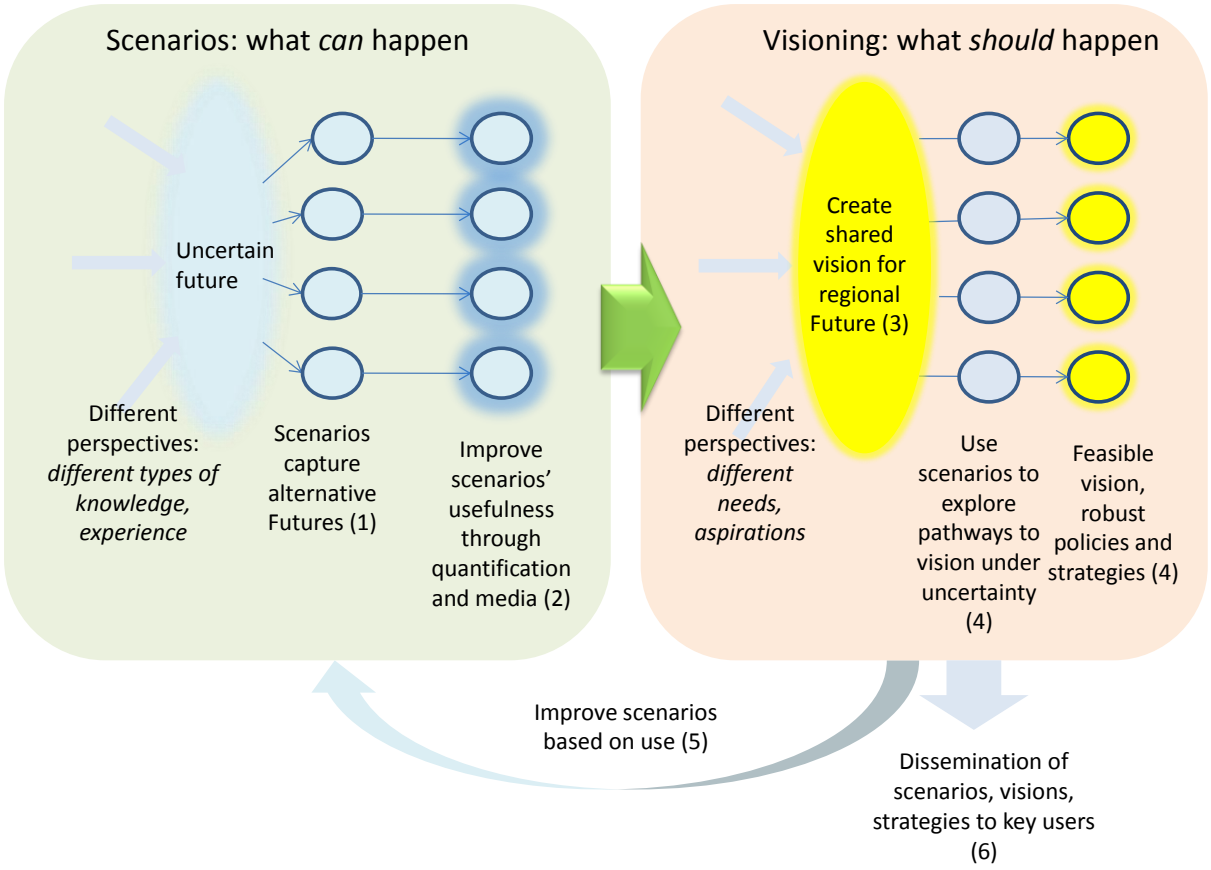

Figure 2. CCAFS scenarios strategy.

1. Bring together stakeholders representing a wide range of regional perspectives, types of knowledge and experience to develop exploratory scenarios of the future.

2. Once basic scenario narratives have been created, the CCAFS regional scenarios process focuses on improving the usefulness of the scenarios:

- Increase consistency, credibility and relevance of the scenarios by creating relevant quantitative information through modelling and other quantification processes. This quantification work can produce counter-intuitive consequences of the scenarios that would require reconsideration of the narratives and lead to improved scenarios. Integrate quantitative and qualitative output.
- Increase the visibility and usage of scenarios as a decision making tool among key audiences through collaboration with media, using news items, fictional narratives, images, radio, video, theatre, interactive visualization.

3. Bring together stakeholders representing different regional needs, agendas and aspirations to create shared visions for the region's future. Visioning is engaging and goal-oriented – and very suitable for work with policy makers and private sector actors.

4. Use the scenarios to explore how these visions could be realized in each of the alternative futures, what the major obstacles are and what policies and strategies would be effective across the scenarios. Integrating the testing of visions, policy choices and strategies within the scenarios process allows us to ensure the scenarios are used, and to test their usefulness.

5. Improve the scenarios based on their use and experience in the visioning/strategy work.

6. Disseminate the regional scenarios, vision, policy and strategy outcomes further to key audiences. We are employing media experts and dedicated regional networking consultants for this purpose.

7. Developing local and global scenarios to make cross-level linkages.

In another CCAFS region, East Africa, the scenarios development process was started first and is now nearly complete. In this region, CCAFS is organizing a wide range of different uses for the scenarios with key regional actors such as strategic visioning workshops with the East African Community and USAID and the CCAFS Regional Learning Platform, but also radio programs, tv items, newspaper articles and an interactive web tool to experiment with the key insights from the scenarios. Furthermore, links to local projects are made both within and outside CCAFS, using the scenarios to provide different socio-economic and policy conditions to experiment with the viability of different local strategies and technologies in terms of food security, environments and livelihoods. We are also planning to have the East African and later on West African scenarios inform the new IPCC socio-economic development pathways.

For the CCAFS West Africa region, we are planning a similarly broad and diverse use of the scenarios that involves key regional actors and ensures that the scenarios are used to their maximum potential for the facilitation of uncertainty-conscious regional governance.

2.Workshop day 1

2.1 Official opening

Dr. Mbène Dème Faye welcomed the participants on behalf of the Executive director of CORAF. After her, Mr Ernest Aubee made an introductory speech on behalf of ECOWAS Commission. Both speeches are annexed to this report.

After welcome remarks, CCAFS scenarios team leader John Ingram (ECI Oxford) introduced the workshop, beginning with an introduction of the CCAFS team and particularly of the CCAFS regional leader, Dr. Robert Zougmore.

2.2 Introduction and background

Next, the objectives of the workshop and the overall programme were communicated by CCAFS scenarios officer, Dr. Joost Vervoort.

Introducing the CCAFS scenarios process, the facilitator highlighted the fact that exploratory scenarios are different from visions in that they do not focus on what the participants want to happen or want to avoid, but instead focus on what could happen irrespective of what is desired.

2.3 Introduction of participants and expressions of expectations

Participants then got the opportunity to introduce themselves and discuss their expectations for the workshop.

It was made clear that participants came from very different backgrounds in terms of disciplines, sectors and countries of origin, and that together they brought great expertise.

The following are some expectations that were uttered:

- For the scenarios to be completed and more usable by researchers
- Joint actions to come out of the work together
- Find effective food security responses
- Link concerns about environments and livelihoods to food security work
- Learn about the scenarios development process
- The hope that re results of the process will not be buried like the 2025 prospective vision elaborated by regional governments
- For CCAFS to ensure the use of the scenarios once completed
- Provide better regional scenarios as context for research
- Scenarios as a bridge between community needs and research
- Develop scenario development skills
- Share and link experience between scenario developers and other researchers

2.4 CCAFS program priority themes, previous steps in the process and examples

John Ingram elaborated on CCAFS, its objectives (see previous section) and its priority themes (see figure 1). The role of the scenarios within these objectives was further discussed.

Then, Robert Zougmore gave a presentation from his perspective as CCAFS regional leader on West Africa in terms of food security, environments and livelihoods and the CCAFS activities on these themes. Robert gave an overview of his region, discussing such issues as the degradation of 25% of lands creating poverty for millions of people, most of whom are smallholder farmers. CCAFS aims to help regions respond to such issues and transition to sustainable and equitable food security, environmental management and livelihoods, taking environmental changes such as climate change as a main focus. This ambition entails many challenges but also opportunities. Current policies are ineffective. Scenarios can be a way to consider the future in order to re-organize the present in terms of policies across sectors.

Dr. Polly Ericksen from ILRI, Nairobi described the first steps of the scenarios development process taken for CCAFS West Africa. In the previous workshop, key uncertainties were discussed and some first ideas for scenario storylines were developed. These ideas would form the basis for the work in the workshop discussed in this report, though this content was open for revision. This revised content will be part of the report in subsequent sections.

The CCAFS East Africa scenarios process was introduced by Joost Vervoort as an example of where the process can lead, and examples discussed under step 7 in the process description were used to give participants a practical idea of the many potential uses of the CCAFS scenarios.

2.5 Workshop outline

Figure 3 shows the different steps undertaken in the workshop. The first draft results of these steps will be presented in the subsequent sections of this document.

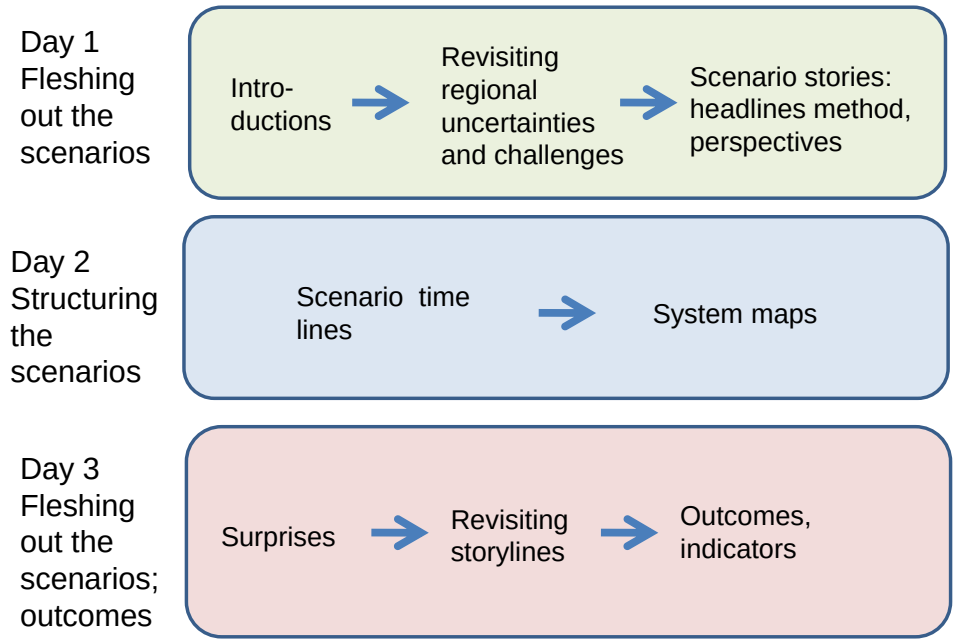

Figure 3. Steps in the workshop

2.6 Revision of key drivers

We revisited the key drivers identified in the previous workshop – factors where the direction of change is highly relevant for future food security, environments and livelihoods in West Africa up to 2030. Of these, the drivers that were seen as both highly relevant and highly uncertain were used as "key uncertainties". These are used to determine the differences between the scenarios.

Population growth and climate change had been identified in the previous workshop as highly relevant but not as highly uncertain – since population growth can indeed be predicted from current births and climate change forecasts only start to differ widely after 2030. These drivers will therefore be assumed to be the same over all scenarios.

The key uncertainties chosen by the participants of the previous workshop were "state actors leading" versus "private sector leading" and "focus on short-term agricultural production" versus "long term agricultural, environmental and social sustainability". In discussing the revision of these key uncertainties, a long, lively and fruitful discussion ensued.

The group agreed on maintaining the basic uncertainties but rephrasing them to make them more useful and flexible. See figure 4 for these revised phrasings.

The absence of regional integration in the key uncertainties was discussed, and it was agreed that integration and interactions between regional and national policies should be part of all the narratives.

