

External evaluation of the Changing Course in Global Agriculture (CCGA) Segment II

Final report

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DEVELOPING AGRICULTURE AND RURAL AREAS

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Abbreviations

AAP	African Adaptation Programme
AFD	Agence Française de Développement
ANSD	Agence nationale de la Statistique et de la Démographie
BAT	Biovision Africa Trust
BV	Biovision
CCGA	Changing Course in Global Agriculture Programme
COP	Conference of Parties
DAPSA	Direction de l'Analyse, de la Prévision et des Statistiques
DPG	Direction de la Planification Générale
ENSAE	Ecole Nationale de la Statistique et de l'Analyse Economique
EOA	Ecological Organic Agriculture Initiative
FAO	Food and Agricultural Organization of the United Nations
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GPFS	Global Programme on Food Security
HEI	High external input
IAASTD	International Assessment of Agricultural Knowledge, Science and Technology for Development
IPAR	Initiative Prospective Agricole et Rural
KHS	Kenyan Shilling
KIPPR	Kenya Institute for Public Policy Research and Analysis
LEI	Low external input
Logframe	Logical framework
MAER	Ministère de l'Agriculture et de l'Équipement rural
MEFP	Ministère de l'Économie, des Finances et de la Planification
MEMR	Ministry of Environment and Mineral Resources
MOALF	Ministry of Agriculture, Livestock and Fisheries
MODP	Ministry of Planning and Devolution
MOER	Ministry of Environment and Ressources
MoU	Memorandum of Understanding
MI	Millenium Institute
NCCAP	National Climate Change Action Plan
NGO	Non Governmental Organisation
PAPA	Projet d'Appui aux Politiques Agricoles
PRACAS	Programme d'Accélération de la Cadence de l'Agriculture Sénégalaise
PC	Personal Computer
Prodoc	Project document
SDGs	Sustainable Development Goals
T21	Threshold 21 (model)
ToRs	Terms of References
TT	Technical Team
TAG	Technical Advisory Group
UNEP	United nations Environment Programme

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1. Introduction

The Changing Course in Global Agriculture (CCGA ; <http://changingcourse-agriculture.com>) is an initiative aiming at improving food security, rural welfare and the sustainable use of natural resources through the implementation of sustainable agriculture and food system policies. The project began in 2013, is jointly implemented by the Millennium Institute (MI) and Biovision Foundation (BV) and is supported, among others, by the Swiss Agency for Development and Cooperation (SDC) through its Global Programme on Food Security (GPFS). More specifically, the project aims to influence policy in favour of the implementation of sustainable agriculture on food system policies based on the findings of a report: International Assessment on Agriculture Knowledge, Science and Technology (IAASTD). The project operates at both the international and the national levels.

The evaluation consists of two Segments, namely the international and the national Segments. They are being treated independently (topic and period). The Segment I was carried out in 2015. This present report relates to the Segment II. The evaluation was done between February and May 2017.

2. Evaluation objectives of segment II

The overall objectives of the evaluation are set out in the terms of reference (ToRs) for both segments in 2015. They relate to the effectiveness and relevance, the attribution of results, the efficiency, the sustainability of the initiative.

The specific objectives and tasks for the evaluation of the Segment II presented in the initial ToRs have been largely reviewed early 2017 as major changes happened at project and context levels since then. The agreed objectives focus more on the process and less on specific outputs. The emphasis of the objectives are now more on the learning side, the change of behaviour of those involved within the programme and on the lessons-learned that should drive the next phase of the programme. Accordingly, the specific objectives are:

- Assessment of the forces and constraints to the programme;
- Main lessons learnt in terms of: intervention strategy, added value of the various activities, training, selection of involved persons, changes in the behaviour (initiatives, responsibility, involvement, etc.) and competencies of the involved and trained persons, changes in policy planning, policy dialogue and the use of empirical evidence for policy formulation and evolution of relationships among specific stakeholders (e.g. between Ministries);
- Recommendations for the next phase.

The evaluation took place in Senegal in February and Kenya in April 2017 respectively (see annex 7.1.).

3. Methodology

The methodology is based on the revised objectives and has been agreed with the BV team and SDC at the beginning of the evaluation (see Annex C of the ToRs).

3.1. Approaches, tools and activities

Several approaches, tools and methods have been integrated into the evaluation. The approaches are: participatory action and learning, appreciative enquiry, Kirkpatrick model, elements of Most Significant Change, change management and gender. The main activities are: review of documentation, interviews, a workshop and evaluation of the training that happened during the field mission. Except for the review of the CCGA documents, all the others have been carried out in the pilot countries.

The review of documentation mainly concentrated on the documents provided by the CCGA team. It had the following objectives:

- Give an overview of the activities of the programme in each country;
- Pinpoint the various elements of the intervention strategy;
- Identify issues to be treated during the evaluation workshops.

The various stakeholders of the project have been categorised into three groups:

- 1st users of the programme: members of the T 21 experts group (modellers). These persons are the target of a training evaluation (see below: training evaluation)
- 2nd users, namely those who are to be the direct users of the results (outputs) of the policy analysis based on the programme. These can be agents within the same Ministries as the modellers or not,
- 3rd users of the programme: key resource persons (or observers), such as relevant donors, large local NGOs, civil society, farmers' groups, etc.

The interviews mainly took place in both countries, face-to-face, and via Skype. Most interviews were conducted with semi-closed and open questions.

A participatory evaluation workshop has been held in both countries: Senegal and Kenya. They have been organised by Biovision and moderated by the mission. The objectives of the workshop were to review specific aspects of the programme identified during the documentation's review and the first interviews held locally.

- Diagnostic of current situation: drivers and restrainers of change, use of the T-21 system dynamics model for policy formulation and awareness raising (maintenance of the model, outreach, etc.), multi-stakeholder dialogue, participatory processes, etc.
- Lessons learned: factors enhancing and restraining the change process and its sustainability in each country;
- Next steps and commitments of the workshop's participants for these next steps.

Both evaluation workshops were evaluated (see appendix 7.2.4. for Kenya).

The table below presents the programme in both countries.

Senegal	Kenya
12 participants (2 women): staff from both Ministries, facilitating institution, some members of the TAG	12 participants (3 women): "stakeholders", mainly from TAG and TT
Welcome	Welcome
Objectives and challenges of the evaluation	Objectives and challenges of the evaluation
Participants' presentations and expectations	Brief reminder of the programme's objectives
Brief presentation of iSDG	Participants' s presentations
Historical profiles	Case study (working group)
<ul style="list-style-type: none">- Trainings- PRACAS's study	Next steps
World Café: what is sustainable agriculture? What should be done so that sustainable agriculture can be reached? Role and responsibilities of the various actors?	Evaluation of the day
Next steps - recommendations	

In Kenya, the workshop was followed by a TAG meeting, during which a World Café was carried out.

The project organised a training workshop about the T21 in both countries. The participants were asked to evaluate the training with an evaluation form. The main objective of this training evaluation was to get a

feedback on selected aspects of the (last) training received by the participants (Dakar: 2-days training in February 2017; Kenya: half a day training). It also allowed to get some more insights from the 1st users' perception of the model and its use. The questionnaire is similar in both countries, except for two questions. All participants in Kenya have responded. In Senegal, the rate was very high too. It is also worth mentioning that the DPG leader made it a point of honour to have most of the participants fill the forms.

3.2. Advantages and constraints

The methodology allowed great flexibility as to fit to the moving programme in the pilot countries. The long period between both segments as well as between both country missions required more investments for linking them as context and the project changed. The attribution of results is not easy. The reasons are the moving context in the countries (other non-CCGA initiatives, economic conditions, etc.), the high number of stakeholders involved, the type and large number of expected changes, etc.

4. Brief overview of the CCGA in pilot countries

The project is active in both pilot countries since 2013. There were several adaptations in the logical framework (logframe), particularly at the outcome level (see annex 7.4.). The current outcome 4 of the CCGA reads: "In Kenya and Senegal, improved policy dialogue and integrated policy planning contribute to the formulation of national policies and agricultural strategies that support sustainable agricultural development with a long-term perspective" (adjusted February 2016). At that time, it was decided to leave Ethiopia. The outputs defined in 2014 are:

1. Institutionalization and use of T21 models as comprehensive planning tools strengthened through adequate capacity building with the government, research institutions and civil society organisations;
2. National anchoring of knowledge on system dynamics and the T21 model is supported through collaboration with local institutions and academia;
3. Multi-stakeholder involvement in policy planning on food and nutrition security and sustainable agriculture and outputs strengthened;
4. Awareness is raised and knowledge built among the public, decision makers and other relevant stakeholders. Existing initiatives/alliances are strengthened for the need to shift to more sustainable agriculture and food systems.

A major element of the project is the expansion of the T21 model with the agricultural sector and its use. Herren (2014¹) presents the model as:

- Integrated tool linking economic, social and environmental sectors
- Based on real-world causal relations, not just theory
- Flexible with scenarios or what if options to simulate the possible consequences of selected policy choices
- Fast, user-friendly, transparent, peer reviewed and based on best available science
- Supports productive dialogue and participatory decision making among government ministries and other stakeholders.

The structure of the system includes causal relations and feedback. It is built on local data. It is a large size model, with over 1'000 equations, 60 stock variables and several thousands feedback loops. It allows the integration of the social, economic and environmental dimensions of development and the knowledge and inputs from different sources.

The implementation of the CCGA project is based on several approaches:

- Holistic
- Participation and inclusiveness
- Empowerment
- Multi-level
- Use of synergies and partnerships
- Demand.

The project acts a facilitator of the changes. It "does not and will not undertake functions that are the responsibility of (...) the authorities and stakeholder groups in the pilot countries²". The strategic entry points are: policy coherence, effective governance and civil society strengthening³. The organisation of the project is similar in both countries, with:

- A local BV officer or representative in the country, a MI country modeller outside the country;
- A BV country representative and a MI country modeller, both outside the country;
- A BV and MI co-project managers, based in the headquarters of their organisation (or otherwise, but outside the pilot country).

Both countries have signed the IAASTD report. The context has changed drastically during the last 6 years, since Rio+20, with the Agenda 2030 and the SDGs, among others.

¹ Herren H.R. 2014. Solutions for Sustainable Development : The Millennium Institute in partnership with UNEP and the Biovision Foundation. Contribution to UNCTAD-WIF. 15 October, 2014. Geneva. http://unctad-worldinvestmentforum.org/wp-content/uploads/2014/11/Dr.-Hans-Herren-_Millenium-Institute-Wednesday-15-October.pdf

² See prodoc, p. 38.

³ See Proddoc, p. 27.

5. Results

This results' chapter first briefly presents the major outputs and then describes the observed outcomes, by stakeholders' groups, for the 2014-17 period.

5.1. Outputs

The table 1 below outlines the major outputs, per country. The latter are then briefly outlined.

Table 1: Outputs by country

	Kenya	Senegal
Institutionalisation	T21 expanded with agriculture and food systems LEI + HEI Study Fertilizers + Agr. Performance Targets > 11 modellers trained Other people trained (online, courses) T21 office at MODP	T21 expanded with agriculture and food systems LEI + HEI Study PRACAS > 15 modellers trained Other people trained (online, courses) iSDG developed for Senegal
Anchoring	Contacts with three education or research institutions	System dynamics course in place and integrated into ENSAE
Multi-stakeholder	TAG and stakeholder regularly contributed to expansion of model and studies	TAG and stakeholder regularly contributed to expansion of model and studies
Awareness	Potential with BAT activities	Several contacts with donors

Source: author.

5.1.1. Institutionalisation

"Institutionalization and use of agriculture sector models as comprehensive planning tools strengthened, including through adequate capacity building within the government, research institutions and civil society organizations."

The model has been expanded with agriculture and food systems in both countries. There is an inter-ministerial Technical Team (TT), composed of trained modellers from both the Ministries of Agriculture and Planning, a technical and multi-stakeholders' Advisory Group (TAG) and at least two studies have been carried out with the T21 model in both countries (see Table 1 above).

The number of persons trained is over 20 persons in total for both countries (no gender distribution). There were different forms of training: i) 6 weeks in Bergen (selected candidates with sufficient economics / statistics background, between 2010 and 2016); ii) online training (introduction to the model); iii) workshops in Rome and/or Addis and iv) local training. A guidebook for modellers is underway in Kenya. Trained modellers are mainly from the Ministries, but also from research and education institutions (the Ecole Nationale de la Statistique et de l'Analyse Economique (ENSAE) in Senegal and the Kenya Institute for Public Policy Research and Analysis (KIPPRA) in Kenya) and one think tank (Initiative Prospective Agricole et Rural (IPAR) in Senegal).

