

Info Note

Formulation of a Robust National Rural Sector Program in Burkina Faso: What new themes have emerged from the socio-economic and climate scenarios process?

Results of analysis based on the CCAFS socio-economic and climate scenarios process

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Key Messages

- Despite a rather good robustness of the PNSR I (> 50%), shortcomings in its implementation did not solve major constraints on rural sector development.
- The use of scenarios to guide the formulation of PNSR II highlighted the need for a research component that would provide a crosscutting dimension to all the other PNSR II components by providing scientific and technical supports required for achieving the rural development objectives of the Government of Burkina Faso.
- The need to promote climate-smart agriculture (CSA) based on endogenous knowledge or best practices in PNSR II by using up-to-date scientific information or new scientific knowledge developed elsewhere was recognized.
- 22 recommendations on Pillars 1, 3, 4 and 5 were identified based on socio-economic and climate scenarios and were translated into new specific or thematic actions to be taken into account in PNSR II.

recommendations were made to allow for the effective mainstreaming of plausible socio-economic, environmental and climatic factors in the near and distant future, that will make PNSR II more robust to face future uncertainties related to climate change, global dynamics, socio-economic changes, changes in norms and values, etc. In addition, an exercise with all the stakeholders helped in translating the said recommendations into new actions and themes to be taken into account when formulating PNSR II. Discussions between the stakeholders also underscored the need for crosscutting involvement of research in the implementation of the activities of PNSR II.

Socio-economic and climate scenarios applicable in Burkina Faso

Four (4) integrated qualitative and quantitative scenarios that describe the future up to 2050 have been developed to explore major regional socio-economic uncertainties in West Africa related to food security, environment and livelihoods within a context of climate change. For these various areas, two driving forces were considered by stakeholders to be of utmost importance in West Africa, though with high levels of uncertainty (Figure 1):

- Are there long-term or short-term priorities in regional governance?

- Are State or non-State actors driving change in the region?

Introduction

Under the partnership initiated in 2015 between the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) and the Permanent Secretariat for Coordination of Agricultural Sector Policies (SP-CPSA), in collaboration with other CGIAR research programs and centers, an analysis of the National Rural Sector Program (PNSR) based on the CCAFS socio-economic and climate scenarios was conducted with the effective participation of rural sector stakeholders in Burkina Faso. Twenty-two (22)

These two "uncertain" drivers were used to structure the four (4) scenarios, which were validated using two agricultural economic models: GLOBIOM, developed by IIASA, and IMPACT, developed by IFPRI.

■ *Cash, Control and Calories*

- *Self-determination*
- *Civil Society to the Rescue?*
- *Save Yourself.*

		Policy Driver	
		Short-term Priorities	Long-term Priorities
Dominant Forces	State Actors	<p>Cash, Calories and Control: The government facilitates short-term gains/benefits</p>	<p>Self-determination: Slow and painful transition to sustainability</p>
	Non-State Actors	<p>Save Yourself: Weak State governance, quick but chaotic development Crises at the expense of investment</p>	<p>Civil Society to the Rescue? Struggles between civil society and the private sector that is ultimately productive</p>

Figure 1. The four (4) scenarios applicable to Burkina Faso

Recommendations for each pillar and their translation into actions for PNSR II

Twenty-two (22) recommendations from the scenario-based analysis process have been translated into several new actions or themes to be taken into account in PNSR II:

Pillar 1: Improvement of food security and sovereignty		
Scenario-based recommendation	How has the scenario-driven PNSR II analysis process led to this recommendation/change?	How can this recommendation be translated into actions (in PNSR style)?
R1. Guarantee the rights of smallholder farmers: land tenure, access to quality inputs, equipment, etc.	In the <i>Cash, Calories, and Control</i> scenario, large agribusiness enterprises focusing on cash crops with high economic return predominate exports, resulting in loss of land for smallholder farmers. This leads to conflicts over access to and use of land.	SP3.2 / A1 for land Action 1 - Implementing National Rural Land Security Policy (PNSFMR) SP1.1 / A1 for inputs and equipment Action 1 - Promoting producers' access to agricultural inputs and equipment
R2. Focus on food production and market gardening	In the <i>Cash, Calories, and Control</i> scenario, large agribusiness enterprises focusing on cash crops with high economic return predominate exports, resulting in neglect of production for the domestic market. The production of cheaper staple products is declining, thereby reducing food security for rural poor. In the <i>Self-Determination</i> scenario, external financing is declining, thereby making investment in new crops with high economic return more difficult. On the other hand, it would be wiser to focus on cereal production.	SP1.1/A1 to A7 for agricultural inputs Action 1 - Promoting producers' access to agricultural inputs and equipment Action 2 - Plant protection Action 3 - Agricultural extension and support Action 4 - Sustainable management of agricultural land fertility Action 5 - Diversifying agricultural production Action 6 - Strengthening farmers' organization Action 7 - Promoting research and development of plant production
R3. Improve the productivity of smallholder livestock farming	In the <i>Cash, Calories, and Control</i> scenario, the focus is generally on improving the productivity of large agro-industries. The competition is not fair, because the regulations benefit these big companies.	SP1.2/A1 to A8 Action 1 - Professionalizing animal value actors Action 2 - Improving livestock feeding Action 3 - Improving the genetic potential of local breeds Action 4 - Multiplying good quality exotic pure breeds Action 5 - Developing market infrastructure Action 6 - Creating referential norms

Pillar 1: Improvement of food security and sovereignty		
Scenario-based recommendation	How has the scenario-driven PNSR II analysis process led to this recommendation/change?	How can this recommendation be translated into actions (in PNSR style)?
		Action 7 – Optimizing production systems Action 8 - Promoting research for animal production
R4. Develop and adopt production standards (such as a Zoo technical Code)	In the <i>Cash, Calories, and Control</i> scenario, emphasis is generally put on increasing the productivity of large agro-industries. The competition is not fair, because the regulations will benefit these big companies. Public health could suffer, because of the use of unhealthy additives in animal feed, etc.	SP1.2/A1 to A8 Action 1 – Professionalizing animal value chain actors Action 2 – Improving livestock feeding Action 3 - Improving the genetic potential of local breeds Action 4 – Multiplying good quality exotic pure breeds Action 5 – Developing market infrastructure Action 6 - Creating referential norms Action 7 – Optimizing production systems Action 8 - Promoting research for animal production
R5. Focus on the production of local animal breeds	In the <i>Self-Determination</i> scenario, external and donor support is decreasing. Therefore, it is (almost) impossible to breed exotic breeds that perform well.	SP1.2/A1 to A8 Action 1 – Professionalizing value chain animal actor Action 2 – Improving livestock feeding Action 3 - Improving the genetic potential of local breeds Action 4 – Multiplying good quality exotic pure breeds Action 5 – Developing market infrastructure Action 6 - Creating referential norms Action 7 – Optimizing production systems Action 8 - Promoting research for animal production
R6. Restore degraded land for fodder production (using zai techniques, half-moons, etc.) and develop fodder storage facilities/ infrastructure	In the <i>Civil Society to the Rescue</i> scenario, smallholder farmers struggle to produce their own fodder and conserve hay.	SP1.2/A1 to A8 Action 1 – Professionalizing animal value chain actors Action 2 – Improving livestock feeding Action 3 - Improving the genetic potential of local breeds Action 4 – Multiplying good quality exotic pure breeds Action 5 – Developing market infrastructure Action 6 - Creating referential norms Action 7 – Optimizing production systems Action 8 - Promoting research for animal production
R7. Modernize livestock infrastructure and equipment (stables, traction equipment, transport, slaughterhouses, etc.)	In the <i>Civil Society to the Rescue</i> scenario, the private sector and civil society are the actors that control the country. When the private sector plays a key role in the livestock sector, the pursuit of profit will be the main priority - which could result in the neglect of animal welfare and hygiene along the livestock value chain.	SP1.2/A5 and A6 Action 5 – Developing market infrastructure Action 6 - Creating referential norms
R8. Give priority to the consumption of local/national products	In the <i>Cash, Calories, Control</i> scenario, local markets will be flooded with lower quality products due to non-compliance with the regulations for healthy food production.	SP2.1/A6 Action 6 - Promoting consumption of local products

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Scenario-based recommendation	How has the scenario-driven PNSR II analysis process led to this recommendation/change?	How can this recommendation be translated into actions (in PNSR style)?
R9. Create, boost and strengthen the capacity of local water management committees	In the <i>Cash, Calories, and Control</i> scenario, there will be more conflicts over the use of water due to the absence of proper water resource management. Furthermore, given the poor operation of water management agencies, water pollution from pesticides is widespread.	SP3.2/A4 Action 4 - Collaborative management of water resources in the country's watersheds through water agencies
R10. Implement agricultural insurance to secure rural incomes	In the <i>Cash, Calories, and Control</i> scenario, the management of food crises will be short-term, through food aid and social measures. Smallholder farmers will be severely affected by natural disasters or falling food prices.	Adopt this as one of the reform measures in the rural sector (recommendation under implementation)