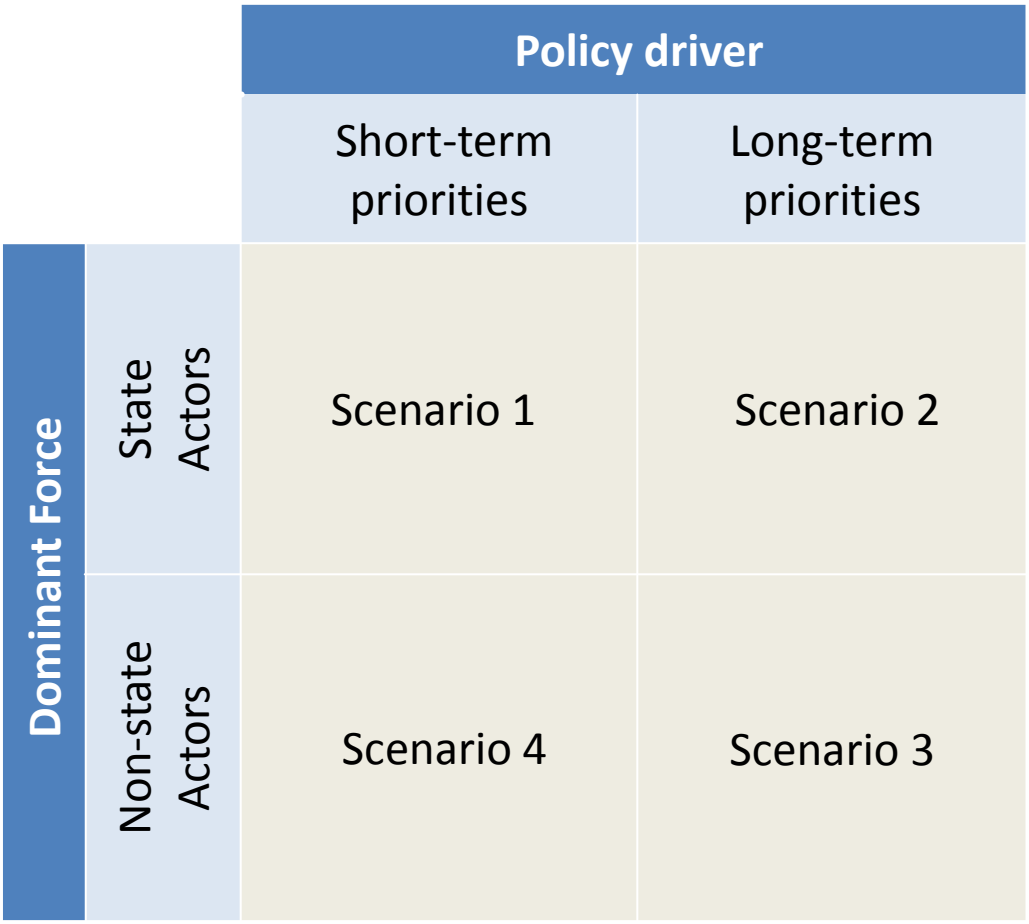

Figure 4. Key uncertainties revised.

The vertical axis was changed to "state actors dominant force" versus "non-state actors dominant force" to give this axis more general applicability – many non-state actors fall outside the private sector label. Changing "leading" to "dominant force" provides some more room in each scenario for the opposite group of actors to still play a role in the scenario.

The change of the horizontal axis of uncertainty to "short-term priorities" versus "long-term priorities" was initially a point for long discussion. What this axis means is that the dominant actors (whether mostly state or non-state actors) maintain short-term or long-term priorities. This applies throughout the time line – in 2028, actors will either have short-term priorities reaching to 2030 or focus on priorities that reach to 2050.

2.7 Scenario groups – headlines exercise

Following the revision of the key uncertainties, the participants were divided into four groups, one for each scenario resulting from a combination of key uncertainties. These groups mixed disciplines, sectors and countries of origin.

We used a headlines exercise: each member of the group was asked to describe developments or events that could take place in the given scenario. Participants were asked to frame these items as if they were writing news headlines. This way, the process focused on concrete, tangible events and developments which help make the scenario more real and defined.
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In this phase, we were not yet looking to create a coherent storyline, but to capture as many ideas about the scenario as possible. Therefore, participants were asked to put ideas on post-its individually without discussing them for the first 20 minutes. After this first round, discussions followed and out of these interactions more post-its were added.

The product was an unstructured but rich assemblage of possible story elements for each scenario.

Headlines exercise – results per scenario group

SCENARIO 1: short-term priorities with state actors as the dominant force.

Headline # 1: "GMOs are legal in most West African countries (2021)"
States have taken a pro-active, interventionist stance to resolve the food security problem using easiest mechanisms available: global biotechnology and local legislative power.

Headline # 2: "Rice imports from Asia hit an all-time high (anytime)"
Food security targets require immediate procurement of staples with rice being cheaper on international markets, and local trade operators being a "quick and dirty" mechanism to meet the growing demand, particularly from growing urban areas.

Headline # 3: "Dry land forests, a thing of the past (2030)"
Rapid growth in food and fuel demand driven by population increase, particularly urban, call for rapid cropland expansion and fuel wood exploitation in Sudan and Guinean agro-ecologies home to the last dry forests for West Africa. There is little incentive to preserve protected areas for the longer term and preference is given to agro-forestry, mixed, intensified systems.

Headline # 4: "Irrigated cropland has doubled in 20 years (2030)"
West Africa harbors abundant water reserves both on surface and underground, largely untapped, and returns on investments are highest in irrigated agriculture in the short term. States can mobilize resources and tools for both large-scale and small-scale irrigation schemes.

Headline # 5: "Farmer unions strike a deal with Monsanto on sorghum hybrids (2030)"
States will favor involvement of multinational giants to kick-start the commercial seed sector, yet will face powerful counter-powers from dynamic farmers' unions requiring lobbying and negotiations on both sides.

SCENARIO 2 : Long-term priorities with state actors as the dominant force

Des options de gestion intégrée de la fertilité des sols qui doublent les rendements des céréales et restaurent les sols.
La promotion des arbres sur les champs, source d'argent et de durabilité des systèmes de production ;
La gestion intégrée des ressources au cœur des programmes d'actions des communes rurales
40% des producteurs sahéliens utilisent des innovations technologiques pour produire plus

Increased food production or increased food imports, which way forward for West Africa?
Is food security a priority for west Africa?
Decline of oil revenues forces governments to embrace agriculture in West Africa
Agriculture budget in WA to increase by 5%in 2030 says FAO Chief
Subsidies and the transformation of West African agriculture, which way forward?
MDG 1 will take another 50 years to achieve?

Investissement des Etats pour le développement du maraîchage
Investissement des Etats pour le développement de l'Agroforesterie
Utilisation des NK dans l'Agriculture
Promotion de la petite irrigation

Le Sénégal n'importe plus de riz
Les coopératives villageoises exportent les graines d'arachides ensachés dans la sous région
Les terres agricoles sont immatriculées et les paysans détiennent des titres fonciers
Les organisations paysannes créent leurs propres écoles de formation
Le gouvernement distribue des subventions aux organisations paysannes ayant exporté sur le marché européen
Les paysans sont majoritairement dans le K de la SISMAR et s'emparent du CA

Politique, de promotion de la transformation des produits agricoles
Promotion des agro carburants dans les terres dégradées (Jatropha)
Facilitation de l'accès du foncier des populations locales

Des mesures de soutien à la production qui permettent au sahel de produire au-delà de ses besoins
La CEDEAO : a partir de 2015, tous les pays investirons 15% de leur budget à l'Agriculture durable
Emergence d'agrobusiness men tendant à valoriser les productions locales
Développement du secteur énergétique pour soutenir l'irrigation des terres du sahel
2015, restauration de 40% des terres dégradées de la vallée du Niger (source ABN)

Land degradation by 2015
State regulation or organizes markets (sub regional)
The great green wall covers 1000 KM

SCENARIO 3: Long-term priorities with non-state actors as the dominant force

Changements sociaux	Développement de technologies adaptées	Politiques Institutions règlements	Marchés et production	Renforcement de capacités
	Intégration agriculture-élevage 2015	Les politiques et plans prennent en compte la dimension genre (prise en compte des groupes vulnérables) 2015	Les banques s'ouvrent à l'agriculture 2025	
	Boom de la production fourragère 2020	Les organisations professionnelles rurales aux portes des parlements 2025	Développement du marché du carbone et des services écologiques (éco-tourisme, produits terroirs…) 2015	
	Les énergies renouvelables dans le quotidien des populations rurales 2020	L'état renforce son rôle de régulation (utilisation des biotechnologies : OGMs…) 2020	Accroissement du déstockage du bétail vers les zones côtières 2020	

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	Intégration agriculture-élevage **2015**	Les politiques et plans prennent en compte la dimension genre (prise en compte des groupes vulnérables) **2015**	Les banques s'ouvrent à l'agriculture **2025**	
	Boom de la production fourragère **2020**	Les organisations professionnelles rurales aux portes des parlements **2025**	Développement du marché du carbone et des services écologiques (éco-tourisme, produits terroirs…) **2015**	
	Les énergies renouvelables dans le quotidien des populations rurales **2020**	L'état renforce son rôle de régulation (utilisation des biotechnologies : OGMs…) **2020**	Accroissement du déstockage du bétail vers les zones côtières **2020**	

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	Boom de la production fourragère **2020**	Les organisations professionnelles rurales aux portes des parlements **2025**	Développement du marché du carbone et des services écologiques (éco-tourisme, produits terroirs…) **2015**	
	Les énergies renouvelables dans le quotidien des populations rurales **2020**	L'état renforce son rôle de régulation (utilisation des biotechnologies : OGMs…) **2020**	Accroissement du déstockage du bétail vers les zones côtières **2020**	

SCENARIO 4: Short-term priorities with non-state actors as the dominant force

Natural reserve forest sold to Japanese
The private enterprises will lead and force the state to take decision who arrange private productivity
Due to economic resources sharing only by private leaders, the 10% of the actors will be wealthy and 90% very poor
Land degradation will increase
Now in Africa, people die for obesity
Drop of peanut price due to over production
Drop of school going children which may affect future generation
Rural exodus because younger will have new need
Social movement in 2015 for economic growth
The big revolution will push to new governance due to social crisis
Climate diseases (malaria, meningitis, etc.;;will increase by 30% in 2030
ICT will be intensified through telephone farming
The road will be degraded because the states have not a sustainable programme for that
Big holding pushes a low for minimum of wage philanthropy
The poverty will put same actors in fanatic activities (religion, al kaîda…)
Great degradation of health due to over consumption, stress, and pollution
Upgrading of criminality due to the need of profit in 2030
More caterpillars just arrived from china
Prostitution increased by 10% due to land lost

SOCIAL AND ECONOMIC IMPACT	**INSTITUTIONAL IMPACT**	**ECOLOGICAL IMPACT**
Rural exodus increased More food, high GDP/capita but suburb People die for hunger and illness	The private enterprises will lead and force the state to take decision which arrange private productivity	Land degradation plus intensive fertilization affected water

3. Day 2: structuring the scenarios

The second day began with summarizing the work done so far for a few participants whose flights were delayed.

Then, the plan for day 2 was discussed in greater detail, starting with the "time lines" exercise.

3.1 Scenario time lines

Once a collection of possible story elements was created, we asked the participants to structure and expanded on the scenarios in terms of time and cause and effect. This structuring captures the logic of the story – the underlying assumptions that drive events and developments in the narrative. This structuring is crucial for future use of the scenarios.

We gave the participants the following terms of reference:

- Structure your story elements on a flipchart: start with those things occurring in 2030
- Work back to 2011
- Consider what is required for the current world to move toward the world of your scenario
- To develop a good storyline, there needs to be a sense of causes and effects
- Place your story events in a chronological order – what causes what?
- What is missing for one thing to lead to the other?
- Which events and developments are driven by multiple drivers?

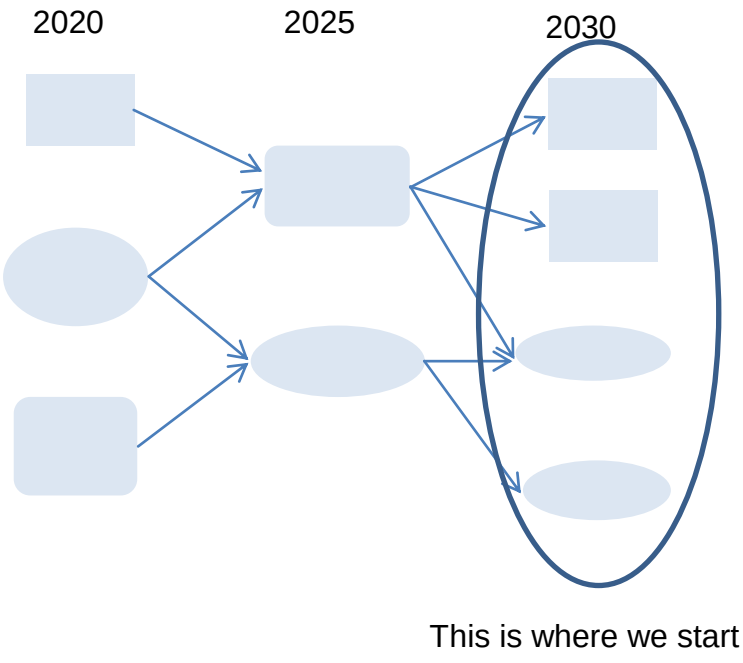


Figure 5. Schema showing the generic structure we aimed for in the time lines exercise.