Most trained modellers are members of the permanent inter-ministerial technical modelling units (TT) that have been established in each country. Modellers are globally very satisfied with the training (see annexes 7.5. and 7.6. for the detailed results in each country). The level of satisfaction of the modellers with the use of the acquired knowledge and competency varies. It was stated several times that there are various constraints, namely:

- The modellers do not perceive that the learning investment for being able to use the T21 is adequately valued by their employers. There are no rewards of any form for their investment in the learning and for their increased competencies.
- Those modellers with system dynamics competencies may find other job opportunities, better paid;
- There are communication uneasiness between the modellers and those who do not have modelling competencies. The reason given was the complexity of the model. The level of competency, the learning stage that some of the modellers have reached might also be an issue, not enabling them to communicate about the T21 to non specialists;
- Generally, the modellers lack flexibility in their work.

In short, some modellers do not see the benefits for them of acquiring this new competency. This will make it difficult for them to become "T21 ambassadors" as they could or should be. This lack of gains partially explains

why some of the modellers in Kenya do not fulfil the contract they have signed. The latter states that modellers will dedicate continuously an adequate amount of time (at least 30-40%)⁴.

The TT has been allocated a working space, an office, within the Ministry of Planning and Devolution (MODP) in Kenya, with two PCs. The use of this office has not been assessed. It is acknowledged that there are some institutional constraints for these TTs to be functional in a satisfactory manner, particularly in Senegal. Meetings are still provoked and organised with the contribution of the project even if invitations are being sent by the relevant Ministry (Ministry of Agriculture).

The T21 model has been expanded and includes comprehensive agriculture and food sectors. An earlier version has served as a basis for this extension in both countries. The T21 model has been used for at least two different studies in both countries during the CCGA programme.

- The analysis of high and low external input (HEI and LEI) scenario was carried out in both countries: this has led to several actions, initiatives and publications for the Senegal case⁵, the Kenyan case⁶ and a publication relating both countries⁷.
- In Senegal, the Ministère de l'Agriculture et de l'Équipement Rural (MAER) requested a study of the long term and multi-sectorial impacts of the Programme d'Accélération de la Cadence de l'Agriculture Sénégalaise (PRACAS) 2014-17 and to make recommendations in order to optimise its implementation until 2017 as well as for the development of the next agricultural master plans. The document is now being going through the authorization process. The Direction de la Planification Générale (DPG), within the Ministère de l'Economie, des Finances et de la Planification (MEFP), also used the T21 in the context of Conference of Parties (COP) 21 to analyse whether the growth objective was eco-compatible.
- In Kenya, the T21 model has been used for a study on the fertiliser subsidies in Kenya and for the Agriculture Performance Targets scenario. Two Policy Briefs have been written based on the fertiliser study in 2016⁸. They are currently within the authorisation process. The fertiliser's study has also served as a basis for the new fertilisers guidance.

The model T21 is perceived as credible and adding value to the agricultural and national policy analysis by the vast majority of people met during the mission, despite some complexity felt by many of them (see also annex 7.5. and 7.6. for the constraints perceived by the training participants). The sectoral inter-connections have been mentioned as positive several times. The ability to improve policy monitoring has also been raised. The translation efforts into French have been welcomed in Senegal. The linkages with SDGs and the development of the interface iSDG (an extension of the T21) have raised great interest. The iSDG is an extension of the T21. The evaluation of the 2-days iSDG introductory training in Senegal shows that the iSDG is a very powerful tool for explaining inter-sectoral linkages and for SDG reporting. Most of the respondents acknowledged this advantage.

⁴ CCGA. No date. Background document for the evaluation of the projet. CCGA-Kenya : an integrated, comprehensive and long-term policy planning approach. BV.

⁵ Zuellich G., Dianati K., Arquitt S. and Pedercini M. 2015. Competing agricultural paradigms to meet urban and rural food needs in Senegal – An integrated system approach. Paper.

http://www.fao.org/fileadmin/templates/ags/docs/MUFN/CALL_FILES_EXPERT_2015/CFP3-07_Full_Paper.pdf

⁶ Millennium Institute. 2014. T21-Kenya : Agriculture, Food and Nutrition Security, and Rural Poverty Scenarios.

Scenario Analysis and Policy Recommendations. Washington DC. August 2014. [http://changingcourse-](http://changingcourse-agriculture.org/wp-content/uploads/2015/04/MI-T21-Kenya-CCGA-Report-08.09..pdf)

[agriculture.org/wp-content/uploads/2015/04/MI-T21-Kenya-CCGA-Report-08.09..pdf](http://changingcourse-agriculture.org/wp-content/uploads/2015/04/MI-T21-Kenya-CCGA-Report-08.09..pdf) ; UNEP. 2014. Green

Economy Assessment report – Kenya. Zuellich G., Pedercini M., Dianati K. and Arquitt S. 2015. Competing

agricultural paradigms to feed a growing population in Kenya. An integrated system approach. World Food

System Conference. Ascona, June 2015. [https://www.ethz.ch/content/dam/ethz/special-](https://www.ethz.ch/content/dam/ethz/special-interest/dual/worldfoodsystemcenter-dam/WFS%20Conference/Presentations/Session%206-4%20Gunda%20Zuellich.pdf)

[interest/dual/worldfoodsystemcenter-dam/WFS%20Conference/Presentations/Session%206-](https://www.ethz.ch/content/dam/ethz/special-interest/dual/worldfoodsystemcenter-dam/WFS%20Conference/Presentations/Session%206-4%20Gunda%20Zuellich.pdf)

[4%20Gunda%20Zuellich.pdf](https://www.ethz.ch/content/dam/ethz/special-interest/dual/worldfoodsystemcenter-dam/WFS%20Conference/Presentations/Session%206-4%20Gunda%20Zuellich.pdf)

⁷ Zuellich G., Dianati K., Arquitt S. and Pedercini M. No date. Integrated simulation models for sustainable agriculture policy design : cross-country analysis of competing agricultural paradigms.

[http://www.gdn.int/fullpaper/Session-13-](http://www.gdn.int/fullpaper/Session-13-Gunda%20Zuellich,%20Kaveh%20Dianati,%20Steve%20Arquitt,%20Matteo%20Pedercini-Integrated%20simulation%20.pdf)

[Gunda%20Zuellich,%20Kaveh%20Dianati,%20Steve%20Arquitt,%20Matteo%20Pedercini-](http://www.gdn.int/fullpaper/Session-13-Gunda%20Zuellich,%20Kaveh%20Dianati,%20Steve%20Arquitt,%20Matteo%20Pedercini-Integrated%20simulation%20.pdf)

[Integrated%20simulation%20.pdf](http://www.gdn.int/fullpaper/Session-13-Gunda%20Zuellich,%20Kaveh%20Dianati,%20Steve%20Arquitt,%20Matteo%20Pedercini-Integrated%20simulation%20.pdf)

⁸ Ayenew M., Arquitt S., Züllich G., Onasanya A. 2016. An integrated assessment of the impacts of fertilizer subsidies and alternative policies on small-scale agriculture in Kenya. Policy Brief July 2016.

http://www.biovision.ch/fileadmin/pdf/e/biovision/Fertilizer_Subsidy_Brief-FINAL.pdf

Box 1: Selected elements of the evaluation of the training in Senegal

Training

Duration: 2 days

Public: between 30 and 35 persons, MEFP staff with and without prior T21 knowledge

Objective: introduction to the interface iSDG

Evaluation's methodology and results

Evaluation method: based on a paper form, with closed and semi-open questions.

Total response: 24 out of 30 distributed forms.

Occupation: 70% economists, 8% statisticians/agents, 16% with management responsibilities.

Gender: women 18% and 82% men.

T21 competencies: 74% without any T21 training.

90% of the respondents are happy and very satisfied with the training. The trainers are credible and enabled interesting discussions. The iSDG interface is also credible.

The mentioned acquired knowledge is: inter-sectoral linkages, long term policy monitoring, SDG, better policy formulation and communication. 70% of the respondents can already envision how to apply the acquired knowledge. Most of them think foresee more collaboration with their colleagues within their ministries or otherwise, scenarios analysis and economic intelligence.

40% of the respondents had no vision on agricultural sustainability for Senegal. The environmental aspect was almost always included in their vision. The social aspect is absent.

Source: annex 7.6. "Results of the survey iSDG information days in Senegal".

5.1.2. National anchoring

"National anchoring of knowledge on system dynamics and the T21 model is supported through collaboration with local institutions and academia."

Currently, the first set of 11 modellers is being trained in a national academic institution in Senegal, the ENSAE. There is a formal partnership between the academic institution, the Agence nationale de la Statistique et de la Démographie (ANSD), BV/MI and IPAR. ANSD has invested 65'000 US. MI accompanies the training with competencies and human resources during a 5-years phase until 2021. Several stakeholders have welcomed this initiative that reduces costs and lowers entry barriers for local candidates (language and cost). It also benefits to the ENSAE.

KIPPRA in Kenya has asked for the model during the mission. According to its web page, KIPPRA already uses it. The institution proudly quotes using the T21 model in its 2014 Brief⁹. Two government representatives from both ministries agree on the fact that it could be beneficial for the country when others also make use of the model. This is very relevant. Another institute, the Kegemeo Institute, has a Memorandum of Understanding (MoU) with the CCGA project. Contacts with the Kenya School of Government have been made through the Ministry of Agriculture, Livestock and Fisheries (MOALF) during the field mission, following a former visit earlier in the project.

5.1.3. Multi-stakeholders

"Multi-stakeholder involvement in policy planning on food and nutrition security and sustainable agriculture and outputs strengthened."

The expansion of the model with the agricultural and food sectors has been carried out with the participation of the stakeholders. The later also contributed to discuss the various scenarios and the results of the studies in both countries. This multi-level and multi-stakeholder approach was much valued in both countries. There were positive feedbacks. The stakeholder meetings were also well attended. The selection of the participants may well have positively contributed to this success.

⁹ <http://kippra.or.ke/downloads/kipprainbrief2014.pdf>

5.1.4. Awareness

"Awareness is raised and knowledge built among the public decision makers and other relevant stakeholders. Existing initiatives/alliances are strengthened for the need to shift to more sustainable agriculture and food systems. "

The level of awareness about the need to shift to more sustainable agriculture and food systems is rather mixed. Most agree that production and/or productivity has to increase. However, the question seems to remain as to the how. For example, at the DPG in Senegal, the small-scale family farming does not seem to appeal. This raises the issue whether the awareness for evidence-based policy and/or system dynamics is at the core of the process. The IAASD was unknown to most participants of the evaluation workshops. This might have a negative influence on allowing the participants to perceive a sense of urgency for shifting to more sustainable agriculture, on the accountability process and on linking the results and efforts with the international process.

5.2. Outcome

5.2.1. Ministries

In both countries, more than 20 modellers in total have now been trained in system dynamics. Those interviewed certainly recognise the relevance of system dynamics for policy processes. The level of competencies is variable depending on the trained persons. The reasons are: difference in training (length, timing and content), different opportunities and incentives to apply the model in their work, etc. Some of them have already left their Ministries for jobs outside the government (academics, NGO, private consultant). The where about of the various modellers having left is known, but is not formally traced. It was mentioned that the expected returns at individual and institutional levels might not always be well perceived. This might be rooted in:

- The level of competencies reached: several have mentioned the difficulties of explaining the T21 and/or its results to non-specialists. This has been confirmed by the evaluations (see Annex 7.5. and 7.6.).
- The motivation of the trained modellers: some mentioned that they did not know what to expect in terms of work at the time of the selection; the need to produce regular deliverables; the lack of incentives.

The selection process for training candidates to the Bergen course (and now also in Dakar) in Senegal has evolved dramatically since 2008. There is now a local academic institution offering this training. The selection process and its conditions are now very clear and transparent. However, the structuration of the selection process took quite some time (see annex 7.2.1.). The reasons were: instability of the TT, institutional instability within the MAER, the limited resources, lack of vision, etc. The selection process was not discussed in Kenya. It was mentioned that there is a selection process that foresees the selection of candidates through a) selection by the institutes and b) their results at the online course.

Both the TT and the TAG certainly improved communication between both ministries, even if this gain is small in Senegal. In Kenya, senior governmental staff has praised the enhanced synergies between Ministries. It is acknowledged that the various stakeholders now better understand who does what, how the various institutions work, etc. A positive outcome for modellers is the fact that they know who to contact in other Ministries for data, for example. Availability and the quality of data have appeared as critical issues, particularly in Senegal.