Pillar 3: Sustainable development of natural resources		
Scenario-based Recommendation	How has the scenario-driven PNSR II analysis process led to this recommendation/change?	How can this recommendation be translated into actions (in PNSR style)?
R11. Establish local structures for management of conflicts over the use of natural resources	In the <i>Cash, Calories, and Control</i> scenario, there will be less land available for smallholder farmers, as larger agro-industries grow at the expense of smallholder farmers, sometimes through land grabbing. There are more conflicts over land and water.	Operationalizing Law No. 034 on Rural Land Tenure Law on water, pastoralism, Forest Code, Environmental Code
R12. Promote the use of renewable energy	In the <i>Cash, Calories, and Control</i> scenario, there are short-term concerns, and sustainability is therefore neglected. Fossil fuels are still used, and this causes environmental problems.	Providing more subsidies for: - biodigesters of the National Biodigester Program (PNB) - Renewable energy (partner Ministries for PNSR implementation) Conducting a tariff review (increasing) for wood energy
R13. Protect the (main) ecosystems from agricultural expansion	As in the <i>Cash, Calories, and Control</i> scenario, large agro-industries focus on producing high-yield export crops and need large agricultural areas. Deforestation remains a major threat to forest ecosystems.	<ul style="list-style-type: none"> - Effectively implementing the Forest Code and Integrated Water Resources Management - Promoting sustainable and smart agriculture - Implementing the National Wetland Policy (PNZH-RAMSAR) - Developing the ecosystem-based adaptation (EBA) approach
R14. Define rules for land use: - Pesticides - Land use (avoid erosion) - Invasive species (exotic crops, etc.)	In the <i>Cash, Calories, and Control</i> scenario, there are short-term concerns, and sustainability is therefore neglected.	<ul style="list-style-type: none"> - Implementing the texts on Persistent Organic Pollutants (POP) - Implementing the national land use plan - Water Management Master Plan (SDAGE) - SAGE - Implementing the Law on Pesticides
R15. Guaranteeing land rights should be a key issue in PNSR II	In the <i>Self-Determination</i> scenario, land-use problems have major impacts as the population seeks to increase production and incomes in the rural sector in the short term.	Implementing the provisions of Law No. 034-2009 on rural land tenure
R16. Enhance State resources and authority for implementation of environmental	Given that the State is not a key actor in bringing about change in the <i>Civil Society to the Rescue</i> scenario, sustainable development is not sufficiently taken into account.	<ul style="list-style-type: none"> - Capacity building and accountability - Operationalizing the National Sustainable Development Policy (PNDD) agencies

Pillar 3: Sustainable development of natural resources		
Scenario-based Recommendation	How has the scenario-driven PNSR II analysis process led to this recommendation/change?	How can this recommendation be translated into actions (in PNSR style)?
regulations		
R17. Involve CSOs and NSAs in the application of regulations on the management of natural resources	Given that the State is not a key actor in bringing about change in the <i>Civil Society to the Rescue</i> scenario, sustainable development is not sufficiently taken into account.	<ul style="list-style-type: none"> - Sensitizing and training NSAs (CSOs, OPAs, SPRs) - Establishing NRM platforms
R18. Strengthen governance and natural resources management at all levels (national, community, district); transfer (part of) the responsibility and authority for NRM at community level	In the <i>Save Yourself</i> scenario, the implementation is weak or non-existent. There are problems of coordination, etc.	<ul style="list-style-type: none"> - Implementing the texts on the General Local and Regional Authorities Code - Building capacity of local authorities.