Figure 5 shows the generic structure aimed for in this exercise. There is a specific reasoning behind working backward to the present instead of forward. By starting with the end states of the scenarios in 2030, the scenarios are not initially limited by sticking to what is expected to be business as usual based on the present. This "back-casting" leaves participants relatively free to come up with creative, plausible futures but then forces them to track back and think about how these futures come about. Often, this means that transitions or other discontinuities are needed. The recognition of this fact arises naturally through back-casting.

All groups followed this back-casting approach, though not all groups ended up using the specific visual format showing cause and effect links. These links, though implicit in the text, are to be made explicit in the follow-up storyline development after the workshop. Additionally, not all groups were able to work back to 2011 from 2030 which means that their time lines will be extended in the workshop follow-up.

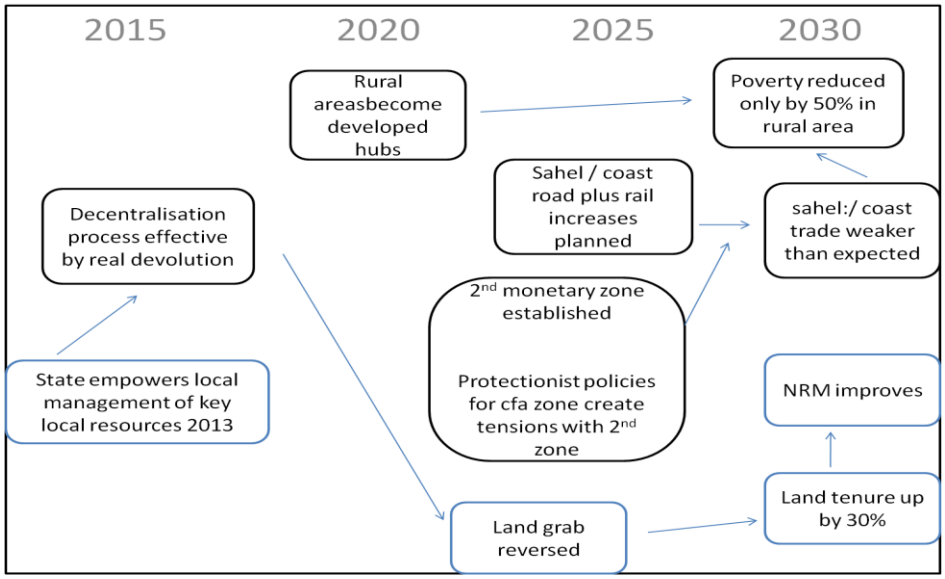
3.2 Time lines – results of scenario groups

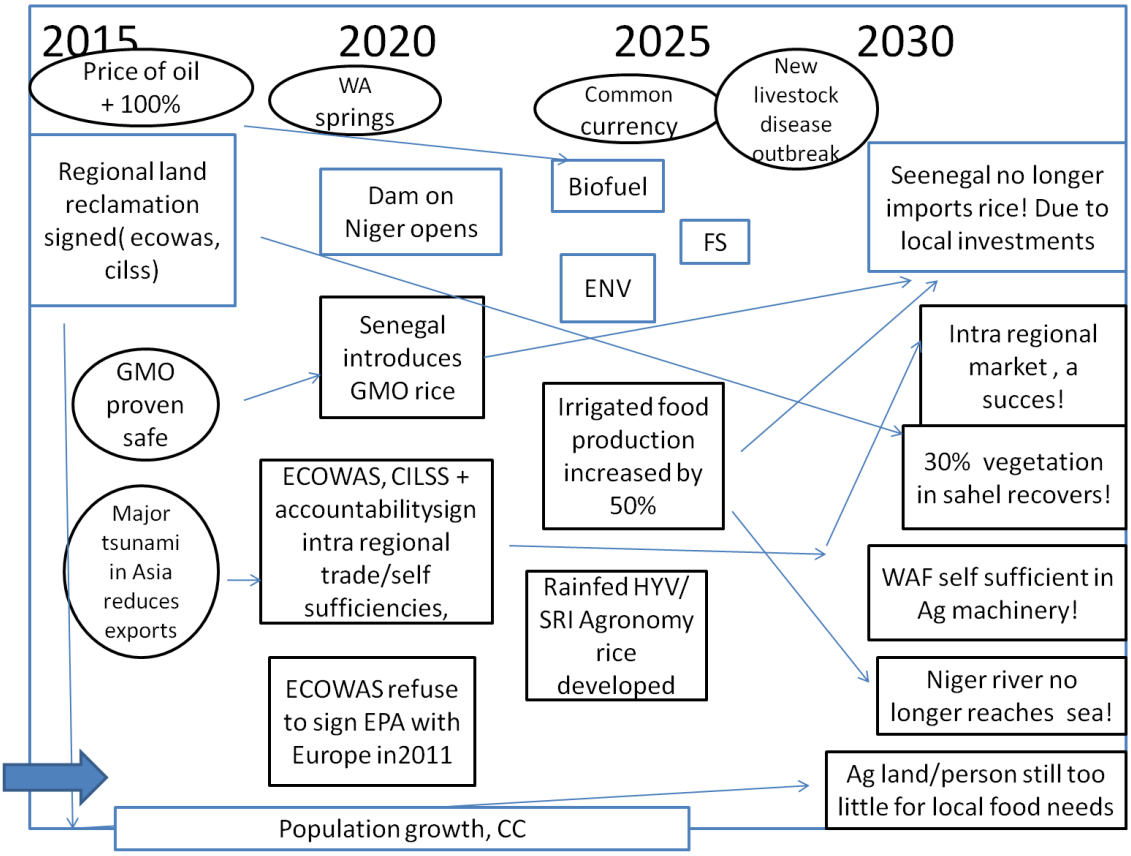
Scenario 1: Short-term priorities and state actors dominant

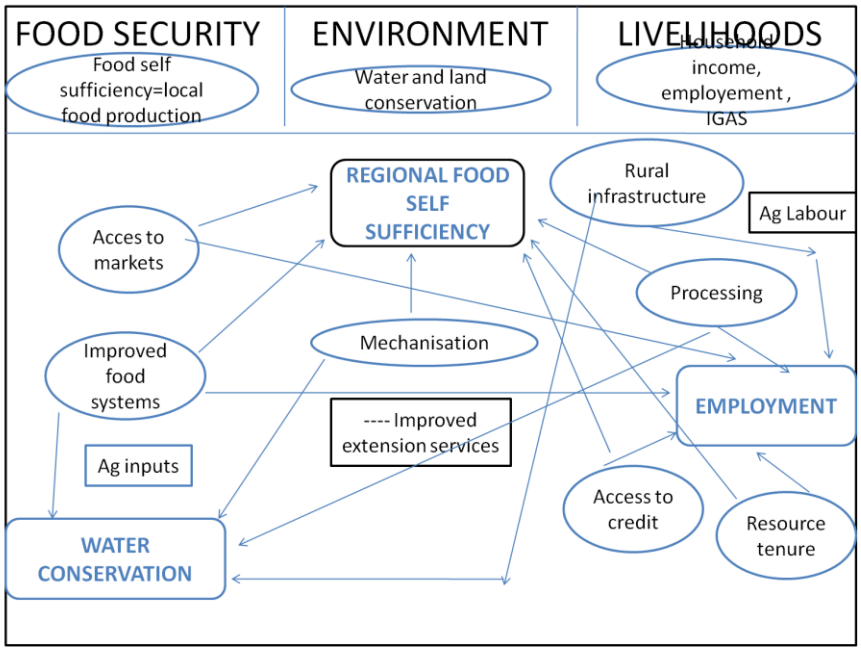
2025	2030
FOOD SECURITY **Increase in fertilizer use with help of subside plus fertilizer production** **Boost in seed supply will help in multi-nationals……** **Greater training in products plus information plus organization** **Expanded irrigation plus efficiency**	**FS increased by 150% (production)** **Supply to regional market** - **Competitiveness networks increase** - **Infrastructures** - **Capacity building roads, energy, value change** **DRIVERS**
LIVELIHOODS **1** - **Diversification of incomes (less agriculture dependence)** - **Local process plus value addition** - **Increase agro industries** - **Remittance, micro credits** **2** - **Pharmaceutical production increase** - **Sell of national reserves** - **Taking advantage of int/dev. Opportunities** - **Women's development**	**1** - **Poverty reduced by 50% , meeting MDGs** - **Migration, financing policy for access to credit** - **Plus 30% agriculture income** **2** - **Improved living condition (human welphare)** - **Support for private sector for short term governance gains** - **$$$** - **Politically correct**
ENVIRONMENT - **Promotion of mixed crop system** - **Provincial water management** - **Intensification of land use** - **Soil and water conservation** - **Market for land increased non Ag actors** - **Over exportation – given to**	**No preserved forests** - **Quick $ plus FS** - **Water use efficiency** - **Water tax, financial gains from water technologies** - **GHG decreased** - **GHG increase**

- **Government greed for land- land grab**	- **Degraded land** - **Market for land, over exportation** - **Poor gov. land policies**
INSTITUTION **Policy incentives to favour effective economic decentralization** **Land taxation system in place** **Effective suppression of customs barriers** **Liberalization of Ag. Information services**	- **PES markets** - **Land reform completed** - **Regional economic/env/Ag/ safety nets policies enforced**

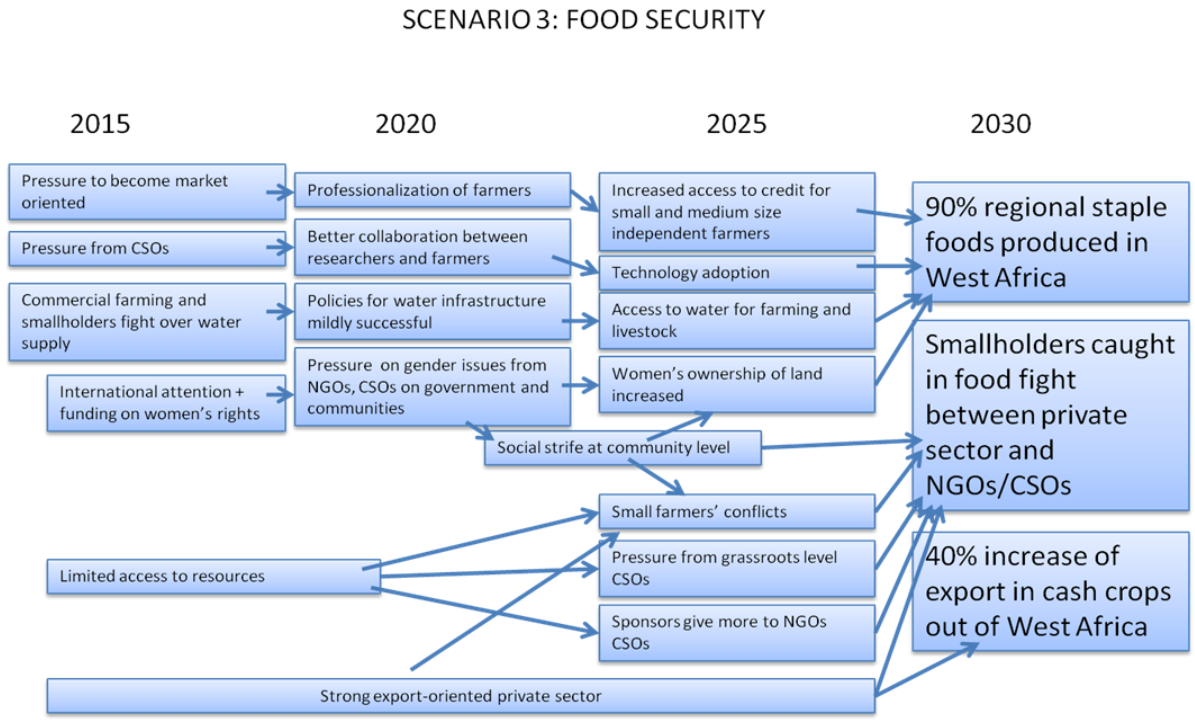
Scenario 2: Long-term priorities and state-actors dominant