The role and responsibilities of TT and the TAG have been defined, but do not seem to have been internalised in the same way by their various members and/or are perceived differently among them. It has been mentioned that: "ideally, the TAG should be the engine of advancing CCGA work in Kenya". The TAG (self)assigned roles discussed during the workshop were very broad as shown in the box below for Kenya. The next steps discussed during the same workshop in Kenya showed very large divergence in the actions and the required investments among the three groups: from a 5,6 millions to 70 millions KSH for the next four years. This may confirm the limited collective vision about the role of the TAG and/or low or different understanding of the process. Currently the TAG does not seem to be integrated into the policy authorisation process. The internal reporting process is low.

Box 2: Perceived role of the TAG by its members, Kenya

- to support policy planning
- integrated policy process
- evidence based policy making
- to change the way policies are formulated and implemented to achieve sustainable food security
- have mechanism in place for adoption and roll out of the CCGA-K project using the T21 food at national and country governments
- disseminate policies to and users in more effective manners
- to evaluate impact of policies (existing) and formulation new ones
- to transform policy
- to effectively engage other stakeholder in policy formulation
- advising on the data needs required for the T 21 model
- to review existing policies as informed by scenarios analysis

Source: see annexe 7.5. Results of the evaluation workshop with stakeholders, Kenya, April 2017.

The use of evidence based on the T21 is difficult to estimate. Both studies based on the T21 and carried out during the CCGA programme have not been officially endorsed and/or released until now. The authorization or endorsement process has proved to take longer than first thought. However, there are signs of the use of the new evidence created with the use of the T21. In Kenya, a task force with 8-10 working groups has been created for responding to a request of a senior staff within the Ministry of Agriculture. The link with the project could not be established, but it has been explicitly mentioned that the policy briefs relating the results of the fertilisers' study could be used. A senior representative within the Ministry of Agriculture explained that the fertilizer study has been used for the redaction of the Kenya fertilizer guidance. It was also mentioned that the business case for evidence-based strategies is growing in general. In Senegal, the use of the T21 and the iSDG is probably well underway, at least within the Ministry of Planning. The programmatic way of working in the technical ministries have shown divergence with the long-term policy strategies. The T21 has been for the DAPSA programme in Senegal. In both countries, other models than the T21 are or were also being used. In Kenya, a CGE-model has been developed, in collaboration with University of York, in the 80's. At the time, there were 21 trained economists working at the Ministry of Planning. Currently, there are only three. The link with and the experience gained from these alternatives have not been discussed. It is worth mentioning that both governments already had experience with the Threshold T21 model. In Kenya, it was used by the Ministry of Environment and Ressources (MOEMR) to elaborate the NACCAP 2013-2017¹⁰. Several stakeholders have mentioned that this experience was positive. It was acknowledged that it has impacted the weight of environment in Kenya: i) there was a Climate Act in 2016 that is now a law; ii) all Ministries have now to indicate what they do for environmental mitigation. It has been extended in the area of agriculture, food security and rural poverty and validated during a multi-stakeholder workshop¹¹ and a review of the institutional capacity has been done¹² leading to several publications¹³. In Senegal, it was developed for changing international environment for the "Etude Prospective Senegal 2035 in 2010. It had been developed in 2009/10 with the Ministère de l'Economie, des Finances et de la Planification (MEFP).

The buy-in of system dynamic, evidence based policy and the need for a shift in agriculture varies among and within Ministries in both pilot countries. The DPG within the MEFP in Senegal considers it-self as the largest user of T21 in the country. It sees the T21 as an adequate tool for the more global objective of modernising public administration. The MEFP has been collaborating with MI for the T21 customization since 2012. Several stakeholders have envisioned the general use of T21 at government level indicating that it would certainly improve efficiency of policy formulation. This requires the willingness to introduce a policy aiming at increasing resources efficiency and a change in governance. The DPG currently uses the T21 within its Ministry only. Some of the staff does not seem convinced of small-scale farming for solving the requested self-sufficiency in Senegal.

¹⁰ Republic of Kenya. 2012. National Climate Change Action Plan 2013-2017. <https://cdkn.org/wp-content/uploads/2013/03/Kenya-National-Climate-Change-Action-Plan.pdf>

¹¹ 2012. Kenya Threshold 21 Climate Change Impact Sectoral Briefs : <https://www.undp-aap.org/resources/publications/kenya-threshold-21-dynamic-model-report>

¹² Ministry of State for Planning, National Development, and Vision 2030, Ministry of Environment and Mineral Resources. 2012. Kenya T21 Model : report on strengthening institutional capacity for integrated climate change adaptation and comprehensive national development planning in Kenya. Also published by Bassi A.M. and Deenapanray P.Nk. and Tan Z. 2011. Final report. https://www.undp-aap.org/sites/undp-aap.org/files/Kenya_Strenghtening%20Institutional%20Capacity%20for%20Integrated%20CCA_july%202011.pdf

¹³ Nzau V. M. 2013. Mainstreaming climate change resilience into development planning in Kenya. Climate Change. IIED Country Report : April 2013. IIED and Government of Kenya. 11 pages. <http://pubs.iied.org/pdfs/10044IIED.pdf>

The participatory and multi-stakeholder processes were also mentioned as ambitious, costly and to be integrated in the mid-term (and not in the short term). The DPG financially contributed to the development of the iSDG for Senegal with 25 millions CFA. The buy-in of the DPG is hence well under way. The buy-in within the MAER in Senegal is very difficult to estimate because of the current internal institutional strenuousness situation. The newly platform for agroecology might offer an opportunity for further efforts. The current document about this platform does not mention the use of the model, nor the IAASTD report¹⁴. In Kenya, the MODP wants to use the T21 model for the oil sector following the discovery of oil reserve in the North of the country. This indicates a buy-in of the model. The MOALF also showed willingness to tight the results of the fertilisers' study into current reflexions being carried out and in the next debate on agricultural extension. The buy-in of the whole package faces some challenges as it requires an important change in current institutional procedures, particularly for the authorisation process of policy formulation. There is willingness to promote the local training anchorage in Kenya and to pursue it in Senegal where it is well underway. Most welcomed the idea that research institutions also make use of the T21 model.

Multi-stakeholders policy dialogue was strongly promoted during the project. There have been intensive efforts to increase dialogue between the Ministries of Agriculture and Planning with mixed results, particularly in Senegal. Serious considerations were also made to contact relevant institutions and resources persons. All agreed that sharing experience and inputs was positive at individual and at institutional levels. The large attending of the TAG meetings tend to demonstrate the relevance of this type of dialogue.

5.2.2. Research and academic institutions

The KIPPR is a research institute under the Ministry of Planning. Its objective is to support Ministries for policies. The institution is currently looking for funding a 3rd person to go to Bergen. It is eager to have the model in-house. It proudly announces the use of the model T21 on its webpage, with two other models.

The initiative had the largest outcome on ENSAE in Senegal. Is has now introduced system-dynamics in its education and invested 65'000 US\$ for support from MI with the contribution of ANSD. Furthermore, it has now the ambition to become the hub for system-dynamics training in West Africa. The first students are currently in place. Most of these students will then work in various Ministries.

5.2.3. Civil society

IPAR is acknowledged to represent the civil society and is highly recognised in Senegal. It is also the project facilitator in Senegal. This later role proved to be sometimes strenuous for IPAR, particularly due to the low institutional governance within the MAER. During the evaluation workshop, several suggestions have been made to increase the participation of the civil society (see appendix 7.2.2.).

The private sector is represented in the multi-stakeholders' workshops in both countries.

5.2.4. Donors

Officially, donors such as the Agence Française de Développement (AFD) and the Food and Agricultural Organization of the United Nations (FAO) in Senegal respond to demand from the Ministry of planning. Both have seemed very interested and consider the model to be credible. They mentioned being willing to use the T21 model if the Government of Senegal "officialises" the T21 use. They also could envision supporting complementary activities that could further accompany the introduction of the model (improvement of data, facilitation of change, etc.). Potential financial contribution to specific studies was also mentioned, conditioned to demand from the Government.

In Kenya, a presentation has been done in front of group of donors in rural development (ARD) by the CCGA, supported by the MOALF. A follow-up of these contacts will be done. It has to be mentioned that some donors (such as the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)) already knew about T21. The United nations Environment Programme (UNEP) still seems to make use of the model with modellers trained by MI.

¹⁴ République du Sénégal. 2017. Plateforme Nationale pour le développement de l'agroécologie. Note d'orientation stratégique et prospective pour un politique agricole en faveur de l'agroécologie au Sénégal. Mars 2017.

5.3. The process

The overall objective of the project remained the same during both project's phases. The expected outcomes have changed quite substantially since the beginning of the project (see annex 7.4.). This highlights the willingness and the ability of the project to adapt and remain flexible. On the other hand, this might also be the result of setting too ambitious outcomes. The pilot countries also changed from Mali, Kenya and Ethiopia to Senegal and Kenya since the beginning of the project.

The intervention strategy of the CCGA includes several elements, also at national level: flexibility, participation, demand-driven, holistic, multi-level, etc. Flexibility allows making use of opportunities in a constant changing environment, which is the case in policy formulation in general. The intervention strategy can be considered as flexible and adaptive to changes. Several processes have been formulated during the project. Some interviewed persons welcomed this flexibility but mentioned that the changes were not always well understood.

The entry door has been the Ministry of Agriculture in both countries. Due to various reasons, it has also turned to the Ministry responsible for policy planning. That is an important move as the latter is (implicitly or explicitly) allocates the public budget and has an global overview of all sectors. There is now recognition that both ministries, if not all, need to make use of the same model in order to collaborate better and for more efficient and coherent policy formulation. This raises the issues of having a multi-sectoral model for long term policies and working with Ministries that are sectoral and manage short and mid-term projects and programmes. However, it could be observed that the Ministries of Planning not always have the same interest in agriculture as the Ministries of Agriculture, furthermore into shifting to more sustainable agriculture.

The project's strategy to respond to demands from the government has been raised by several stakeholders. Demands for modelling have been low according to most interviewees within and outside the project staff. Several factors have been mentioned. First, the project is complex and it requires a certain level of understanding and an organisational change within the institutions. Some have mentioned that not all the changes, direct and indirect, have been foreseen. This has led to a study on the policy process in both countries (see next paragraph). Secondly, the fact that a contract has been signed between the project and both Ministries of Agriculture did not seem to increase demand. Some mentioned the lack of resources from the government (no line of budget) and/or low or no funding from the project. This leads to the issue of the role of the project in facilitation and in inducing informed demand. Low governance and low leadership within institutions require increased facilitation efforts as observed in the case of the MAER in Senegal.

The project aims at organisational changes within various institutions and organisations through capacity building, awareness raising, etc. Its role is to facilitate and promote this change. The use of demand-driven and participation approaches are hence highly relevant. It was clearly acknowledged that deeper knowledge about the policy process in both countries is a requisite for facilitating the whole project. IPAR has done such a study in Senegal in 2015¹⁵. An external consultant was mandated for this study in Kenya in 2016. The report is currently under review from the local project manager in Nairobi. The results of the evaluation workshop in Kenya tend to indicate that there are still issues that need to be dealt with. The TAG in both countries could or should play an important role for linking policy analysis with policy authorization. It is currently not integrated within the authorisation process. Ministries and/or specific members might not perceive all the potential gains of the TAG's integration.

Multi-stakeholder participation to the expansion of the T21 has been a positive process. The approach has proved to be an intensive process (selection of people, organisation, moderation, use of inputs, etc.). Several interviewed persons highly value this dialogue. Some of them did mention that they had a slight feeling of disappointment as they did not know about the next steps. The in-kind participation of Ministries and the other stakeholders should not be underestimated. Currently, there is no financial participation in Kenya. In Senegal, the Ministry of Planning has invested financial resources into the development of the iSDG.

Both governments already had experience with the T21 model. The way this prior experience was being valued within the CCGA project was not evaluated.

The management of the programme was mainly done by the BV staff based in Zurich, with large consultations with the MI staff. In both countries, this strategy was modified and a local officer was being recruited. IPAR was chosen in Senegal and began in 2015, while a new project officer was engaged in Kenya late 2016. The interviewed stakeholders all acknowledged that this had been a breakthrough for the project and most have greatly appreciated the move. This allows a better understanding of local stakeholders, a closer relationship,

¹⁵ IPAR, Biovision and Millennium Institute. 2015. Processus de formulation des politiques agricoles et alimentaires au Sénégal. Mai 2015.

increased visibility of the project through its local base, etc. Decision-making is based on demands from the local officer and/or by the local modeller and then strategized between the local manager and/or the local modeller and BV and MI staff abroad. This means that all has to go through Zurich. There are a lot of consultations and e-mails exchanges. This slows somewhat the decision process and might was not always understood by the locals. There seem to be some confusion between BV, MI and CCGA for some people. The BV/MI staff has a strong team spirit. Their competencies are complementary and relevant to the project's outcome.