Pillar 4 : Improvement of access to drinking water and living environment		
Scenario-based Recommendation	How has the scenario-driven PNSR II analysis process led to this recommendation/change?	How can this recommendation be translated into actions (in PNSR style)?
R19. Promote the use of renewable energy	In the <i>Cash, Calories and Control</i> scenario, the quality of air deteriorates because of agricultural intensification and related use of machinery	Providing more subsidies for: <ul style="list-style-type: none"> - biodigesters of the National Biodigester Program (PNB) - Renewable energy (partner Ministries for PNSR implementation) Conducting a tariff review (increasing) for wood energy
R20. Involve civil society in the improvement of drinking water facilities	In the <i>Civil Society to the Rescue</i> scenario, CSOs are very active in improving drinking water quality and facilities. However, State determination, few improvements are made.	Building capacity of NSAs in advocacy and lobbying
R21. Promote results-based management (ensure transparency, etc.)	In the <i>Save Yourself</i> scenario, there is no financial support for the development and maintenance of water resources and sanitation conservation facilities. Furthermore, there is widespread corruption in competitive bidding for the infrastructure construction and management of available infrastructure.	<ul style="list-style-type: none"> - Implementing WAEMU Directive No. 06/2009 on RBM and Budget Program - Building stakeholder capacity in RBM

Pillar 5 : Establishment of partnerships between stakeholders		
Scenario-based Recommendation	How has the scenario-driven PNSR II analysis process led to this recommendation/change?	How can this recommendation be translated into actions (in PNSR style)?
R22. Improve rural sector governance by involving all stakeholders	In the <i>Save Yourself</i> scenario, governance is mediocre, corruption frequent and instability aggravates this negative situation.	<ul style="list-style-type: none"> - Strengthening and streamlining existing governance structures - Empowering NSAs - Accountability - Monitoring of execution

Importance of research in PNSR II implementation

In Burkina Faso, several CGIAR Centers are conducting research through consortium research programs covering:

(1) forests, trees and agroforestry, (2) water, land and ecosystems, (3) climate change, agriculture and food security, and (4) dryland systems. These programs are implemented in close collaboration with national research organizations, universities, rural development technical services, and NGOs.

The use of scenarios to guide the formulation of PNSR II underscored the need for coordination of research interventions for better contribution of their findings to the rural sector development objectives of the Government of Burkina Faso. In addition, reflection on how research could contribute more effectively to PNSR implementation helped to identify specific needs for accompanying research for each PNSR sub-sector. The identification of certain gaps and their translations into new themes also highlighted the crucial need for scientific knowledge and tools to facilitate appropriate planning and implementation of these themes under PNSR II. Based on these needs, stakeholders in the process strongly supported the inclusion of a research component in the new PNSR, which could be considered as a crosscutting theme in all other areas of PNSR II.

Conclusions and the way forward

This process of using scenarios to guide the formulation of a more robust PNSR II to face uncertainties in the future produced the following findings and implications:

- More than 50% of the recommendations are already taken into account in PNSR I (2011-2015), thereby reflecting a fairly robust PNSR I to face some uncertainties that may appear during its Phase II;
- The robustness of PNSR I and shortcomings in its implementation did not help to solve major constraints on rural sector development;
- The need to develop and include a research component that would provide crosscutting support to all the other PNSR II components by lending the required scientific and technical support;
- The need to promote climate-smart agriculture (CSA) based on endogenous knowledge or best practices in the NRPP II by making use of up-to-date scientific information which could subsequently be complemented by new scientific knowledge developed elsewhere;
- The need to develop climate services and climate information systems that will benefit farmers;
- The need to develop rural sector governance by setting up a sustainable and autonomous structure which, beyond the short-term, could structurally develop and establish a sustainable basis for the transformation of Burkina Faso's agriculture;
- The need to take local authorities into account in the new configuration of rural sector governance;
- The need to promote the consumption of local products, particularly those processed locally, for greater development of production at grassroots level and the development of a flourishing rural economy.

- Palazzo A. et Al., 2016. The future of food security, environments and livelihoods in Western Africa: Four socio-economic scenarios. CCAFS Working Paper No. 130. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Available online: www.ccafs.cgiar.org
- CCAFS scenarios: a tool to co-develop policy and research. https://ccaafs.cgiar.org/news/ccaafs-scenarios-tool-co-develop-policy-and-research#.WBm9kl_XJPa

Further Reading

Activity carried out by:



This Info Note summarizes the results of workshops conducted under the CCAFS socio-economic and climate scenarios process to guide the formulation of development policies, plans and strategies. It is an initiative of the CCAFS Program in close collaboration with SP-CPSA, Oxford University, and CGIAR Centers and Programs in Burkina Faso.



This work has been done with the very active involvement of public and private sector stakeholders who are key actors in rural sector development in Burkina Faso, as well as resource persons responsible for the PNSR review.

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