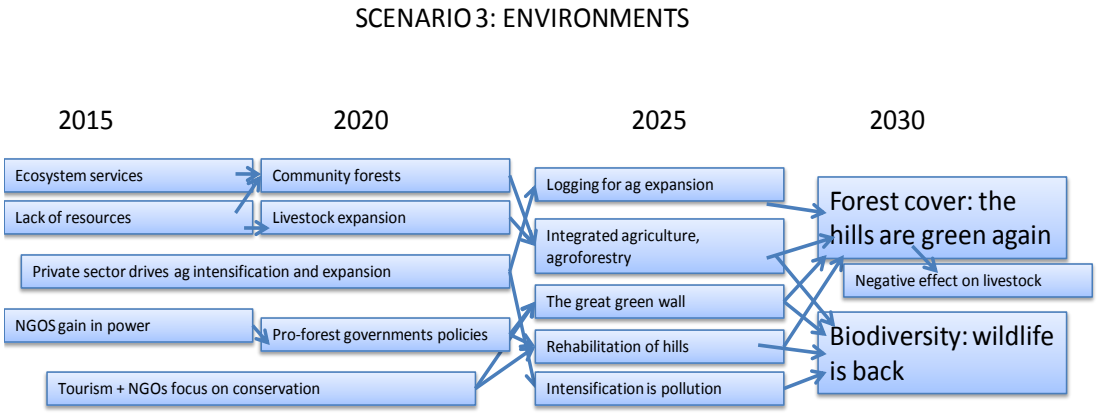



2015
2020
2025
2030
Price of oil + 100%
WA springs
Common currency
New livestock disease outbreak
Regional land reclamation signed(ecowas, cilss)
Dam on Niger opens
Biofuel
FS
ENV
Seenegal no longer imports rice! Due to local investments
GMO proven safe
Senegal introduces GMO rice
Intra regional market , a succes!
Irrigated food production increased by 50%
30% vegetation in sahel recovers!
Major tsunami in Asia reduces exports
ECOWAS, CILSS + accountabilitysign intra regional trade/self sufficiencies,
Rainfed HYV/ SRI Agronomy rice developed
WAF self sufficient in Ag machinery!
ECOWAS refuse to sign EPA with Europe in2011
Niger river no longer reaches sea!
Ag land/person still too little for local food needs
Population growth, CC

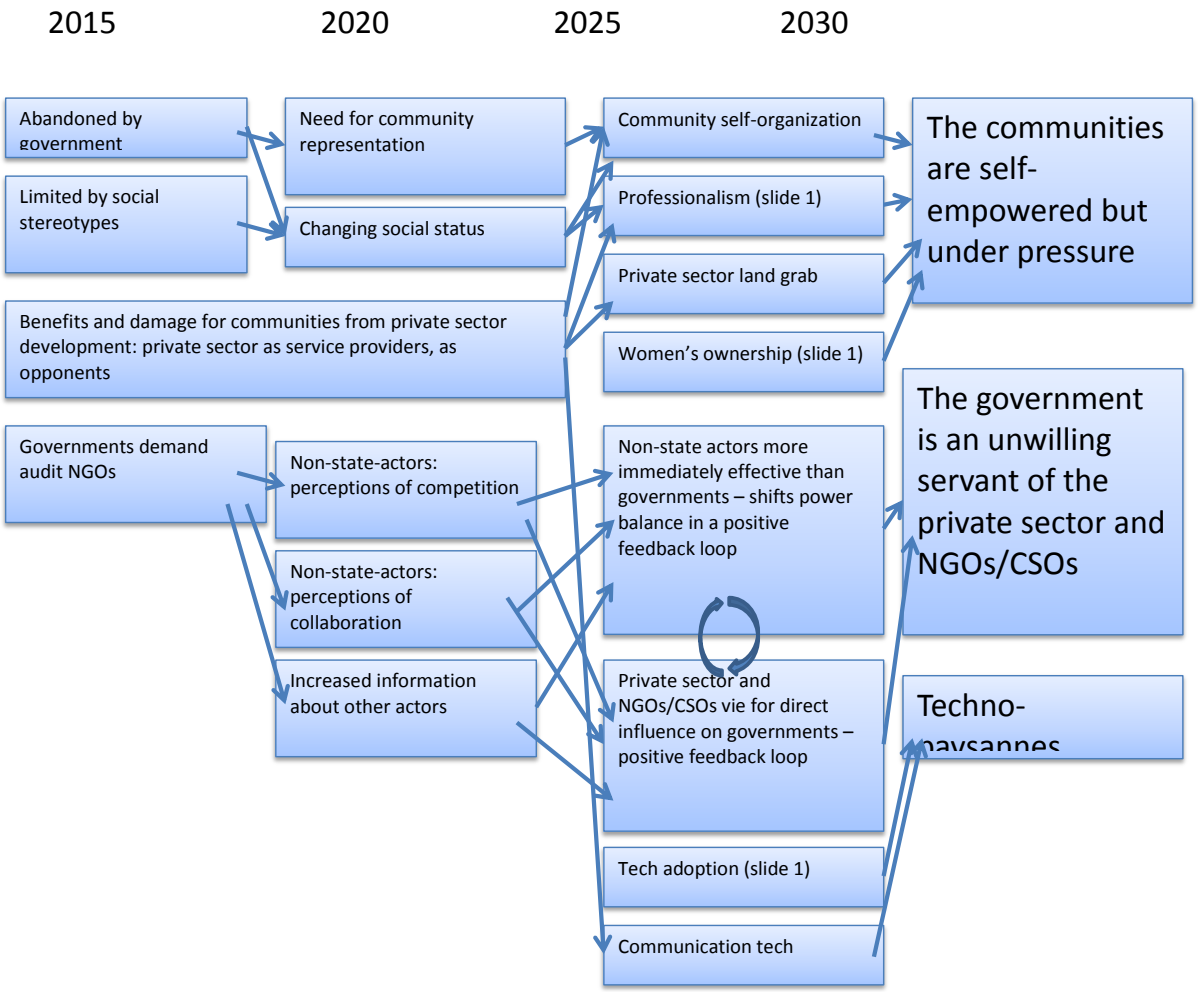

FOOD SECURITY
ENVIRONMENT
LIVELIHOODS
Food self sufficiency=local food production
Water and land conservation
Household income, employement , IGAS
REGIONAL FOOD SELF SUFFICIENCY
Rural infrastructure
Ag Labour
Acces to markets
Processing
Improved food systems
Mechanisation
EMPLOYMENT
---- Improved extension services
Ag inputs
Access to credit
Resource tenure
WATER CONSERVATION

Scenario 3: Long-term priorities and non-state actors dominant





SCENARIO 3: LIVELIHOODS/WELLBEING



Scenario 4: Short-term priorities and non-state actors dominant

B – Environment sustainability

2020	2025	2030
		Peasant farmers agitate for policy to restrict transitional
Overuse of chemical, fertilizer is generalized by 2020	25% of land degraded by 2025	
Multinational acquire 30% of	30% of deforestation due to	Large companies change

public and private land	creation of large scale farms and factories GHG emissions enhanced by20% of the 2011 level	production systems towards green technologies
For each crops extension, 40% of agriculture product will be due to new land clearing	80% of cultivated areas are under erosion (low yield, poor, forestation…)	50 % of cultivated area will be acid (ph 3- 4)
Expansion into drought land by rural /local farmers	Biodiversity loss, water pollution and general ….degradation	
Natural lake disappear	More artificial lake	New water barn disease

C. LIVELIHOODS

2020	2025	2030
- More income but illes distributed creates suburbs	- Violence and drug will increase	More arms circulation
- Increase of resources at rural population level (30% increasing)	- Some separation of family due to resources sharing issues (40% of product unit)	- Increasing of criminality (50% more aggressions)
- Rural exodus increased by 40% in 2020	- Criminality and prostitution increase by 30%	- Rural population livelihoods decreased by 30%
- Reduction in agriculture production and alternatives livelihoods	- Increased migration of youth for urban areas for jobs -	-
- Rural, urban - migration reaches 40% of the current level with exposure to ICT	- ICT technology available through ICT villages dev. About 50% of population	- 80% of population ICT literate hence increases communication for development.
- The need of great productivity favorites the multiplication of agriculture new actors (30%)	- Livestock and agriculture land are grabbing by agro business men	- Development of news services (by 20%) like processing in forest product by the farmers and rural communities

3.3 System maps for each scenario

After a start was made with the development of the time lines for each scenario narrative, we took time to develop a different, parallel perspective on the scenarios – system maps. These system maps chart the key outcomes for each scenario, the key drivers that impact these outcomes, and the nature of the relationships between outcomes and drivers. This approach allows the participants to chart crucial relationships and feedbacks that make each scenario distinct. System maps communicate the scenarios to potential users and make quantification based on the assumptions of the workshop participants possible.

This is the assignment given to the participants, including an example (figure 6):

Determine one key OUTCOME each for your scenario for food security, environments and livelihoods; 3 outcomes in total.
Determine two drivers at most for each outcome that are specific to your scenario; 6 drivers in total.
Map the 10 most important relationships between drivers and outcomes and give them a positive or negative value.

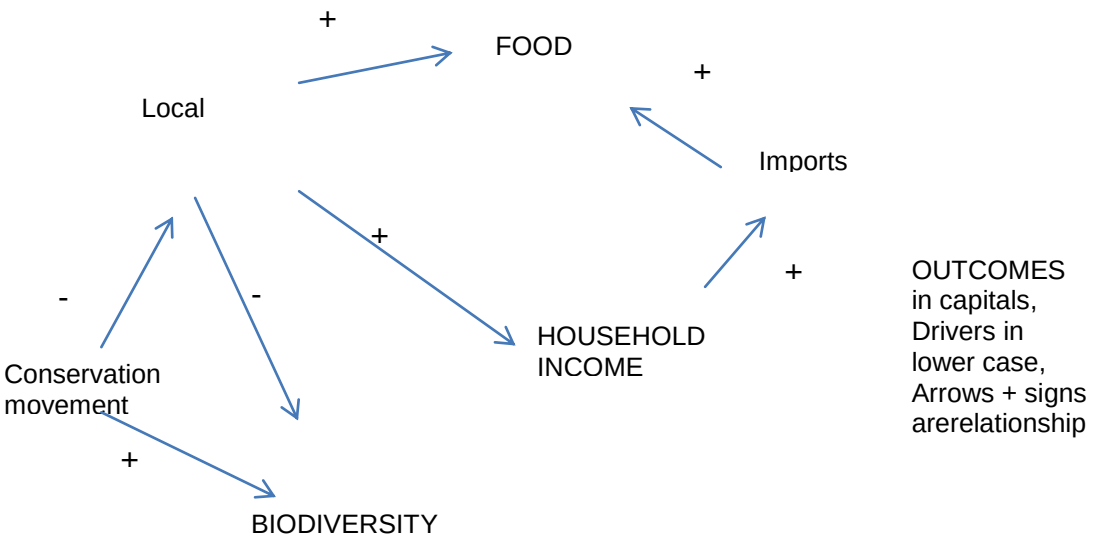
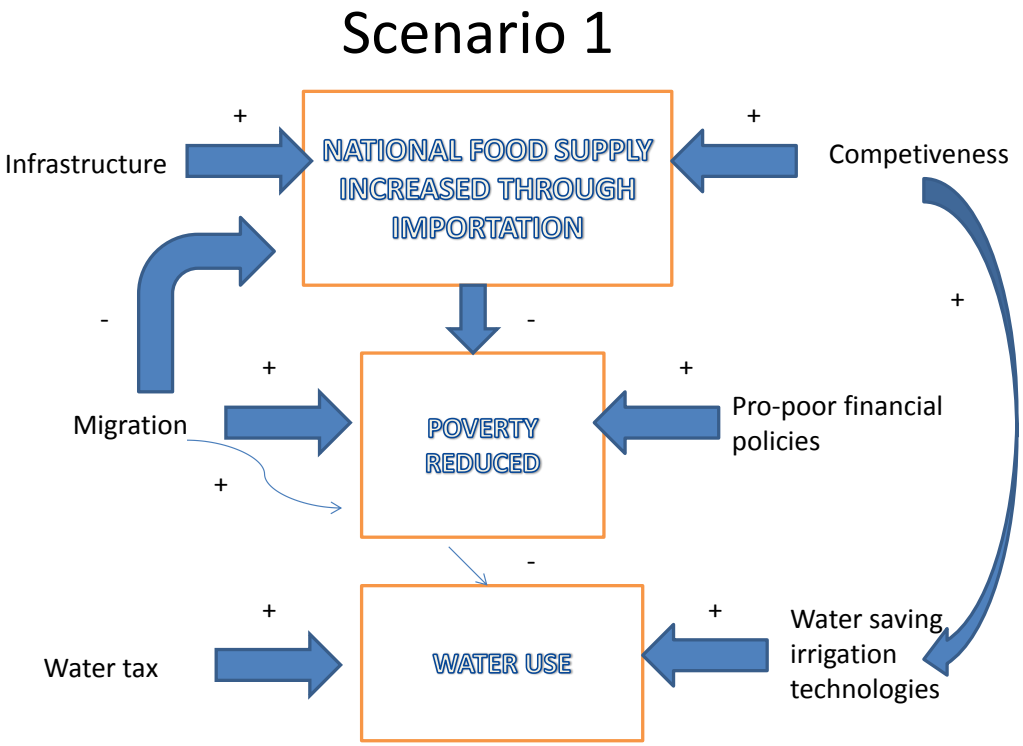