Some local actors had the perception that the project aimed for too ambitious objectives compared with the available budget and other resources. The results of a joint demand for matching funds and joint fundraising by CCGA and the public institutions are mixed. Several reasons have been advanced. First, the demand comes from the project, which wants to work with the government. Second, it was mentioned that at least some of the partners had not seen the CCGA budget.

The contribution of Hans Herren is and has been instrumental to several results of CCGA. His reputation indisputably helped to "open doors", gain access to senior people and move things. This raises the question of the strategy to put in place when he decides to move on. Another related aspect that has been mentioned about the staff was that "grey hairs open doors". This was raised in relationship with having to dialogue and cooperate with senior members of Ministries.

Studies made with the model within the government have to be validated and/or endorsed by the government before publication. This has important implications. The first is that the studies' results are disseminated with some delays. Second, the project is aware that conclusions might not all suit the government. The process about how to deal with this issue has not been discussed during the field mission, but the project mentioned that it does not want to change the conclusions. Thirdly, the expected results from the many publications from MI were not discussed. MI certainly could gain visibility from them. Several papers have been published and presented at various international conferences. Both BV and MI certainly also gained from the experience.

6. Conclusions, lessons learnt and recommendations

6.1. Conclusions

The model T21 is being recognised as credible and adding value to policy formulation by most stakeholders. The issues raised about the CCGA programme are of both strategic and operational nature.

The overall objective of improving food security, rural welfare and the sustainable use of natural resources through the implementation of sustainable agriculture and food system policies is relevant. The large majority of the stakeholders met and active in agriculture agree with this statement, whereas the agreement was less strong with some of the staff, particularly in the planning ministries. The collective vision of sustainable agriculture is a bit hazy among public institutions, the TT and the TAG. There is a low awareness of the IAASTD report and its process. There seem to be some divergence about the path for reaching sustainable agriculture, at least in the short and medium term. This is mainly due to the fact that the so-called technical ministries work with short-term programmes (four years). They also face short-term political demands such as rice and maize self-sufficiency in Senegal and Kenya respectively.

Interviewed persons in both countries, from the project team and from outside, generally agree that the project did not reach a sustainable level of project implementation that can guarantee sustainability of the identified outcomes that have been obtained. There are however project elements that will have lasting effects. Modelling competencies are on their way to be nationally anchored in Senegal. This will increase the local number of system dynamic experts in the country in the mid and long-term. Reaching a critical mass of experts is an issue. Most modellers, those trained in this project and those trained with an earlier "T21" project, are still using their acquired knowledge and may contribute to the introduction of system dynamics analysis and the dissemination of evidence-based knowledge. The T21 (and the iSDG) may well be underway to become an official tool at the MEFP in Senegal, but not in Kenya. Hence, system-dynamics is the element with the highest lasting effect. The CCGA initiative did make a case for evidence-based policy, even at various levels depending on institutions and persons. The shift to sustainable agriculture will need a reviewed strategy as the main pillars for this shift are: i) the use of system-dynamics and ii) the ability and willingness to engage into evidence-based policy formulation based on the system-dynamic model.

The project made use of various approaches and tools, some of them being very innovative. The multi-level approach is relevant for linking with the international aspect of the project, for securing change within the institutions and extended policy dialogue. However, the experience shows that the expected changes require more time. Public institutions have their own processes, are very structured and hence have more inherent resistance to changes than for example NGOs. The endorsement's process of the policy briefs based on the results of the model is a good example of this. The awareness of the system-dynamic approach and its adoption certainly improved in both countries. The model with its agricultural expansion is being used. It is still too early to observe the link between the results of the model, their recommendations and their implementations and furthermore, their impacts on end-beneficiaries, namely the family farms. However, it can be said that the policy analysis of the agriculture and food systems has generated constructive dialogue among the different stakeholders. The advantages of having objective tools for analysis have also been raised. Moreover, awareness of using a single tool has also been mentioned. New ideas of potential policy analysis projects with the model have emerged in both countries. However, these are still no budget line within the public institutions for these ideas or moreover for other activities linked to the project. The in-kind investment made by the public institutions for training and participation in meetings is not to be underestimated.

The project brings recognised added values. One is the training and the technical support relative to the expansion, validation and calibration of the model. The "technical" aspects of the project are acknowledged to be credible and relevant. This is a strong positive advantage of the project. The model and the trainers have been approved. The countries now have a credible system-dynamic model that links agriculture and the food systems with the whole economy at their disposal. The whole policy analysis exercise with the agricultural sector has been highly praised. The large, multi-level and multi-stakeholders' participation, the credibility of the model and the training were mentioned as success factors. The facilitation of the process allowed to sensitise about coherent policies, to highlight the issue of data (particularly in Senegal), to intensify the dialogue between ministries and to promote participation with non-Ministerial stakeholders.

Decentralisation and/or devolution are in place in both countries. The strategy about how to integrate this process into the project has to be further developed. This will enhance the participation of those "more on the ground" and might increase forces for changes. Other issues will also need to be dealt with. The first is the demand from Kenya for developing the oil sector, which does not directly fit into the project's objective. When engaging in a new country, the weighting and the timing of the shift to use of system-dynamics, to evidence

based policy formulation (and monitoring) and the shift to more sustainable agriculture and food systems will have to carefully strategized, given the local context.

The project and its team definitively adopted a strong positive attitude towards the project's objective and the presentation of its results. This certainly served as a positive driver for allowing people and institutions to adhere to the project's objective and its implementation. It also led to some level of discouragement from some individuals due to some delays for specific tangible results being perceived by them.

The project regularly sought for project efficiency by remaining flexible and by regularly amending its activities and/or strategy. The regular presence on the ground of CCGA representative is one of the positive changes that the project implemented. Increased flexibility on the ground will also increase smooth decision processes and flows of activities. Adding the Ministry of Planning as a partner also contributed anchoring system-dynamics and the model in both countries, particularly in Senegal. One of the pilot countries, Ethiopia, has been foregone for the last two years. This allowed the allocation of more resources into the more advanced countries: Senegal and Kenya. Some aspects of the project have been sometimes implemented a bit hastily. The preparation of strong business cases for the three pillars, system-dynamics, evidence-based and shift in sustainable agriculture, might have needed more investments. It seems that it was assumed that the shift to sustainable agriculture was perceived as desirable in the long term, but less in the short term. It was acknowledged that the objective is was and is very ambitious. The shift to the new paradigm of sustainable agriculture and food systems requires change in behaviour, organisational and process changes by so many actors require constant efforts, which have been done. The expected changes have not been matched with resources in time, finances and human resources.

The project succeeded in partnering with relevant stakeholders in both countries. The strategy to include stakeholders' contribution to the various element of the project is acknowledged to have been productive. The increase in facilitating knowledge flows and catalysing information exchange on the project, its process and its results have enhanced informed demand, strengthened the various groups and increased efficiency. A more focused facilitation approach aiming at teamwork may have contributed to raise the empowerment level of the various groups and of their members. The contractual relationship with the public institutions did not meet the project's expectations and did not seem to have been respected by all the public institutions. More focused communication on the terms of contract (and the arguments underpinning them) might have helped. The project has been very active in contacting several stakeholders, also at very high level, and in following these up. The reputation of Hans Herren has certainly contributed to make the project visible at national level, "open doors" and building trust. Several events have been organised and contributions have been made to local and international events.

Gender is mentioned in the project document (prodoc), but more specifically for the end-beneficiaries. It does state that women should be included in training in system dynamics. Disaggregated data for persons trained was not observed. The women represented 33% and 18% of the training participants who responded to the evaluation form during the field mission in Kenya and Senegal respectively. These numbers are not comparable as the training focus and its target public were different.

6.2. Drivers and lessons learnt

There are a large number of positive and negative drivers. The reason for this large number is mainly due to the intervention strategy consisting of many elements: multi-level, multi-stakeholder, participation, introduction of dynamic systems (and a new model), evidence-based approach, etc. Several drivers that are still relevant were already identified by the project¹⁶ and during the NCCAP in Kenya¹⁷. The table below presents the identified drivers, internal and external to the project. Selected drivers are then briefly described.

The external negative drivers given in the Table 2 are inherent to many countries. Solutions have to be found for reducing their influences on the project in the current pilot countries and when entering a new country. The effect of the high rate of staff rotation among the modellers can be reduced by increasing the number of trained modellers, shifting some of the evidence building into research institutions and finding ways to value the acquired knowledge and the role of trained modellers are examples of measures that could be implemented. Except for the

¹⁶ See the prodoc. 2014 and CCGA. No date. Background document for the evaluation of the project : CCFA-Kenya : an integrated, comprehensive and long-term policy planning approach. BV-MI.

¹⁷ Republic of Kenya. 2012. National climate change action plan: knowledge management and capacity development. Chapter 1.0: introduction, methodology and evidence-based policy and planning. November 2012. : <http://www.kccap.info/phocadownload/final/SC7/Chapter%201.0%20-%20Introduction,%20Methodology%20and%20Evidence%20Based%20Policy%20Making%20and%20Planning%20-Final%20-%2030.11.2012.pdf>

latter, these measures have already been integrated into the project. Decentralisation and devolution may have positive or negative effects depending on the possibility to disaggregate the model into (agroecological) regions or counties and the willingness of the various local actors to step in. The existence of leadership within ministries or otherwise is also very relevant as shown in Senegal.

The highly ambitious objective has already been mentioned earlier as a positive and a potential negative driver for some stakeholders, in particular related to the given budget of the project. The intervention strategy certainly includes positive drivers, such as acknowledged credible technical training, multi-level and multi-stakeholder participation, evidence-based approach, etc. The model T21 is certainly a positive driver for the policy analysis, also at sectoral level. The programme is mainly based on an efficiently running, regularly updated, even upgraded model, which results are being used for evidence based policy analysis and planning. It is a necessary condition, but not sufficient for a successful integration of system dynamic policy analysis, moreover for evidence-based policy and a shift to more sustainable agriculture and food sectors. Some aspects may negatively influence the efficiency of the project. The model T21 is multi-sectoral, while the project is sectoral. The potential interactions with other ministries might add efforts to be invested. Linking the policy analysis with the policy authorization process is a critical element to the project.

Table 2: Drivers of the project, positive and negative, internal and external, both countries

	Internal to the project	External to the project
Constraints / negative drivers	<ul style="list-style-type: none"> - Sectoral project - multi-sectoral model - Link policy analysis – policy authorization - Tight resources at local level and project level - Decision-making process between MI/BV HQ - field - Some roles and responsibilities within TT and TAG not fully internalised - Vision vs. definition of sustainable agriculture and food systems not always present in activities - Evidence building and compiling aspects less taken into account - T21 is a complex tool for non-specialists - Private sector is almost absent as well as the use of media - Link between technical and political aspects or analysis and authorization process - Facilitation vs. demand-driven - Tardy analysis of the authorization procedure in both countries - Some processes and activities defined during project (also a strength for specific issues) - Hazy collective vision (process, sustainable agriculture, roles and responsibilities, etc.) 	<ul style="list-style-type: none"> - High rate of staff rotation (all levels) in the government bodies (mentioned in the 2014-17 prodoc) - Limited governance and slow processes - Low or lack of willingness / need for long term policy in technical ministries (more interested in short-mid term) - Agriculture is “just” one of the various economic sectors, and / but highly strategic - Policy formulation is a slow and complex process, particularly the authorisation process - Decentralisation – devolution (or positive?) - CCGA not a project (no budget line) - Lack of sense of urgency for change in policy processes
Positive drivers / strengths	<ul style="list-style-type: none"> - Highly ambitious objective and very positive attitude (also a constraint?) - High credibility of T21, MI and its president - Use of SDGs as a driver for T21 - New tool iSDG very powerful - Flexibility of the programme and ability to make use of opportunities - Former experience with T21 in both countries - A clear vision about sustainable agriculture and food systems at international level (less obvious at national level) - Evidence-based approach (objective approach) - Demand-driven - Linkage with Ministry of Planning - Participation - Multi-level 	<ul style="list-style-type: none"> - Existence of leadership within government (or otherwise) - Ministry of planning has global overview of all sectors in both countries - Relevance of agriculture in both countries - Highly strategic topics such as fertilisers' subsidies with high stakes - SDGs - Both countries signed IAASTD - Both countries experience with participation - Prior experience with T21 (or a constraint?)

Source: author.

The main lessons learnt that can be derived from the experience of CCGA are:

- Change management at policy level is very demanding in terms of facilitation (competencies, resources, etc.). Regular presence on the ground is a prerequisite. That has been acknowledged by the project.
- The “package” of the CCGA project at national level is very broad, requiring the participation and buy-in of several dozens of people in each country for its implementation and its success. The ability and willingness to adopt some or all elements of the intervention strategy requires a careful analysis of the context. Not all aspects will be adopted into policy formulation until the end of the project. As rightly planned by the project for the end of this phase, the emphasis on specific aspects has to be made. The timing of the expected changes (adoption of system-dynamics and of T21; evidence-based policy analysis and authorization and shift into sustainable agriculture and food systems) is also very relevant.
- It seems easier for the planning ministries to adopt and use the T21 model than for the “technical” ministries (agriculture), particularly when no external funds are available. The model can be used without the multi-stakeholder and participation approaches.
- Sharing a strong common vision about the various aspects of the project (role, responsibility, vision of sustainable agriculture, objective of the project with its indicators, etc.) among the stakeholders of the project can increase efficiency of the process. This was highlighted in both evaluation workshops (see the box 3 below for the lessons learnt from the participants in Kenya). Regularly going back to the “basics” of the project may help, particularly for those not dealing with the project on a daily basis.
- The use of the facilitation and demand-driven approaches imply a complex balance between waiting for demand on one hand and inducing demand with facilitation, information and training on the other. This requires constant and strong presence in the country. Demand might also not fit into expected demands. This relates to the demand for the oil sector in Kenya.
- The existence of evidence and facts is a necessary condition, but is not sufficient for moving to evidence based policy formulation. The integration of stakeholders and/or the existence of leadership may be critical elements of change. Understanding and valuing the gains that each actor and actors’ groups may benefit from the expected change is also very important.

Box 3: “Lessons learnt from the evaluation workshop in Kenya”

- Need to avoid compartmentalizing policy dialogue
- Need to have a mutual and clear understanding of what the problem is
- Scenario concept can be applied to policies programmes and projects
- Take cognizance of national and country govt. functions in the constellation -> policy + IF
- Being clear on what is the desired outcome and what level and when
- All stakeholder should be involved at all relevant stage
- Determine audience of policy analysis
- Importance of multi-stakeholder approach
- Define/understand the policy environment
- Develop a good understand of the context and players
- Trade offs between CCGA project/capacities vs. efforts to objective, target and means
- New challenge for policy change will be the implementation – process with 47 counties
- Regular consultation in journey of problem understand and solving
- More sensitization on T21 model and apply to other government policies
- That is a need step up the use of the T21 model with regular release of outputs
- There is a need to ensure more training of modellers in the team of stakeholders
- Big chance for CCGA: UVP! “We have tools and teams to address challenges”
- There are still gaps along the chain using the T21 tool within CCGA project
- Involvement of crucial stakeholders need to increase
- Complexity of process of policy formulation – implementation
- The need of collaboration for effective policy formulation to implementation

Source: evaluation workshop with stakeholders in Kenya. April 2017.

6.3. Recommendations

The second phase of the CCGA project will end by the end of 2017. The project rightly decided to focus on capacity building and anchorage of the training. The mission recommends the integration of institutional (and team-)building into the process as well as the integration of non-ministries modellers into the TT and TAG in order to increase collective team work (instead of group work). They will add knowledge and competencies and may also add new ideas. The aims are to reach a level of learning where modellers may contribute to the change process and a critical mass of potential “system dynamic ambassadors”. The tracing of the trained modellers by their employers may contribute to reflect on the current situation in the ministries. Finding ways to better value the TT and TAG’s groups and members will certainly contribute to more evidence-based discussions.

Furthermore, enhancing the capitalisation process with prior local experience with the T21 model in both countries and elsewhere and the capitalisation of current experiences might increase the project's efficiency. The exploitation of the experiences of those people involved in prior T21 experiences could be in the form of resources persons, coaches, champions, role models or otherwise. Making the project, its process and success stories (or those of the Ministries) more visible in the media as well as within the government might achieve more support from the stakeholders. This will also contribute to a better understanding and valorisation of the individual and institution benefits from specific changes. Increasing the flexibility of the local BV representative or officer in the day-to-day coordination, implementation, decision-making process and financial means will ease daily activities on the ground. Sharing the project budget with the public partners certainly will contribute to ease their engagements (or otherwise). Finally, clearer collective visions have to be developed at each stage and with the various stakeholders' groups.

In Kenya, it is suggested to assess the demand of the MODP to expand the model for the oil sector. This demand could be met conditioned to financial and in-kind contributions (into the TT and TAG for example) and collaboration with TT and TAG. The newly created platform for agroecology might offer a strong opportunity to pursue for promoting the shift to sustainable agriculture and food systems in Senegal.

Table 3: Recommendations, by country and outcomes.

	Kenya	Senegal
Institutionalisation	Capacity and institutional building of TT and TAG Include modellers from other Ministries (Environment) and research institutions (KIPPRA) into TT and TAG Pursue demand from MODP for the oil sector Link with the green economy and SDGs	Capacity and institutional building of TT and TAG Include modellers from other Ministries and research institutions (ENSAE) into TT and TAG Look into the opportunity given by the "Plateforme nationale pour l'agroécologie" Link with the green economy (SDG: done)
Anchoring	Pursue with contacts	On track
Multi-stakeholder		Input contribution to the Plateforme nationale l'agroécologie, and link it with stakeholders' group
Awareness-communication	Make the project, the process and the success stories (at process and results levels) visible (media, etc.)	
Project management	Allow more responsibilities at local level for coordination and day-to-day implementation	

Source: author.

The project should be pursued in both pilot countries following this current second phase. The investments made until now have achieved positive results and, moreover, some demands. The investments still require further efforts so to ensure sustainable changes in the long term. The next phase should include a capitalisation exercise that should aim at valuing the various experiences and benefits from past experiences in both countries and for the countries. The various local stakeholders should be included in this activity. The results of this participative capitalisation should be broadly communicated in both countries. Some of the communication should be done with the local public institutions, the main project partners. Communication should also be a regular activity during the next phase both for advocacy and for increasing visibility of the project. The authorization or endorsement of the studies' results certainly will contribute to the communication efforts. The theories of advocacy and change have to be fine-tuned based on experiences in Kenya, Senegal and Ethiopia, but also specifically for each current pilot country. Based on the policy process studies, the three main elements, system-dynamics, evidence based policy and sustainable agriculture and food systems, have to be carefully integrated into the theory. There is now a strong base for system-dynamics within the government in both countries. There is a need for more institutional support in order to support the government to reflect on how the core groups (TT and TAG) may contribute to policy analysis, formulation and authorisation. Recommendations made for the end of the current phase remain valid for the next phase.

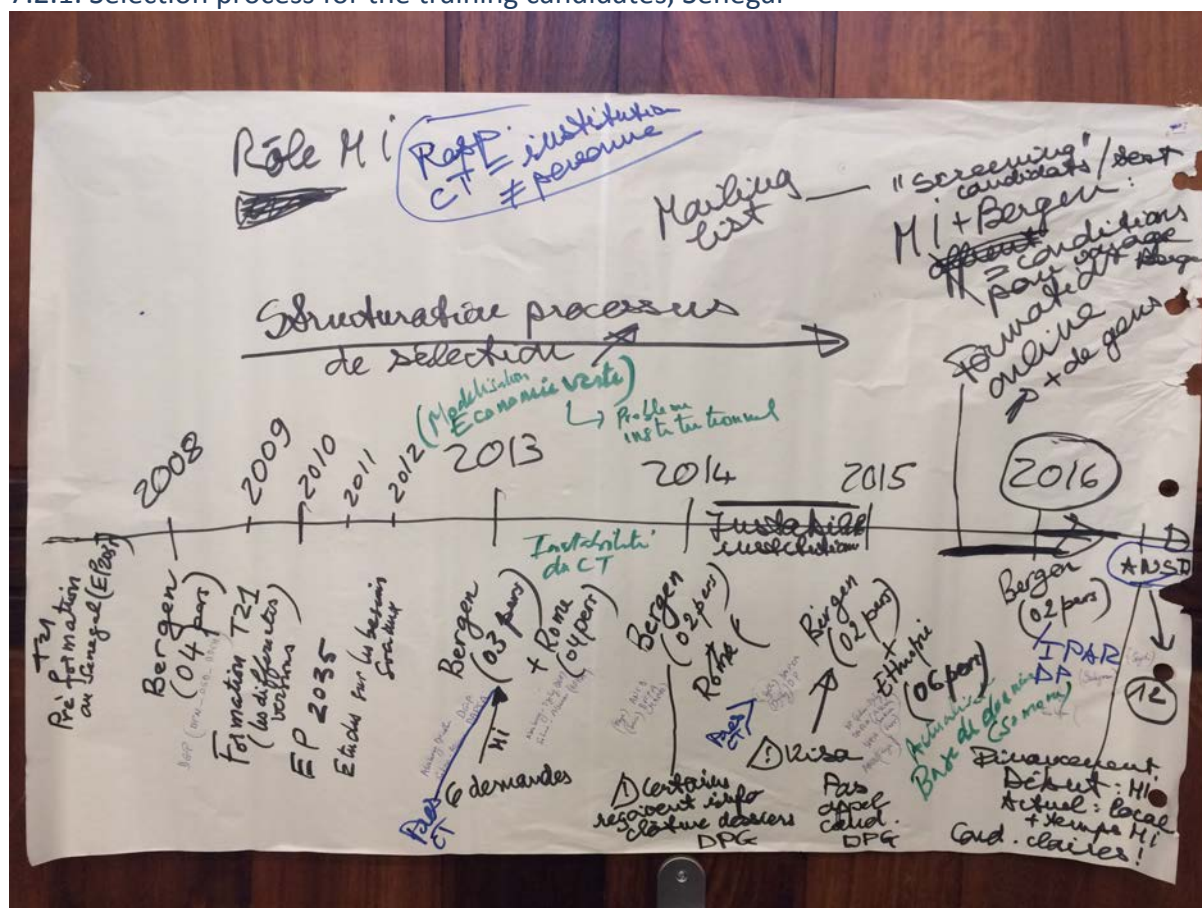
7. Appendix

7.1. Planning of Segment II, 2017

When	What
January – February	Organisation of the mission-review of documents Briefing
February	Mission to Senegal: - Interviews - Workshop
April	Mission to Kenya - Interviews - Workshop
May	Report writing
June	Report Segment II to be sent

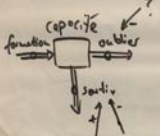
7.2. Selected outputs of the evaluation workshops

7.2.1. Selection process for the training candidates, Senegal



7.2.2. Recommendations from the evaluation workshop, Senegal

Institutionnalisation de l'outil T21 et son utilisation



- Contrôle qualité données si T21 "libre" ?
- Projet d'arrêté
- Elaboration de textes réglementaires qui prendront en compte tous les acteurs
- PROTOCOLE DE COMMUNICATION (INTERNE EXTERNE, etc.)
- Passer des programmes post-formation pour encourager le suivi après formation et valoriser les compétences acquises durant la formation.
- Intégrer dans les cahiers de charges des différents experts des différents structures des programmes de modélisation afin de leur permettre d'avoir du temps à consacrer à cette activité.
- Mettre en place des sous-comités technique au niveau des ministères techniques.