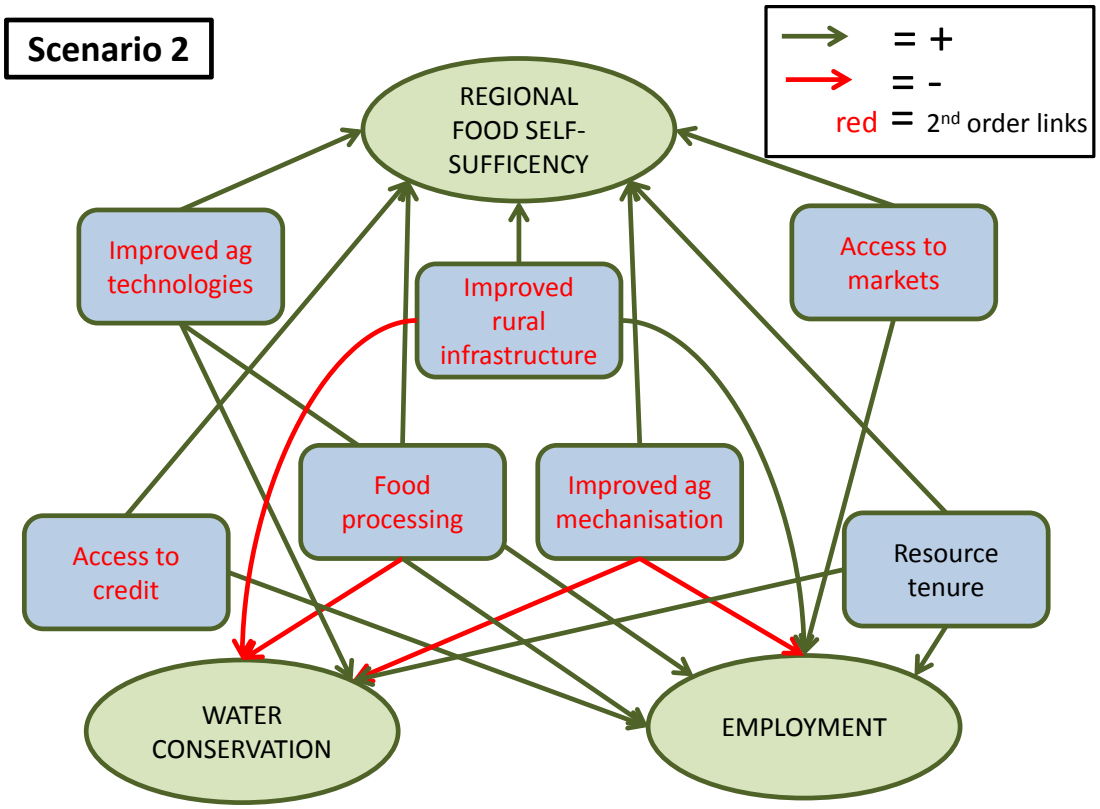
Figure 6. Simple example of a system map containing several outcomes, drivers and relationships for food security, environment and livelihoods in West Africa.

3.4 System maps – scenario groups

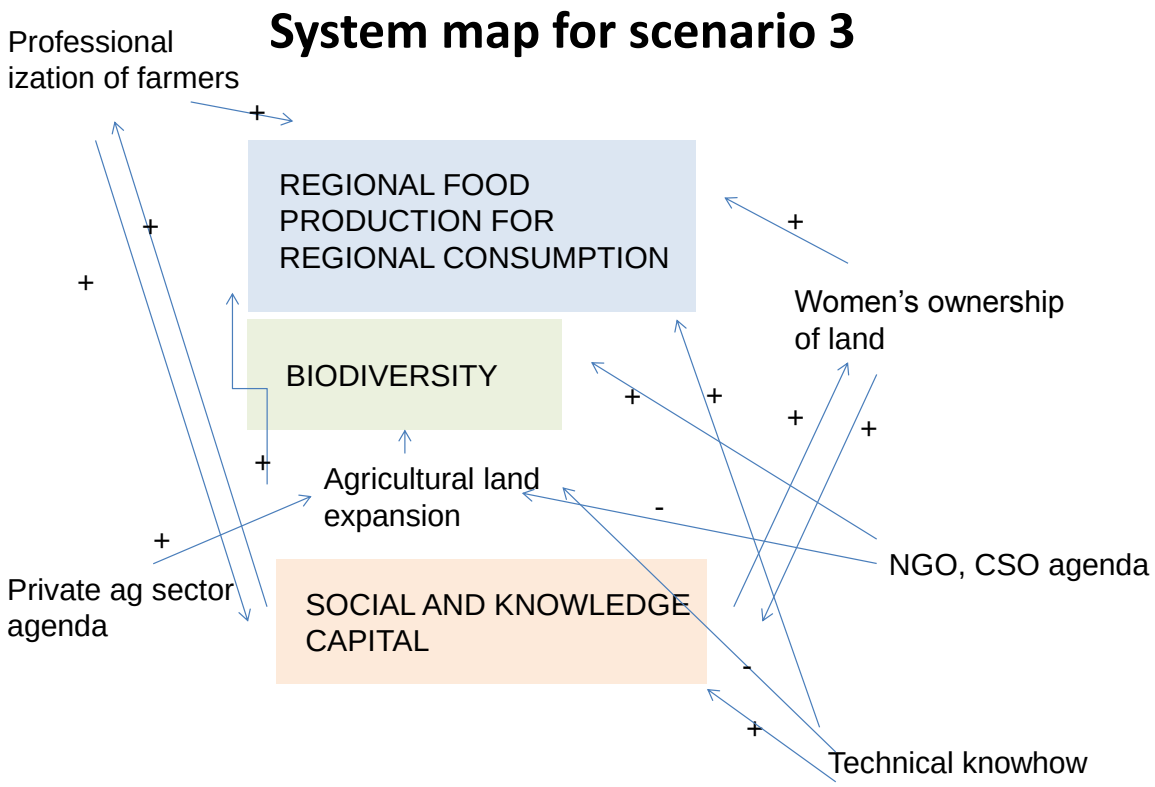
Scenario 1: Short-term priorities and state actors dominant



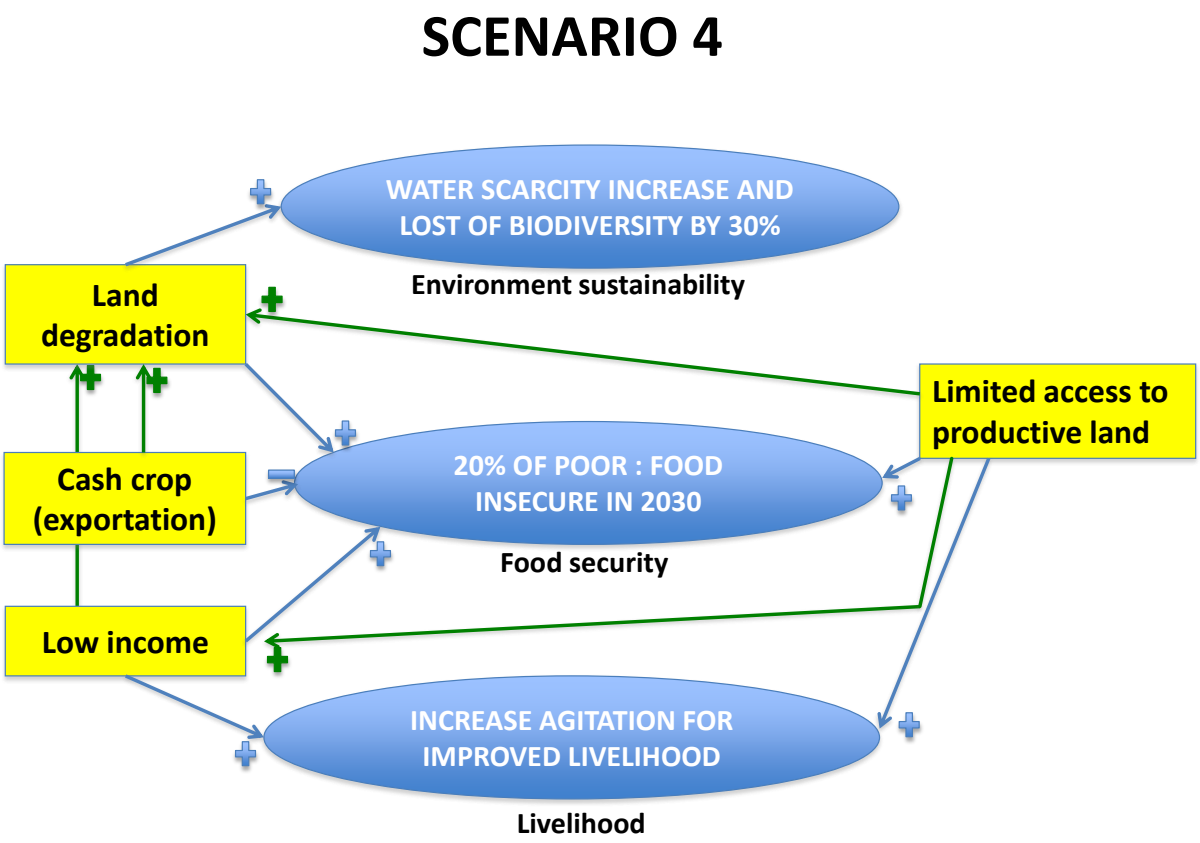
Scenario 2: Long-term priorities and state actors dominant



Scenario 3: Long-term priorities and non-state actors dominant



Scenario 4: Short-term priorities and non-state actors dominant



Overview of outcomes and drivers for food security, environments and livelihoods across the scenarios

Food Security	Environments	Livelihoods	Drivers
SCENARIO 1: State dominates/ Short term priorities			
National food security increased thru importation	Water use	Poverty	Infrastructure Competiveness Pro-poor financial policies Water saving techs Water tax Migration
SCENARIO 2: State dominates/ long term priorities			
Regional food self sufficiency	Water conservation	Employment	Improved ag technologies Competiveness Pro-poor financial policies Water saving techs Water tax Migration Improved rural infrastructure
SCENARIO 3: Non - State dominates/ long term priorities			
Regional food production for regional consumption	Biodiversity	Social and knowledge capital	Professionalization of farmer Private Ag sector agenda Ag land expansion Tech know-how Womens' ownership of land NGO & CSO agendas
SCENARIO 4: Non - State dominates/ Short term priorities			
Food security for poor	Water availability & biodiversity status	Improved livelihoods	Land degradation Cash cropping for export Low incomes Limited access to productive land Civil disturbance

Day 3 Surprises, outcomes of interest and way forward

4.1 Comments on system maps in plenary session

Scenario 1

In this state dominated scenario with short term priorities one could think to promote small farmers and develop irrigation.

Scenario 2

The infrastructures are to be developed, the aspects of regional integration are to be considered, states regulation on market, enforcement of agreements, the group should also focus on food security. Is there a place for long term green job?

Scenario 3

No comments

Scenario 4

The international impact is to be considered, the demographic change and its impact within the region. The scenario is very skeptic

Recommendation: 1.2 billion are suffering food insecurity in the world, these figures should be taken into account in this scenario. The demographic is increasing; around 10 % actually. Civil society will fight against private sector and that will bring lot of crisis. Finally do not forget that even if the state is weak, it will not stay away.

4.2 Surprises exercise

A main function of scenarios is to offer plausible yet surprising perspectives on the future. History has shown us that low-probability, high-impact events are a major force of change – examples that spring to mind are natural disasters or the attacks on the twin towers in New York on 9/11.

Scenarios should help us become conscious of this reality of dynamic change, but many scenarios exercises have difficulties moving away from predictable, linear trends.

Therefore, in this workshop, we took time to focus explicitly on including surprises in the scenario narratives and think about what their effects would be on system developments in terms of food security, environments and livelihoods.

We introduced the concept of surprises, and discussed that concrete events like 9/11 and natural disasters are not the only forms that surprises can take.

Surprises can be:

- New ideas or insights suddenly becoming dominant: ozone layer, climate change
- Changes of direction: food prices going up
- Discrete events: hurricanes, sudden political change (violent or non-violent), shocks in oil prices, terrorist attacks
- Unintended consequences of change: greater accountability in public services creates more corruption
- New phenomena: the internet, mobile phones

We gave the following assignment to the scenario breakout groups:

How would these types of changes and surprises change your story? Think of at least 2 different types of surprises for your scenario.

All groups came up with more than 2 different types of surprises. Some groups were able to integrate these into their time lines and discuss the consequences, while for some groups this step has been left for the story development because of time pressures.

4.3 Surprises per scenario group

SCENARIO 1: Short-term priorities and state actors dominant

Brutal monetary shocks that affect WA's competitiveness on international markets
E g appreciation of cfa franc resulting in decreasing of agriculture exportation, different impact on urban / rural food security, income, welphare
New pesticide, biotic pressures, phyto sanitary crisis (2016)
Next desiccation event (similar in magnitude to 1970- 1980S) in 2025
Sudden series of terrorist attacks with religious implications potential failed state (touareg, Nigeria?) leading to regional war, guerrilla
Phytosanitary crisis

- Variable impact on FS b/c imports dominant
- Negative impact on rural poverty/livelihoods
- Increased national dependence on external solutions (eg arian flu)

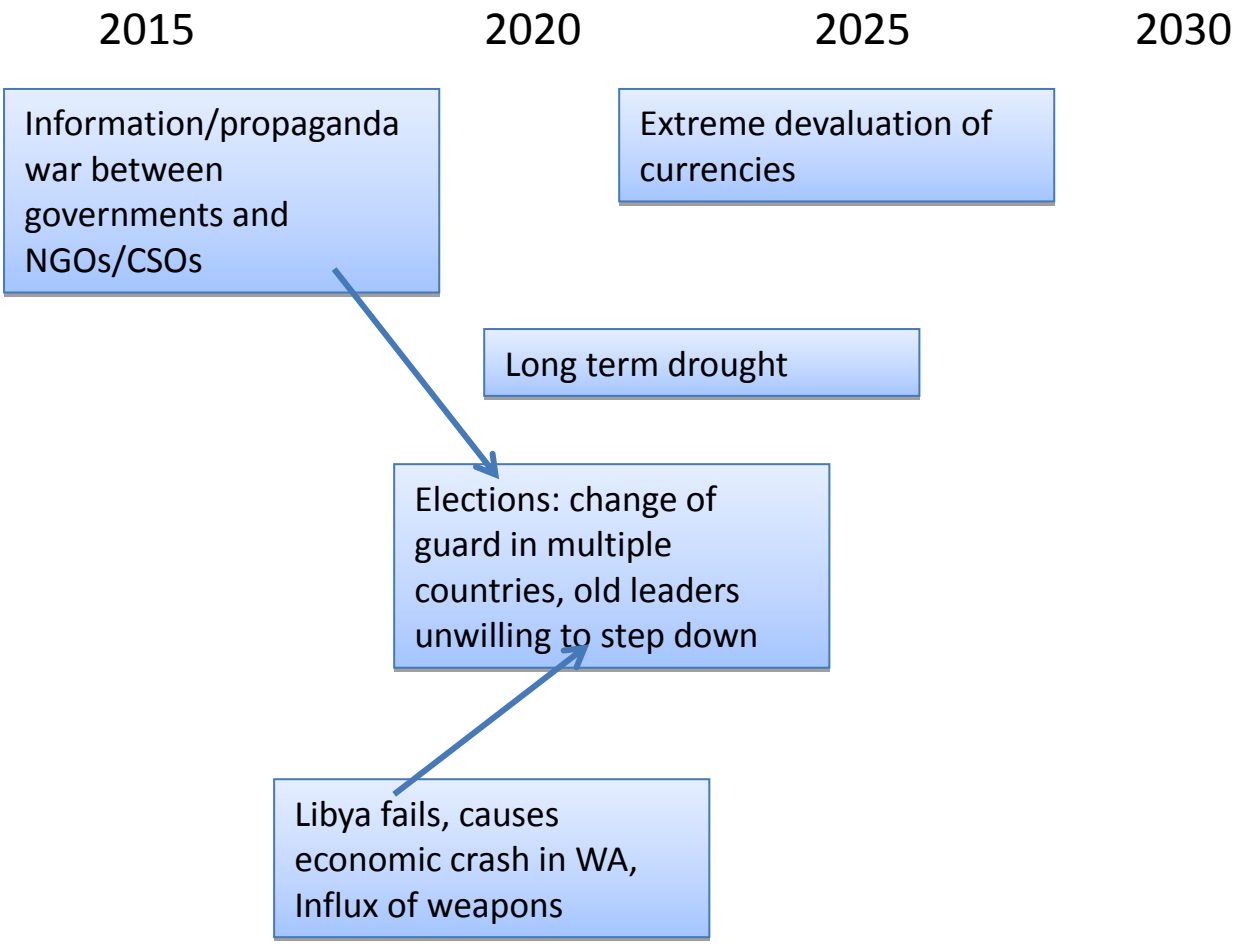
Failed state leading to regional conflict

- Collapse of local food supply systems
- Increasing of migration, exodus, increasing of pressure on peaceful islands
- Destruction, collapse of infrastructures
- New geopolitical makeup for West Africa (US WA?)

SCENARIO 2: Long-term priorities and state actors dominant

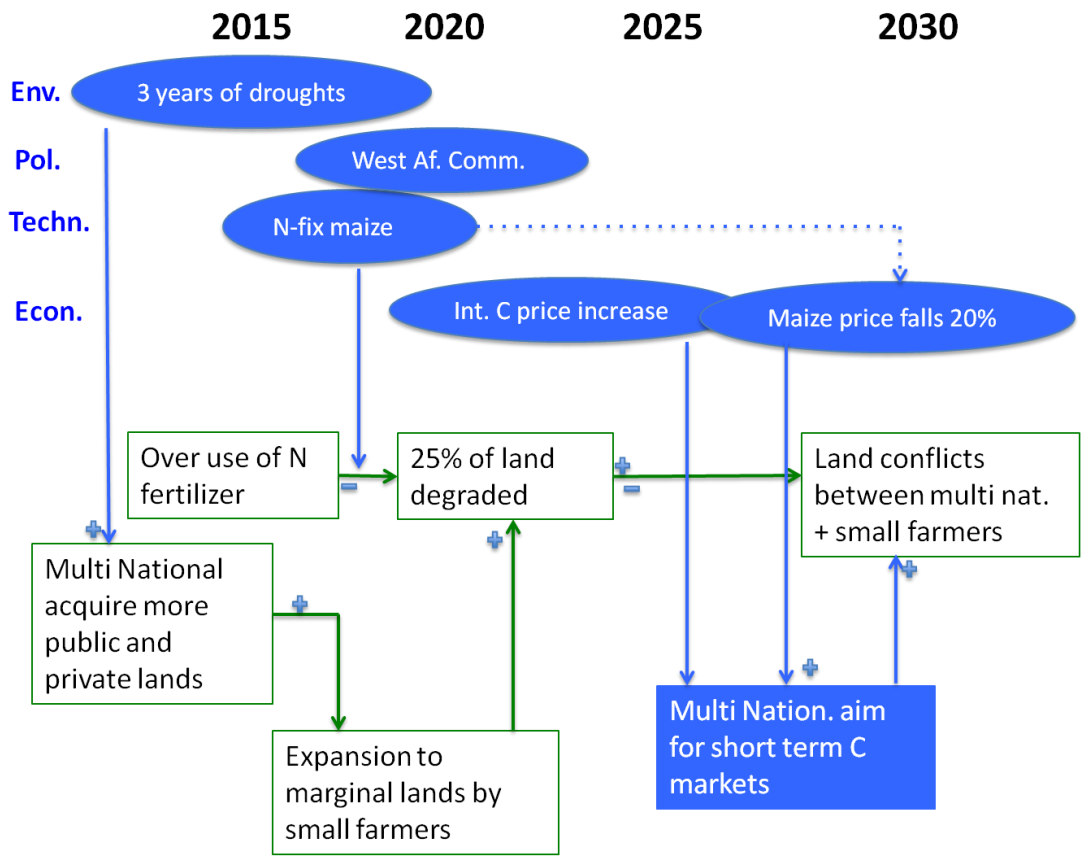
2015	20120	2025	2030
Increase in price of oil by 100%	West Africa spring new livestock diseases	Donor funds stop and ECOWAS becomes stronger	ECOWAS collapse Funds leaving WA stops and funds go back to WA
Major tsunami in Asian rice producing areas water war			

SCENARIO 3: Long-term priorities and non-state actors dominant



SCENARIO 4: Short-term priorities and non-state actors dominant

- Technology : 2020 N-fixation in maize
- Economic : 2025 cereal price drop by 20%
  International Carbon price increase
- Environment : 2015/8 three consecutive years of drought
- Political : 2018 West Africa under single government



- Demography change in region and other parts of world : ASIA
- Civil war?
- Food security focus
- Conflicts between state and non-state actors
- Urbanization pressure in rural areas to produce food
- Migration

FS

Regional food (self -sufficiency) production, Food security through imports, Food security for poor, Changing food habits, Nutritional value, Media influence,

ENVIRONMENTS

Biodiversity, Water availability, Water quality, Land conservation, Air quality, Tree cover Fuel use ⇨ (land grabbing)

WELL BEING

Income, employment, social capital, knowledge capital, Access to physical resources, physical, Health, institutional capital, Gender equity

4.4 Outcomes of interest and indicators

The final session of the workshop consisted of a listing of the key outcomes from the system maps exercise across all scenarios. This list was used as a starting point to discuss, in a plenary session, what would be a useful first list of outcomes of interest to be explored in all the scenarios concerning food security, environments and livelihoods.

In a second session, these outcomes were pasted on the wall across the conference room and an open-space session was held where participants walked around and wrote down suggestions for indicators and ways to measure each outcome. We chose this method to get as much suggestions as possible, as consensus is less important than multiple options for measurement to take into consideration. This session was successful and produced a large number of suggestions in terms of indicators and ways to measure outcomes. The result is the list below.

FOOD SECURITY

NUTRITIONAL VALUE

- Taux de malnutrition
- Improved baby food made with local cereals
- Chemical analyses (protein, carbohydrates, vitamins, Fe, Ca, Zn)
- Weight for age information in local clinics
- Ratios of nutriments in diets , energy: protein, Ca, P, etc….