Planification des politiques multi-acteurs + inclusive

- à travers la mise en place des plateformes organisées par les secteurs différents (e.g. le gouvernement, la société civile, les universités, etc. → multi-stakeholder approach)
- identifier au préalable quelles politiques on veut contribuer à planifier, quels sont les acteurs concernés et comment.
- Mettre en place une instance de décision forte impliquant tous les acteurs.
- iSDG SUR LE WEB, former + acteurs à l'utilisation des outils de planification (notamment iSDG, T-21, HAER+DP)
- Intégrer les structures chargées du suivi et de la mise en œuvre du PSE (BOM - BOSS)
- Analyser tous les projets existants avec le T21 iSDG (des projets)
- Pour la mise en cohérence
- (L'outil de travail T21 dans la planification des politiques, analyse de programmes multisectoriels (BOM, BOSS) en deux langues)

Sensibilisation agriculture + durable

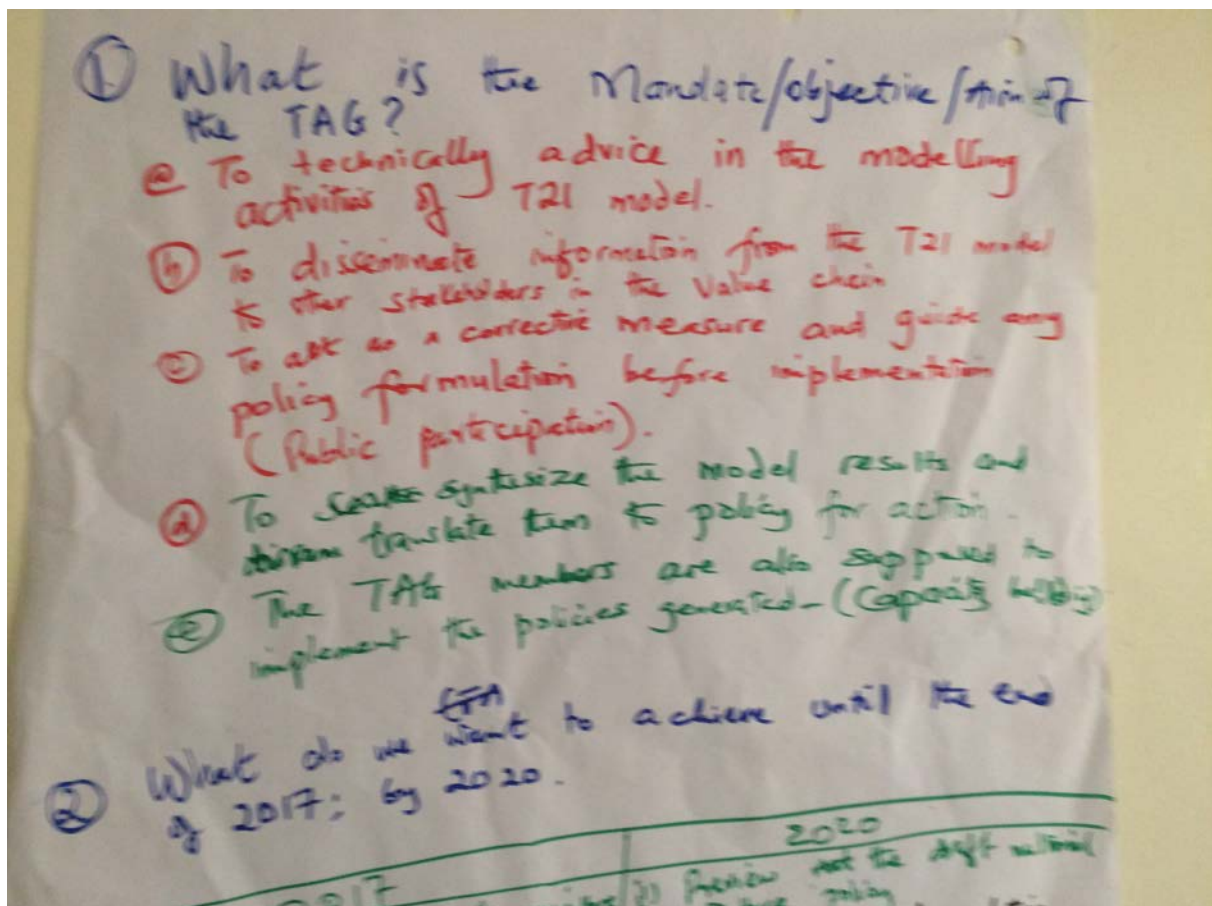
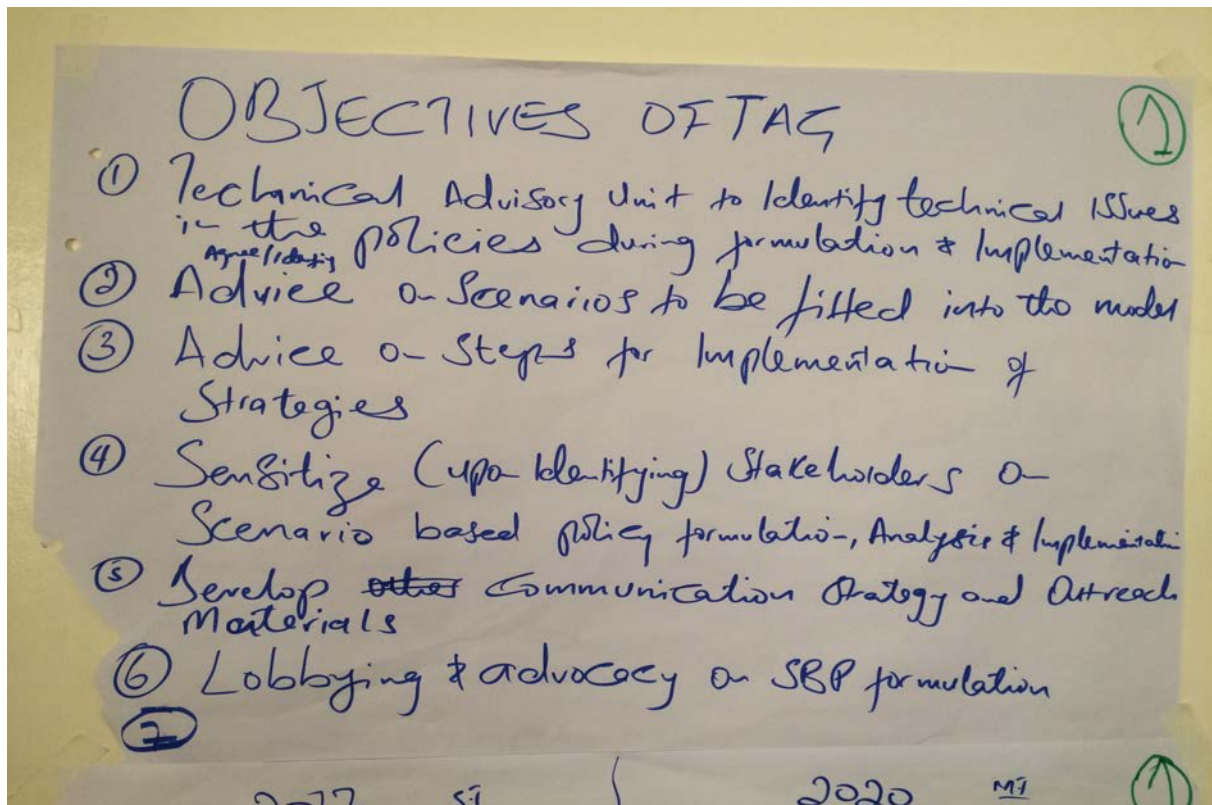
- ② Organiser une vaste campagne d'information et de sensibilisation au niveau national (utilisation de la Radio, TV, films, dépliants, réseaux sociaux, etc., articles de presse, etc. et échanges d'expériences/forums)
- ① vulgariser le Papp. (T21) au niveau des politiques / programmes (travaux communautaires)

- * iSDG SUR LE WEB
- * Elaborer un plan de communication **Budget**
- * Appeler "Apr. dur." du HEF
- * Informer - large public au sein de HEF
- * Rapport distribué à tous les participants CCA

Ancrage national T21 iSDG

- Améliorer gouvernance **ext. auto-gouv.**
- formation des acteurs
- vulgarisation T21 iSDG au niveau National
- Notamment OSC
- Relancer le projet de modélisation du T21 avec les régions financières
- Relancer le projet T21/FASER
- UTILISER LE iSDG POUR DES ETUDES RELEVANTES POUR LE PAYS
- Elaborer un plan d'action national pluriannuel
- entente entre les parties prenantes (e.g. HAER, HEF, afin que le dossier puisse assurer un DAPSA suivi permettant d'aller vers l'avant.
- Coordination de CT par le MEFP avec une participation plus active des autres secteurs (Agriculture, élevage, Pêche, etc.)
- Planifier en compte la note de l'importance de iSDG dans la planification stratégique

7.2.3. Objectives / roles of the TAG as perceived by its members, Kenya workshop



- INFORM MODELLING TEAM ABOUT POSSIBLE MODELLING SCENARIOS
- REVIEW MODEL STRUCTURE + RESULTS
- TRANSLATE MODEL RESULTS INTO POLICY
- LINK PROJECT WITH OTHER gov. AUTHORITIES & OTHER STAKEHOLDERS
- DISSEMINATION OF RESULTS OF MODELLING WORK IN TAG-CONSTITUENCY

7.2.4. Evaluation of the workshop, Kenya

Evaluation workshop				
	++	+	-	--
• TT/TAG/SG	●	●		
• Historical profile	●	●		
• Objective reached	●	●		
• Facilitation	●	●		
• Time for exchange	●	●		
• Atmosphere	●	●		
• Learning effect lessons learnt	●	●		

7.3. TT – TAG – Stakeholders' group

		Senegal	Kenya
Technical Team	Date creation		
	Membership	15	5 (2015)
	Turnover of members		
TAG	Trained in System Dynamics	20	5
	Date creation	2013	2014
	Membership	15	18
	Turnover of members		
Stakeholders' group	Date creation	2013	2013
	Membership		60-80
	Turnover of members		
	Number of workshops	5	6

Source: author.

7.4. Expected outputs and outcome 2011-14 and 2015-17

2011-14	2015-17	2016-17
Three national or regional authorities (Ethiopia, Mali, Kenya) endorse national policies and agricultural strategies that allow for effective, comprehensive and long-term planning of sustainable agricultural development	Three national or regional authorities endorse comprehensive national policies and agricultural strategies that support sustainable agricultural development with a long-term perspective	In at least two CCGA pilot countries, improved policy dialogue and integrated policy planning contribute to the formulation of national policies and agricultural strategies that support sustainable agricultural development with a long-term perspective.
<ul style="list-style-type: none"> • Priority issues for analysis of agricultural sector in Ethiopia, Mali and Kenya identified • Terms of reference for analysis endorsed by authorities in Ethiopia, Mali and Kenya • Agricultural sector in Ethiopia, Mali and Kenya analysed through an integrated system-dynamics based development model • National authorities supported in effective, comprehensive and long-term planning of agricultural development through model demonstration and building capacity on its use 	<ul style="list-style-type: none"> • Institutionalisation and use of agriculture sector models as comprehensive planning tools strengthened, including through adequate capacity building within the government, research institutions and civil society organisations • National anchoring of knowledge on system dynamics and the T21 model is supported through collaboration with local institutions and academia • Multi-stakeholder involvement in policy planning on food and nutrition security and sustainable agriculture and outputs strengthened • Awareness is raised and knowledge built among the public, decision makers and other relevant stakeholders. Existing initiatives/alliances are strengthened for the need to shift to more sustainable agriculture and food systems 	<ul style="list-style-type: none"> • Same as 2015-17

Source: prodoc, different dates.

7.5. Results of survey “Training in Kenya”

6 questionnaires. 100% response rate.