CHANGING FOOD HABITS

- Utilisation des légumes à feuilles pour l'alimentation
- Manger la viande 3 ou 4 fois par semaine
- Food processing/ packaging market metrics

REGIONAL SELF SUFFICIENCY

- Produit disponible/ nombre dela population
- Production level of major staples
- Production / importation
- Taux de couverture des besoins alimentaires
- % des ménages autosuffisants
- % des ménages qui bouclent l'année avec les céréales produits dans leurs exploitations
- Nombre de tonnes exportées
- Number of cereals banks in rural areas
- Availability over time

FOOD SAFETY

- Prix bas des cereals
- Nombre d'intoxication
- Analyser les elements
- Production and processing standards
- Contrôle et repression / nombre de verbalisation
- Réglementation de l'utilisation des OGM
- Nombre de laboratoires d'analyse de qualité

- Quality of food
- Public health records, hepatitis, (starting/aflatoxin prevalence etc

ENVIRONMENTS

AIR QUALITY

- Monitoring of population
- Cases of respiration diseases reported
- Use of solar energy
- Law of import of user vehicles
- % des aerosols de l'air
- % des maladies respiratoires

LAND CONSERVATION

- Food availability , power abuse
- % de terre dégradables
- Structures ou infrastructures visibles sur le terrain
- Nombre d'hectares plantés
- Effet quantifié des techniques de conservation, nombre de techniques efficientes
- Chemical, physical analysis (c, no, density, soil, faune)
- % d'hectares de terres restaurées
- Hectares de terres recuperées
- Cropland metric under ….. management practice (how very high resolution …)
- Land use cropping, grabbing land …
- Superficies des aires protégées

BIODIVERSITY

- Evaluation de la biomasse par espèce
- Présence de faune
- Nombre d'espèces générées
- Nombre de variétés (sorgho, mil, maïs, patate, igname)
- Nombre d'aires protégées viables
- Absence de GMOs
- Conservation, co-habitation
- Inventory (species names, number of species), inventory of varieties and breeds.
- Number of seed productions units at the community level
- Seed self sufficiency

FOREST COVER

- No fire outbreak reported
- Availability of a forestry policy and land that is functional
- GIS (% of soil cover)
- Number of ecotourism sites
- Tree counts/ densities (measured directly from very high res-satellite)
- Construction d'une longue bande de la Grande Muraille Verte
- Evaluation du couvert végétal

- Hectares de forêts reboisées
- Superficies de forêts primaires conservées
- Taux de couverture végétale

MARINE
- Inventory (names of species, number of species)

WATER QUANTITY
- River how ground water depth
- Water available in underground basins
- Use of new irrigation technology (drop-irrigation)
- Water boreholes per the population
- Management of ground and surface water resources (strategy, policy, programmes)
- Water consumption per household
- Strengthen …, vegetation greenness metrics…(from satellite)
- % d'aménagement hydro agricole
- Nombre de barrages construits
- Nombre de techniques de gestion de l'eau (pluvial, souterraine)

WATER QUALITY
- Taux d'accès à l'eau potable
- Analyse de l'eau
- % d'infrastructure d'eau potable
- Qualité de source d'eau
- Availability of functional water laboratories

WATER AVAILABILITY
- Nombre de ménages ayant accès à l'eau
- Nombre de compteurs d'eau rendus par circonscription urbaine
- Number of water points per person
- Number of households with piped water
- Indice de pauvreté en eau
- Expositions aux alléas

LIVELIHOODS/WELLBEING

ACCESS TO PHYSICAL RESOURCES
- Equipment for production and domesticuse
- Km de réseaux dans les systèmes irrigués
- Différences de ranchs

SOCIAL
- Nombre d'infrastructures sociaux de base dans les zones rurales
- Différents conflits éleveurs/agriculteurs
- One family, one bicycle, motor or car
- Social protection schemes available for the poor
- Number of schools , hospitals per number of population
- Access to mobile phone and internet in rural area

ECONOMIC

- Not existing income generation activities for vulnerable groups and individuals
- Time of income generating awareness
- Epargne local
- Montant de crédit octroyé

SOCIAL CAPITAL

- Number of NGOs (survey)
- Number of communities organizations
- Dialogue on shared values, culture of tolerance in place
- Level of organization of rural population
- % of children in school per family
- Prise en compte des structures traditionnelles

KNOWLEDGE CAPITAL

- % of literacy
- % of secondary education
- Number of newly diploma (university)
- New curricula development at universities and schools
- Number of publications/ speakers in national languages
- Number and quality of schools
- Relevance of training program to the wellbeing of individuals/ society
- % of people/child going to school
- Réseaux régionaux mis en place
- Nombres d'institutions et d'universités créées
- Nombre de plateformes de partage de connaissances

INSTITUTIONAL CAPITAL

- Criminality level = performance des actes /décisions
- Nombres de lois institutionnelles nouvelles
- State / public officers accountable, wide access to information laws

GENDER EQUITY

- Effectivity and implementation of laws that promote women, redefinition of access to land to enforce women access, existence of mechanism allowing women to combine familial issues with working issues
- Boy / girl child ratio in school
- Ratio of men and women in policy decision making positions from villages to national levels
- Nombre ou % de femmes ayant accès aux ressources
- Nombre de femmes aux postes décisionnels

HEALTH

- % de population souffrant de maladies respiratoires
- Taux de vaccination

- Nombre de centres de santé créés
- Nombre de médecin par habitant
- Number of health centre per village
- Altainment of health related MDGS
- Height/weight index
- Nombre d'enfants malnutris
- Mosquito prevalence /habitat metrics (from satellite)

INCOME

- Bank savings
- Cost of life vs medium salaries
- MDG1 achieved in 2020
- What money can buy?
- % by source (on farm / off farm)
- Payment received for any job done
- Salaire mensuel moyen, dépenses moyennes par mois
- Revenu monétaire par an et par personne active
- Mesure du panier de la ménagère, que contient-il ?, à quel prix ?
- Nombre de femme ayant une activité de production
- Pauvreté en eau, bords du porte- monnaie
- Alimentation familiale variée dans la semaine et non riz à midi et pâte le soir

EMPLOYMENT

- Taux d'emploi des jeunes
- Engagement in any income generating venture, measured by number of hours / day
- Proportion of employees in decent work
- % des jeunes au chômage au sein d'une population, part des femmes ayant un emploi, activités génératrices de revenue
- % de jeunes au chômage
- Proportion of employees enjoying formal social security
- Rate of people employed per different productive sectors: agriculture, tertiary, ….
- Number of unemployed youth
- Number of persons / family working 8 hours per day for pay
- Number of people in decent work, type of skills in the labour markets
- % d'emplois jeunes crées

4.5 Collecting contacts for the CCAFS scenarios communication strategy

The last item on the workshop agenda before closing comments and an outline of the way forward was a short introduction of the CCAFS scenario communication strategy.

The CCAFS communication strategy on scenarios is based on the principle of linking knowledge with action and specifically facilitating policy to action. The communication strategy focuses on:

(1) Increasing exposure to the process of developing scenarios in order to build capacity on how to conduct regional level scenario exercises,

(2) Building awareness about the various scenarios developed in each region as a decision making tool to help decision makers assess plausible future pathways at the regional level and

(3) Awareness of key socio-economic uncertainties and trade-offs between food systems, environments and livelihoods at a regional level.

Participants were asked to provide the names of five persons linked to civil society, the private sector, donors, research and policy makers and administrators – selecting for those people who would be most receptive to the scenarios work and most likely to champion this process to third parties.

These names were to be sent to the Regional Scenarios Consultant, Ms. Zenabou Segda. The collection of these contacts is still in progress.

Questions for further consideration regarding the CCAFS scenarios communication strategy were:

What audience group would you like to target that could benefit from scenarios as a decision making tool? Why?
What communication tools would be useful to target the audience?
Are there any events in the region where you think scenarios could be used in 2012?

4.6 Evaluation of content and process by facilitators and participants

Concerning the results, participants had the following questions:

What are the next steps, how are the scenarios made concrete?
What types of documents will be created for the communication of the scenarios?
Are the budget implications for each scenario addressed?
How will the system maps be presented?

These questions are addressed below in the description of the next steps in the scenarios process.

Evaluation by facilitators in terms of results

The facilitators evaluated the results of the different steps taken in the workshop to develop content:

Axis revision:
- to create more clarity ,
- excellent and improved the scenarios' usefulness.

Headlining:
- creates content through brainstorming; gets the ideas flowing; Headlines should go beyond trends and tell a story.
- went well and created a lot of content, but some groups expressed these as trends rather than headlines.

Timelines:
- provide a structure to the story and align cause and effect,
- a bit of confusion over what to describe in 2030, but the historical back stepping went well.

System maps:
- looks at cause and effect relationships between drivers and outcomes and identifies feedbacks,
- different for each group; was in some cases difficult to reduce system to a few essentials; helped some better articulate outcomes and drivers

OVERALL: make the scenarios challenging, relevant, plausible and consistent

Evaluation by facilitators in terms of process

A main observation was that as it is natural for people to think about desirable and undesirable futures, it is difficult to move beyond this and talk about what could happen rather than what we want or do not want to happen. The difference between these two modes of futures thinking remained a difficult thing to conceptualize.

It was sometimes difficult to link back to the work of the previous workshop with so many new participants – maintaining the balance between work that was already done and revising this work in favour of views shaped by a broader group of participants.
The facilitators though they could have been clearer about what each step leads to – this has to be repeated time and time again to maintain a sense of purpose and logic.

The group was very engaged throughout the entire process, and group learning could be observed in the process. There was an excellent mix of expertise and perspectives that was a main success factor in this workshop.

Feedback by participants on the process (on the hand of facilitators)

5. Conclusions and next steps in the CCAFS scenarios process for West Africa

The workshop that this document reports on represents a comprehensive, solid basis of the CCAFS scenarios development process in West Africa. The revision of key uncertainties, the enrichment and structuring of scenario narratives, the identification of key outcomes, drivers and relationships in the system maps, the inclusion of surprises and their consequences and the mapping of outcomes of interest and possible indicators all provide a basis for the development of the scenario narratives and the quantification of the scenarios in terms of these outcomes of interest. The involvement of highly engaged experts from across sectors, disciplines and countries in West Africa ensures that these scenarios are insightful and relevant for these sectors, disciplines and countries in the region.

Story development

From among the participants, scenario writers will create full scenario narratives based on the work done in this workshop that explore crucial events and processes in each storyline towards an alternate, plausible future in 2030. The scenario writers will take all the outcomes of interest into account so that comparability between the scenarios is achieved.

Quantification

The indicators proposed for the outcomes of interest will be reviewed and quantified in collaboration with trade, food security and environmental change models and through other complementary methods. The next scenarios development workshop will focus on this quantification process – how can the scenario narratives be captured in terms of numbers? How do assumptions for different outcomes relate to each other? What do the models say about the plausibility of different outcomes in a scenario? This workshop will be done with the same, strong and diverse group of participants.

From scenarios development to experimentation with key user groups and wider audiences

Scenarios development is a valuable process in itself for group learning and the capturing of key features of possible futures and what these mean for our understanding and actions in the present. However, much value in scenarios must ultimately come from using and experimenting with the scenarios in different contexts of strategy development, research.

As mentioned before, in the CCAFS scenarios process in East Africa which was started earlier and serves as the pilot for the process in West Africa the experimentation with the scenarios with key user groups is now underway. Plausible future socio-economic and policy contexts at a regional level have many applications, from regional-level strategizing to local-level community adaptations and more specific research and strategy development focusing on a single issue (e.g. vector-borne diseases and climate change).

Part of what makes the CCAFS scenarios process unique is that we aim to include this experimentation with the scenarios by key user groups into the process. In this, the scenarios process becomes less a product and more a service for uncertainty-conscious future strategizing across sectors and stakeholder groups.

The experimentation with the scenarios by distinct user groups provides a range of perspectives on the usefulness of the scenarios and provides different critical perspectives on their assumptions. This allows for a reflexive enrichment and revision of the scenarios to make them more relevant and flexible in their usefulness.

Apart from the active targeting of and collaboration with key user groups, the CCAFS scenarios communication strategy aims for a wide dissemination of the scenarios and the insights arising from experimentation with these plausible alternate futures. We do this through a collaboration with, among others, the PANOS journalists' network for global development journalism. Radio, TV, interactive web tools, comics and newspaper articles as well as policy briefs and research documents and articles are part of this strategy.

ANNEXES

ANNEX 1 Scenario breakout groups

Scenario 1 – Short-term priorities and state actors dominant

Ange, Alain Louis, GHANA
Traore, Pierre Sibiry, MALI
Parkouda, Sibiri Dominique, BURKINA FASO
Kouressy, Mamoutou, MALI
Faye, Mbène Dièye SENEGAL
Bend, Pauline, SENEGAL
Niambele, Aminata Diarra, MALI
Fatou Faye , SENEGAL

Scenario 2 – Long-term priorities and state actors dominant

Ofei-Nkansa, Kingsley, Ghana
Bayala, Jules, Mali
Aubee, Ernest, Nigeria
Seck, Emmanuel, Senegal
Faye, Abdourahmane, Senegal
Kadi Kadi, Hame, Niger
Senghor, Abdoulaye, Burkina

Scenario 3 – Long-term priorities and non-state actors dominant

Diouf, Helene, Senegal
Sawadogo, Alfred, Burkina Faso
Moudy Manmane, Sany, Niger
Karbo, Naaminong, Ghana
Fahinkey, Mahamadou, the Gambia
Diop, Mamadou, Senegal
Coly, Adrien, Senegal

Scenario 4 – Short-term priorities and non-state actors dominant

Ndiaye, Ousmane, Senegal
Mwickcha, John, Niger
Sogoba, Bougouna, Mali
Some, Leopold, Burkina Faso
Nutsukpo, Delali Kofi, Ghana
Segda, Zenabou, Burkina Faso

ANNEX 2 Comments on objectives linked to outcomes – Alain Ange

For the outcomes exercise, Mr Ange Alain made the following suggestion consisting in linking objectives to outcomes.
Scenario 1 - Government leading – Short term response
Linking objectives and outcomes – Suggestions from A. ANGE – FARA
Objectives are designed to provide immediate satisfaction to the public on a case by case basis.