Profile

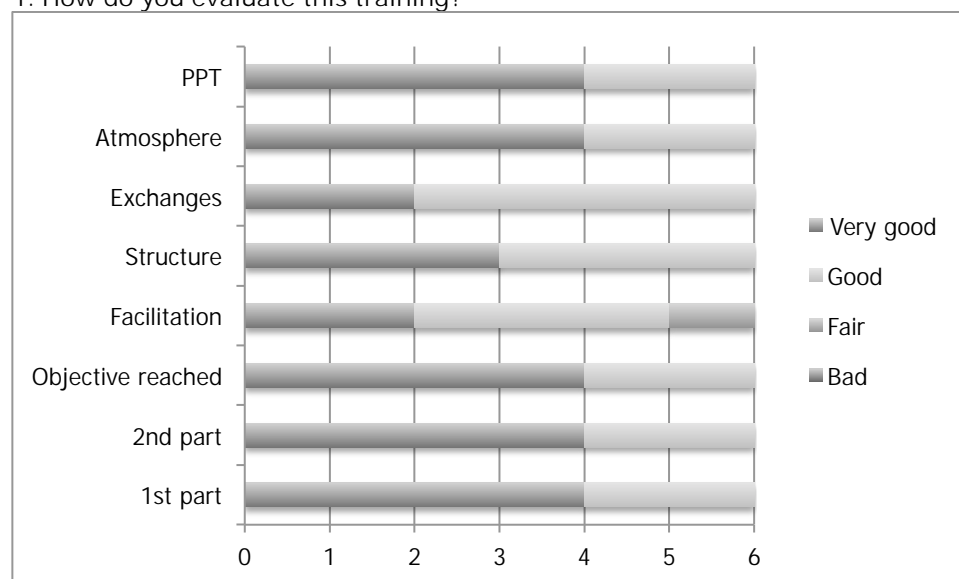
Sex: 4 women and 2 men

Employee: 2 Min. Agr., 2 Min. Planning and Devolution, 1 Krebi, 1 unknown

First training:

- 1 2010
- 1 2014
- 2 2015
- 2 2016

1. How do you evaluate this training?



2. What did you particularly enjoy ?

- very clear, different views, free atmosphere
- comments about enabling environment (but not into details)
- discussions about future

3. What are you taking with you? And what are you going to apply tomorrow?

- Need to rejuvenate efforts of core team and more policies
- Identifying problem for the right assumptions and possible scenarios
- Grow as a modelling team
- T21 all possible benefits
- Nothing

4. Do you need further training? If yes, about what in particular?

All feel that they need further training:

- Go beyond basic modelling
- Model calibration using different policy scenarios
- Model structure adjustment
- Policy analysis and simulations
- Policy simulations

5. According to you, what are the main advantages and the constraints of the programme T21?

Advantages T21	Constraints T21
<ul style="list-style-type: none"> - Core in addressing policy analysis - It is an inbuilt system - The fact that it gives an overall outlook at a sector's equations looking at feedback loops - Integration of the model (society, economy, environment) - Ability to analyse and run scenarios 	<ul style="list-style-type: none"> - Lack of financial facilitation by government (no financial allocation to modelling team) - High staff turnover - Lack of capacity - Poor motivation - Problems with domestication of units which are already inbuilt in the system

- | | |
|--|--|
| <ul style="list-style-type: none"> - Robust model that integrates all sectors of the economy, hence very useful - Able to simulate the several scenarios | <ul style="list-style-type: none"> - Can get complicated if you are not well aware of the system dynamics principle - Complex model - Requires hands on experience - Needs a lot of time to keep uploading (reloading?) - Lack of adequate funding to carry the activities of the programme - Complex tool that needs more advanced training |
|--|--|

6. What did you learn out of using the T21, for you and/or for your work?

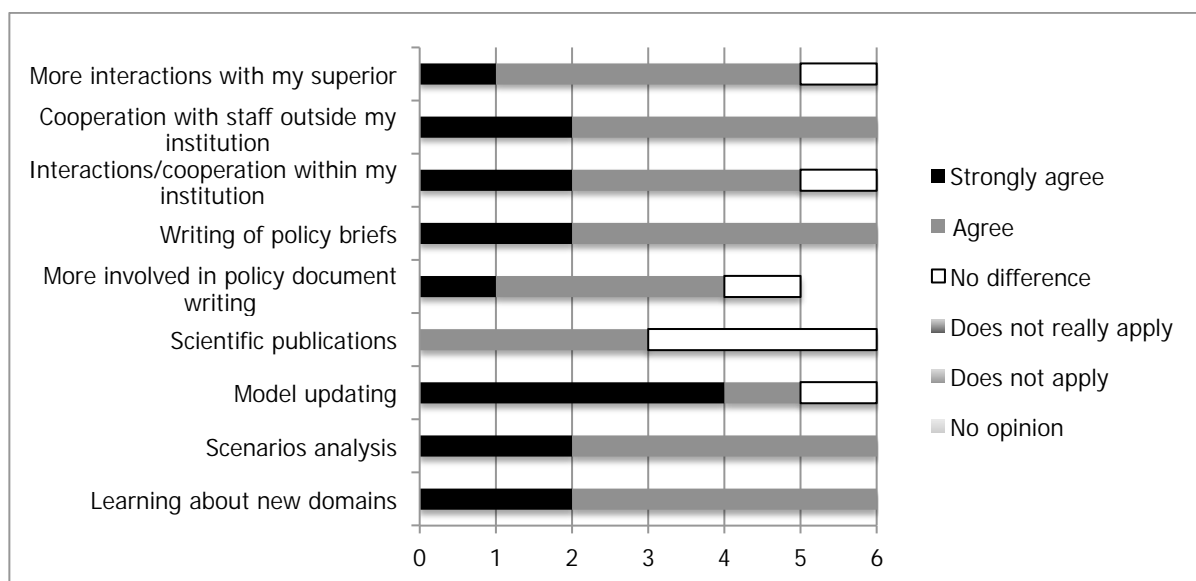
	Strongly agree	Agree	No difference	Does not really apply	Does not apply	No opinion
An improved understanding of system dynamics	3	2				
An improved understanding of the sectorial interactions	4	2				
Ability to calculate scenarios more rapidly	2	2				
An improved communication with institutions outside my Ministry	2	4				
An improved monitoring of the policy implementation	1	5				
Sectorial analysis	2	3	1			
Clearer short and long term impact results	1	4				
The feeling that the proposed policies based on the model are more usefull&Co	1	4	1			
More interactions with the economic sector and the civil society		4	1			
More work		3				
Other						

7. What is your vision for sustainable agriculture in Kenya?

- Brigent with application of the right policy mix
- To have a country with food security and higher earnings from exporting agricultural products
- An agriculture that improves income with a lesser negative impact or no negative impact on the environment
- can be achieved through analysing the most appropriate policy scenarios, irrigation, fertilisers subsidies, etc.
- be able to use the model to predict and analyses the current scenarios of policy and provide policy directions

One had no answer.

8. Did your work change following the T21 training and its use? If yes, how?



9. What is the purpose / aim / objective of this Technical Team?

- To coordinate policy analyses using T21
- To conduct policy analysis and modelling in the country
- Support to institutions on policy modelling using T21
- Developing capacity of other teams on use and interpreter of T21
- to conduct policy analysis on various sectors of the economy and advice the government on the most appropriate policy intervention for implementation
- to work together in policy analysis and simulation.

One had no answer.

10. According to you, what are (have been) the main advantages of being a member of this Technical Team? Are there some constraints? If yes, which ones?

Advantages of being a member	Constraints
<ul style="list-style-type: none"> - Getting more details on analyses of policies - Understanding how other sectors work - One is able to understand policy analysis and modelling - Knowledge - Increased understanding of government systems - Understanding of how planning happens using real-time evidence - Working on sector policies - Knowledge on system dynamics - Training - Better understanding of sectors - Improved understanding of system dynamics - Improved modelling skills - Improved analysis of policies and policy recommendations - Work together in data updates - Planning together - Policy analysis and simulations are done together - Learn from each other 	<ul style="list-style-type: none"> - Limited training - Inadequate facilities - Getting accurate data - Being assigned of the tasks which are equally demanding - Getting the different sectorial teams together to give time to T21 work - Increased workload without compensation - Some teams members have left for greener pastures - Lack of adequate resources - No structured times to meet - Lack of funding to facilitate regular workshops

7.6. Results of survey “iSDG information days in Senegal”

30 questionnaires distribués, 24 en retour.

Profil des personnes ayant répondu au questionnaire:

Sexe: 18% femmes – 82% homes

Fonction: 70% économistes, 4% statisticiens, 4% analyste, 8% CT, 4% directeur, 4% chefs de division...

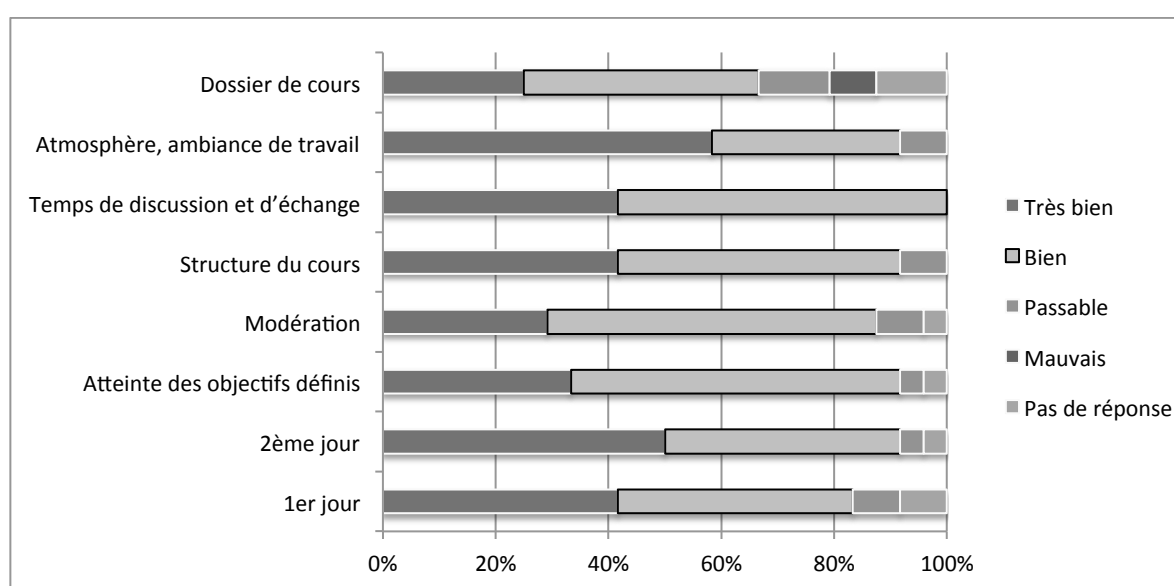
Formation T-21: 74% n'ont pas reçus de formation T21, 26% avaient reçus une formation T21. Pour ces derniers:

- 2 en 2016
- 1 en 2015
- 1 en 2013
- 2 en 2010.

1. Comment évaluez-vous cet atelier sur l'iSDG ?

Le taux de satisfaction (bien et très bien) est très élevé: plus de 90%. Seul l'aspect “évaluation du dossier du cours” est moins satisfaisant, du fait qu'il n'y avait pas de dossier distribué.

Le temps de discussion et d'échanges est l'élément qui a été le plus apprécié, avec 100% de bien et très bien.



2. Qu'est-ce qui vous a particulièrement plus dans ce cours? Et si vous avez été formé au T21, par rapport aux autres formations antérieures liées au T21?

Cette question met en évidence différents points en particulier:

- la reconnaissance de l'expertise des référents
- l'interactivité durant ces deux jours,
- l'interaction avec les ODDs.

Formation T21	Intérêts
Avec formation	<ul style="list-style-type: none"> - L'interactivité et la prestance du prestataire dans sa maîtrise du sujet et sa capacité d'écoute - Sa méthodologie de déroulement du cours et les explications précises - Revue de l'ensemble des secteurs (modules) - Découvrir la philosophie qui est derrière le T21 / iSDG - La simplification du modèle T21, l'explication claire et simple de Matteo - L'intégration des ODD ainsi que la comparaison avec le modèle antérieur
Sans formation	<ul style="list-style-type: none"> - Complexité et dimension du T21 - Prise en compte des ODD dans la modélisation - La clarté des explications et le sens de l'écoute du présentateur - La richesse du modèle T21 / iSDG et sa dimension intégrée - Les discussions et les réponses apportées - Les explications et les discussions

- Le bon niveau des formateurs
- Le module revenue / pauvreté
- Interactivité, discussions très poussées, réponses satisfaisantes
- L'interaction avec les facilitateurs / modérateurs
- L'interactivité
- Intéressant
- Dynamisme des échanges

3. Qu'allez-vous mettre en pratique concrètement dès demain dans le cadre de votre travail?

Les résultats mettent en évidence le fait que 70% des participants voient concrètement ce qu'ils peuvent appliquer, ce qu'ils peuvent faire suite à ces deux jours d'information – formation. Il faut noter qu'il n'est pas possible de connaître le rôle exact de ces personnes, rôle qui peut avoir une influence sur les réponses à cette question. Les activités "globales" citées par les participants sont: la simulation, analyse des politiques publiques, une meilleure planification. Certaines activités plus précises concernent les variables, les données, le module pauvreté et le suivi des indicateurs.