Objectives	Increased food production	Increased food imports	Improved livelihoods
Products from policies	Budget for agriculture Donor support	Budget for food imports International support	More donor support and public budget
		Investments for food imports (ports, warehouses, etc.)	
	More farm land	Land cession to private sector for cash crops	
	More inputs through subsidies		
	More water tapped		Better water access
	Some rural credit		Social nets
	More rural labor is mobilized		
	Better marketing for agricultural products	Industries processing production and imports	Improved income
			Better sanitation
			Health improvement
			Education
	Support to traditional processing		Women empowerment?
Outcomes	More production	More food available	
Social	Emergence of entrepreneurs in farming	New drive on food habits	Changes in social relationships in agriculture
		More benefits for private sector	Fragmentation of agricultural land
		Competition between imports and national production	Exclusion not considered
	Food prices increase		Poverty not reduced

		Subsidies on food	School children targeted
Natural resources management	Deforestation increases		Degradation of social access to natural resource
	Land degradation increases		
	Less water in waterways		
	Impact on bio-diversity		
	More GHG emissions		Loss of indigenous knowledge
Public finance	Taxes on water	Taxes on export crops	
	Taxes on forest products	Taxes on business	
	Budget deficit	Budget deficit	Lack of budget
CONCLUSION	Increased pressure on natural resource	More dependency to international markets	More dependence to foreign assistance

ANNEX 3 Statement by Ernest Aubee, Principal, Programme officer- Agriculture, ECOWAS Commission, Abuja, Nigeria

Felicitations

Climate change, Agriculture, foods security west Africa scenarios workshop seeks to address very critical areas of development mainly food security, livelihood, environmental goals in the force of changing climate

Climate change is indeed a practical reality and would hinder the attainment of food security and other socio economic targets. The need to work together cannot be over emphasized

I will like to thank CCAFS for supporting the scenario workshop for West Africa. I see this workshop not only one of exchange of ideas and experiences but it is one of capacity building. The issues of climate change are dynamic and complex, we need to build a critical ways of expertise in West Africa.

I will like to thank CCAFS for supporting CORAF, one of the technical partners of the ECOWAS Commission. I am confident that the CCAFS/ CORAF partnership will yield positive developments for West Africa. The challenges of climate change cannot be addressed in an ad-hoc basis. We need to have a holistic and comprehensive strategy and activities to address climate change. I am delighted to see that the scenario building workshop will compliment what the ECOWAS Commission is doing in the areas of agriculture, food security, climate change and livelihood enhancement.

ANNEX 4 : Mot de bienvenue du CORAF/WECARD

Mr le représentant de la CEDEAO

Mesdames et Messieurs les représentants des institutions nationales, sous régionales, régionales et internationales

Chers participants
Honorables invités
Mesdames et Messieurs

Je commencerai mes propos par présenter les excuses de Dr Paco Sérémé Directeur Exécutif du CORAF/W ECARD absent de cette cérémonie pour mission en dehors du Sénégal
Et je souhaite donc en en son nom la bienvenue à tous les participants qui ont bien voulu effectuer le déplacement pour participer à cette rencontre d'un très grand intérêt à tout point de vue.
Je n'ai certes pas besoin de vous dire que, le Directeur Exécutif du CORAF/WECARD, reconnait toute l'importance de cet atelier qui est le 2ème d'une série qui a démarré par l'organisation d'un atelier régional sur «le Changement Climatique, l'Agriculture et la Sécurité Alimentaire en Afrique de l'Ouest tenu à Dakar au Sénégal du 28 au 30 Septembre 2010. Rencontre par ailleurs coordonnée par le CORAF/WECARD avec l'implication de son programme sur la gestion des ressources naturelles qui coordonne un large volet sur les changements climatiques.

Ce processus créatif qui se poursuit avec les différents acteurs de la politique, du secteur privé, de recherche, ONG, médias et organisations de la société civile bénéficiera non seulement de l'appui mais de la participation du CORAF/WECARD à tous les niveaux vu le partenariat déjà tissé entre notre institution et le programme CCASA.

Dans l'espoir de réaliser les principaux résultats attendus de cet atelier qui restent par ailleurs un excellent moyen de créer et de développer des connections entres acteurs mais aussi d'identifier des intérêts communs et des idées de collaboration, je souhaite au nom du Directeur Exécutif du CORAF/WECARD plein succès aux travaux qui seront menés au cours de ces trois jours.

Je vous remercie.

ANNEX 5 : RECOMMANDATIONS POUR LE RAPPORT ATELIER CCAFS D'ALAIN ANGE

Sommes- nous vraiment dépendants des OGM pour améliorer la productivité ? (l'amélioration génétique a actuellement beaucoup de solutions qui ne sont pas valorisées ;

Il est faux de dire que l'augmentation de l'utilisation des engrais va conduire à court terme à des pollutions. La consommation moyenne actuelle est de 6kg /ha de NPK ; il n'y a pas de pertes significatives à moins de de 50 kg/ha ;

Par contre, l'abus et les mauvais usages des pesticides sont un vrai danger (pollution, nocivité pour l'alimentation, résistance des ravageurs, déséquilibres écologiques…) ;

Pour développer les scénarios proposés, il faut faire apparaître les rapports de force et les contradictions qui résultent des choix ;

En Afrique de l'Ouest, il conviendrait de distinguer des scénarios pour les pays côtiers, sensibles aux marchés internationaux et mieux pourvus en ressources (destination des migrations) et les pays enclavés moins soumis à la globalisation des marchés et avec moins de ressources (zones de départ des migrations) ;

Les scénarios doivent considérer les mécanismes qui les financent ;

Il faut distinguer les produits (décisions, régulations, modes de financement) et les effets des scénarios (services aux populations, économie, environnement) ;

Les mots ont un poids important pour décrire les composantes essentielles des scénarios. Exemples

SCENARIO 1	SCENARIO 2
- Fournir des aliments	- Assurer l'autosuffisance alimentaire
- Usage de l'eau	- Conservation de l'eau
- Réduire la pauvreté	- Promouvoir l'emploi
- Financer les déficits générés par les actions de subvention	- Organiser le financement des budgets publics
- Action nationale	- Concertation régionale

Quatre titres proposés pour les scénarios

SCENARIO 1 Le feu à la maison	SCENARIO 2 Action publique organisée
SCENARIO 4 Prends et débrouilles toi	SCENARIO 3 Programmation et régulation concertées

ANNEX 6 : KEY WORDS TRANSLATED

Key terms	Short explanation	Translation	
Uncertainty	When something is inderminate or indefinite and we don't know enough about it. Uncertainty might be measurable in which case we know both the type of uncertainty and the amount of uncertainty; unmeasurable in which case we know about the uncertainty but not how uncertain it is; and unknown, in which we are not aware of the uncertainty.	*Incertitude*	Situation indéterminée ou indéfinie et sur laquelle nous ne disposons pas d'assez de connaissances. Une incertitude peut être mesurable : dans ce cas, nous connaissons à la fois le type et le degré d'incertitude. Elle peut aussi être non mesurable : dans ce cas, nous la connaissons mais nous en ignorons le dégré. Elle peut enfin être inconnue : dans ce cas, nous ignorons l'incertitude.
Scenarios	Alternate futures described in words and/or numbers that explore how the future could develop without making predictions.	*Scenarios*	Description en mots et/ou en chiffres de futurs alternatifs, présentant le déroulement éventuel de l'avenir, en veillant à ne pas faire de prévision
Scenario stories	Stories describing different alternate futures.	*Recits/descriptifs de scenarios*	Récits décrivant différents futurs alternatifs
Vision	A decription of a desired future.	*Vision*	Description d'un futur souhaité
Scenario time lines	Using time to structure how a scenario develops - what changes lead to other changes over a time period.	*Calendrier/echeancier/deroulement d'un scenario*	Structuration chronologique d'un scénario, chaque changement générant d'autres changements sur une période donnée.
System map	A drawing describing how different elements in a system (such as a food system, social system, environmental system) relate to each other.	*Carte de systeme*	Dessin décrivant les relations qui existent entre les différents éléments d'un système (par exemple, le système alimentaire, le système social, le système environnemental)
Quantification	The process of adding numbers to stories, using models and other methods.	*Quantification*	Chiffrage des récits à l'aide de modèles et autres méthodes

Outcomes	The consequences of alternative futures that the workshop group is interested in.	*Resultats/consequences/effets*	Conséquences des futurs alternatifs qui intéressent les participants à l'atelier

ANNEX 7 : Programme

TIME/*HORAIRES*	ACTIVITY/*ACTIVITE*	SPEAKER/*FACILITATEUR*
DAY1 : 01 November 2011		
17.00 – 21.00	**Arrival and registration** ***Arrivée et enregistrement des participants***	
DAY2: 02 November2011		
09.00	Welcome words *Mots de Bienvenue*	*CORAF*
09.30	Introduction to the scenarios process for West Africa , questions *Présentation du processus de scenario en Afrique de l'Ouest, Questions*	*John Ingram, Robert Zougmoré, Polly Ericksen, Joost Vervoort*
10.30	**Coffe and speed meet/*Pause café et echanges***	
11.00	Discuss key uncertainties *Discussion sur les incertitudes importantes*. .	*Joost Vervoort*
12.00	Discuss challenges for each scenario *Discussion sur les défis pour chaque scenario*	
12:30	**Lunch/ Déjeuner**	
13.30	Challenges continued, developing the stories: headlines technique (breakout groups)	*Joost Vervoort*
15.00	**Coffe and speed meet/ Pause café et echanges**	
15.30	Presenting first results, feedback *Présentation des premiers résultats, réactions*	*John Ingram*
16.00-	Further story development *Développement d'autres récits*	*Joost Vervoort,*
17.00	Recap, end of day /*Résumé de la journée,* Fin	*Robert Zougmore*
DAY3 :03 November 2011		
09.00	Recap of previous day, way forward *Récapitulatif de la veille, marche à suivre*	*Joost Vervoort*
09.30	Developing the stories – time lines (breakout groups)	
10.30	**Coffee and speed meet /Pause café et echanges**	

10.00	Short intro on surprises *Petite introduction sur les surprises*	*Joost Vervoort*
10:15	Developing the stories –surprises in the time lines (breakout groups)	
12:00	Presenting results in the plenary *Présentation des résultats en plénière*	*Joost Vervoort*
12.30	**Lunch/Déjeuner**	
13.30	Participants' perspectives on natural and social systems *Les perspectives des participants sur les systèmes sociaux et naturels*	*Joost Vervoort*
14.30	System maps /*Cartes de systèmes*	*Joost Vervoort*
15.00	**Coffee and speed meet/Pause café et echanges**	
15.30	Developing system maps (breakout groups) *Elaboration des cartes de systèmes (travaux en groupes)*	
17.30	Recap, end of the day/ *Résumé de la journée et Fin*	*Joost Vervoort and Robert Zougmore*
DAY 4:04 November 2011		
09.00	Recap and way forward *Récapitulatif de la veille et marche à suivre*	*Joost Vervoort*
09:30	Comparing the system maps, coming to overall outcomes of interest *Comparaison des cartes systèmes, pour aboutir à des résultats intéressants*	*Joost Vervoort, Polly Ericksen*
10.30	**Coffee and speed meet/ Pause café et echanges**	
11.00	Comparing the system maps, coming to overall outcomes of interest *Comparaison des cartes systèmes, pour aboutir à des résultats intéressants*	*Joost Vervoort, Polly Ericksen*
12.00	**Lunch/ Déjeuner**	
13:00	Open space brainstorm– determining ways to measure for the outcomes of interest *Brainstorming pour explorer les possibilités de mesures des résultats d'intérêt*.	
14.00	Open space brainstorm with PANOS journalist network: communicating scenarios	

	Brainstorming avec les journalistes du réseau PANOS : la communication autour des scenarios	
15:00	Workshop recap and way forward *Récapitulatif de l'atelier et marche à suivre*	*John Ingram, Robert Zougmore, Joost Vervoort*
15.30	End of workshop / *Clôture de l'atelier*	

ANNEXE 8 : List of participants

N°	Name	Title & Organization	Address	Telephone	Email
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