Participants	Activités
Avec formation T21	<ul style="list-style-type: none"> - Simulation après révision des politiques et indicateurs, ensuite analyse des résultats de simulation - Sortir les outputs du modèle pour une diffusion dans le public afin d'orienter le choix des décideurs - Continuer la réflexion sur les modules - Revisiter ce qui a été fait dans les deux jours afin de consolider et de fixer les idées / relations, etc. - Analyse des politiques publiques et faire des simulations avec l'interface iSDG - Recenser les variables pertinentes qui n'ont pas été prises en compte et qui occupent une place importante dans le PSE
Sans formation T21	<ul style="list-style-type: none"> - Simulation de politiques économiques - Affiner l'analyse et la recherche - Une meilleure planification du développement économique et social (allocation des ressources, mesure de la performance, etc.) - Les modélisations - Le module pauvreté - Mettre à jour le modèle, revoir la modélisation des secteurs concernés, faire plus de recherches sur les indicateurs renseignables - Commencer la simulation - Collecter les données nécessaires (complémentaires) pour aider à la calibration du modèle - Approfondir la réflexion sur la prise en compte de la dimension genre dans les indicateurs sectoriels - Prévision sur les indicateurs - Le suivi des indicateurs - Rien de concret (7)

4. Auriez-vous besoin de formation complémentaire pour l'utilisation du modèle T21? Si oui, de quoi?

Trois personnes, soit 12%, ne ressentent pas le besoin de formation complémentaire concernant le T21. Pour les autres participants, les thèmes demandés concernent:

- des aspects globaux concernant le T21 (et son extension): boîte noire,
- des éléments plus précis,
 - o la compréhension des équations, le renforcement des aspects dynamiques du modèle
- la calibration du modèle

	Nb non	Si oui, de quoi (thèmes)
Avec formation T21	1	<ul style="list-style-type: none"> - Interconnexion des variables par les flèches et la logique qui les sous-tend - Peut-être passer plus de temps dans les spécifications du modèle - Comment calibrer - Calibration du modèle car cet aspect technique n'est pas abordé - Comment intégrer un nouveau module dans le modèle T21
Sans	2	- comprendre et bien comprendre la boîte noire

formation préalable T21	<ul style="list-style-type: none"> - modélisation des équations utilisées dans le iSDG - utilisation proprement dite du modèle T21 - Renforcement de la compréhension de la dynamique économique - Modèle T21 - Hypothèses, fonctions de base et tables de résultats - Formation pratique - Présentation plus approfondie de la modélisation, méthode d'utilisation - Calibration - Utilisation de l'interface et sur les aspects plus techniques que le temps ne l'a permis - Du modèle au vu de son utilité capitale - Intégration des variables, l'analyse et le suivi des résultats
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5. Quels sont, selon vous, les bénéfices et avantages et les contraintes du programme T21 et de son extension iSDG?

Les réponses détaillées dans le tableau ci-dessous indiquent clairement que les aspects d'inter-relations entre les différents secteurs, le lien avec les ODDs et leurs suivis, le suivi des politiques moyen-long terme sont perçus comme des avantages évidents.

Pour les contraintes du modèle, ils peuvent se résumer comme suit:

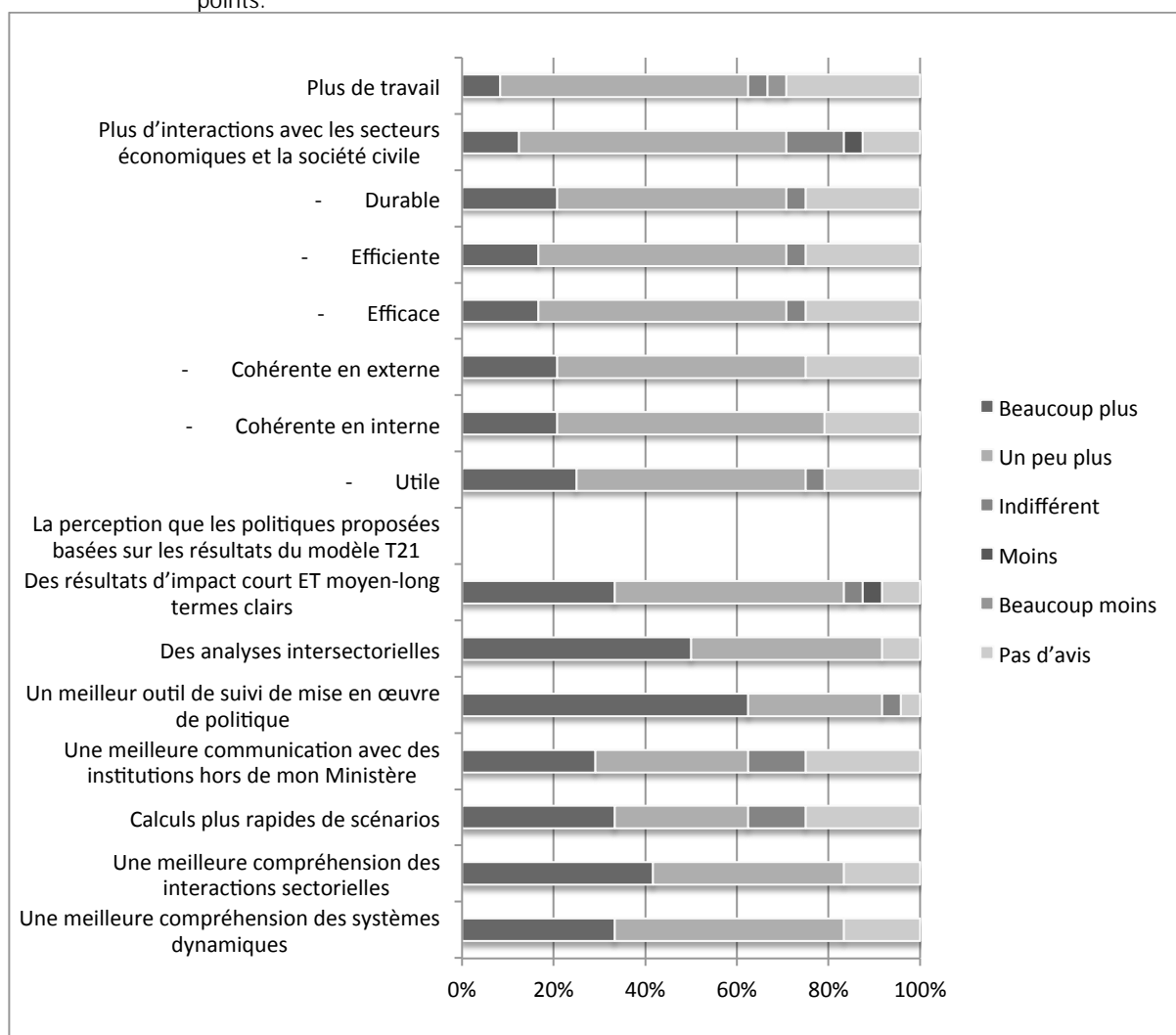
- la langue (anglais pour certains éléments) ainsi que la dimension genre (ou sa visibilité) devraient pouvoir être résolues;
- la problématique de la disponibilité et de la qualité des données est une contrainte qui n'est pas liée au modèle.
- Le niveau de déségrégation, par exemple régions, devrait pouvoir être revu.
- La complexité (équations, structure, etc.) est une contrainte..
- Pas de court terme.

Participants	Bénéfices – avantages T21	Contraintes T21
Ont reçus une formation T21	<ul style="list-style-type: none"> - Nous aider à éclairer les décisions des pouvoirs publics afin de faire du Sénégal un pays émergent en 2035 - Utile dans la perspective d'améliorer les politiques de développement - Approches multisectorielles - Permet d'interconnecter les différents secteurs et sphere. - Permet de faire des projections de moins long terme - Suivi des ODD, évaluation des ODD - Outil d'aide à la prise de décision - Donner une vision claire de nos politiques - Interconnection entre les différents secteurs 	<ul style="list-style-type: none"> - Disponibilité de certaines données - Niveau de déségrégation peut-être insuffisante dans les structures du modèle - Complexité - Structure complète et lourde - Modèle non désagrégé au niveau régional
N'ont pas reçus une formation T21	<ul style="list-style-type: none"> - Suivi des ODD notamment certains indicateurs - Permet d'avoir une connaissance sur les secteurs économique, social, et environnemental - Possibilité de quantifier les politiques - Outil puissant de planification de politiques économiques - Approche intégrée, meilleur ciblage, meilleure allocation des ressources - Interconnexions des trois dimensions (économie, société et environnement), Bénéfices cadres - Beaucoup d'indicateurs de suivi de politique économique, projection de bibles annuelles d'indicateurs - Gains de temps appréciables pour les projections et fiabilité des outputs - Flexibilité 	<ul style="list-style-type: none"> - Non prise en compte de tous les indicateurs - Non prise en compte de soucis d'ordre sectoriels - Modèle assez complexe - Le modèle est agrégé sur certains aspects - Enormément de choses (équations, variables) à voir et leur relation - Trop technique, trop de technique économétrique et statistique - La langue gagnerait à être le français pour l'interface plutôt que l'anglais - La dimension genre est faiblement prise en compte par le modèle

- | | |
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| <ul style="list-style-type: none"> - Suivi efficace des politiques – évaluation - Long terme - Son extension en ISDG rend le T21 plus intéressant - Modélisation des ODDs , niveau de prise en compte des investissements - L'intégration de plusieurs dimensions de la vie économique et sociale | <ul style="list-style-type: none"> - Pas de court terme - Base de données incomplète, fiabilité de certaines données, impertinence de certains indicateurs |
|--|--|

6. Qu'est-ce que l'utilisation du T21 et/ou de son extension ISDG vous a apporté – va vous apporter dans votre travail?

- 20% pas d'avis
- 4% pas d'apports (ou de changements)
- pour les autres:
 - o plus de 50% perçoivent que le modèle leur amènera beaucoup plus un meilleur suivi ainsi qu'une meilleure compréhension, 91% pour la somme beaucoup plus et un peu plus
 - o > 75% considèrent que l'utilisation du modèle et/ou de son extension leur amènera les différents aspects cités dans le questionnaire plus et beaucoup plus.
 - o Les plus grands apports sont le suivi et analyse sectorielle avec plus de 90% pour ces deux points.



7. Quelle est votre vision d'une agriculture durable au Sénégal?

Pour les 60% des participants qui ont partagé leur vision d'une agriculture durable au Sénégal, l'aspect performance semble prépondérant. Les participants ayant eu une formation au T21 au préalable semblent plus enclins à inclure plus d'un aspect de la durabilité dans leur vision.

40% des participants n'avaient pas de vision pour une agriculture durable au Sénégal à proposer. Il faut noter que les participants sont essentiellement des économistes. Si certains ont une spécialisation (agricole ou non), celle-ci n'est pas connue.

Participants	Vision
Avec formation T21	<ul style="list-style-type: none">- Nourrir convenablement les populations tout en préservant l'environnement- Une agriculture qui puisse satisfaire les besoins actuels et futurs de la population- Une agriculture basée sur l'exploitation familiale avec l'utilisation d'engrais naturels- Une agriculture durable qui permet de satisfaire les besoins de la population pour chaque filière et qui permet d'exporter le surplus de production afin d'avoir une balance commerciale excédentaire
Sans formation T21	<ul style="list-style-type: none">- Une vision pessimiste aux vues des politiques qui sont en train d'être menées- Avec les nouvelles politiques mise en oeuvre par l'Etat en collaboration avec le partenaire, nous bâtir une agriculture moderne et durable- Une agriculture productive, participant à la création d'emplois et contribuant à la souveraineté alimentaire- Performance au service des populations- Une agriculture source de croissance et respectant l'environnement- Accroître la productivité agricole- Gestion efficace, efficiente et équitable de l'agriculture- Créer des industries sur tous les plans approvisionnement, transformation, production fiables et promouvoir celles-ci.- Une agriculture durable au Sénégal peut nous aider à porter notre économie plus haute (c'est-à-dire accède à une croissance forte et durable)- Une agriculture à la fois qui augmente sa productivité et respecte les normes environnementales

14 réponses sur 24.

8. Suite à cette formation, pensez-vous que votre rôle / vos activités / votre travail va changer? Si oui, de quelle manière?

En moyenne, 15% des participants ne perçoivent pas de changement dans leurs activités. Moins de 16% ne prévoient pas de changements pour les différentes activités, sauf pour la veille de sujets émergents, de rédaction de publications scientifiques et de briefs politiques pour lesquelles le taux est plus élevé, 20%.

10% des participants ou moins n'ont pas d'avis sur la question, sauf concernant l'actualisation du modèle et la rédaction de publications scientifiques ou ce pourcentage de participants va jusqu'à 18%, ces deux activités étant très spécifiques à des modélisateurs expérimentés.

70% des participants en moyenne prévoient plus collaboration avec leurs collègues de leur ministère et d'autres ministères, de rédaction de briefs politiques et/ou d'articles scientifiques, d'actualisation du modèle, d'analyse de scénarios et de veille de sujets émergents. Près de 50% des participants pensent renforcer leur implication dans la rédaction de documents politiques.

