

Applying foresight analysis in West and Central Africa: Capacity needs assessment from a regional engagement process

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Background

Climate change remains a major threat to agriculture and food systems in Africa 1. In West Africa, economies and farmers' livelihoods remain fundamentally dependent on rainfed agri-food systems and the natural resource base. Technical and research capacity is needed to consider future risks and impacts, and deep uncertainties, and to adapt plans, policies and programs that support climate-smart and resilient agriculture.

Key messages

- Identifying transformative adaptation pathways requires mainstreaming foresight analysis in both research and development planning for climate change adaptation.
- As a regional institution coordinating agricultural research in West and Central Africa, CORAF aims to provide leadership on strategic foresight planning in the region beyond individual projects, as emphasized in its 2018-2027 Strategic Plan.
- Based on the capacity needs assessment workshop, a training of trainers of the Community of Practice of Expert Foresight Facilitators will be carried out.
- Workshop participants identified substantive topics for which to apply foresight analysis in the region.
- Inclusion of gender and youth social groups in foresight analysis is a key priority focus. This includes the use of gender disaggregated quantitative and qualitative data in the situational analysis
- The West and Central Africa region will benefit from a network of existing foresight initiatives, curricula development and certification efforts to support the Community of Practice.



Foresight analysis is the process of looking to the past and present to envision and prepare for different futures, which then enable us to make strategic decisions today. It provides a set of tools and methods to practically help decision-makers to move toward a desirable future.

Capitalizing on previous efforts in building capacity on foresight analysis in the region, the Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA) project, through a collaboration of the West Africa Cluster and AICCRA Innovation theme and CORAF, hosted a workshop on Strengthening West and Central Africa Stakeholders on Foresight Analysis and Capacity Needs Assessment, held on March 12-13, 2022 in Sally, Senegal.



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The event brought together 29 CORAF members (20 men and 9 women) and stakeholders from eleven countries (Benin, Burkina Faso, Cameroon, Chad, Cote d'Ivoire, Ghana, Mali, Nigeria, Niger, Senegal and Sierra Leone) across the West and Central Africa region. The participants represented 13 institutions, including 12 NARS, 01 youth organization and 01

development organization (Table 1). The aim of the event was to understand the tools and methods of foresight analysis and to identify the needs in capacities and applications of foresight analysis among the West and Central African actors involved in the development of climate-resilient agriculture.

Countries (# of institutions)	Institutions	Types
Benin (01)	INRAB (Institut National des Recherches Agricoles du Bénin)	NARS
Burkina Faso (02)	INERA (Institut de l'Environnement et de Recherches Agricoles du Burkina Faso)	NARS
	Tanager International	NGO
Cameroon (01)	CAMYIRD (Cameroon Youth Initiatives for Rural Development)	NGO
Cote d'Ivoire (01)	CNRA (Centre National de Recherche Agronomique de Côte d'Ivoire)	NARS
Ghana (01)	CSIR (Council for Scientific and Industrial Research)	NARS
Mali (01)	IER (Institut d'Economie Rurale)	NARS
Nigeria (02)	NASC (National Agricultural Seeds Council)	NARS
	ARCN (Agricultural Research Council of Nigeria)	NARS
Niger (01)	INRAN (Institut National de la Recherche Agronomique du Niger)	NARS
Senegal (01)	ISRA (Institut Sénégalais de Recherches Agricoles)	NARS
Sierra Leone (01)	SLARI (Sierra Leone Agricuture Research Institute)	NARS
Chad (01)	ITRAD (Institut Tchadien de Recherche Agronomique pour le Développement)	NARS

1 Trisos C.H., Adelekan I.O., Totin E., Ayanlade A., Efitre J., Gemeda A., Kalaba K., Lennard C., Masao C., Mgaya Y., Ngaruiya G., Olago D., Simpson N.P., Zakiideen S. 2022. *Africa*. In: Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Pörtner H.O., Roberts D.C., Tignor M., Poloczanska E.S., Mintenbeck K., Alegría A., Craig M., Langsdorf S., Lösschke S., Möller V., Okem A., Rama B. (eds.)]. Cambridge University Press, UK and New York, NY, USA, pp. 1285-1455, doi:10.1017/9781009325844.011

The specific objectives of the two-day event were to:

- Improve understanding of the tools and methodologies of prospective foresight analysis;
- Assess regional capacities in foresight analysis in agriculture and food systems in West and Central Africa;
- Identify capacity building needs and priorities in foresight analysis; and
- Develop a training and action plan of key strategic activities to be implemented in 2022.

The CORAF members and stakeholders who participated were identified as those who will continue to strengthen their foresight capacity and ultimately facilitate foresight analyses regionally and nationally going forward.

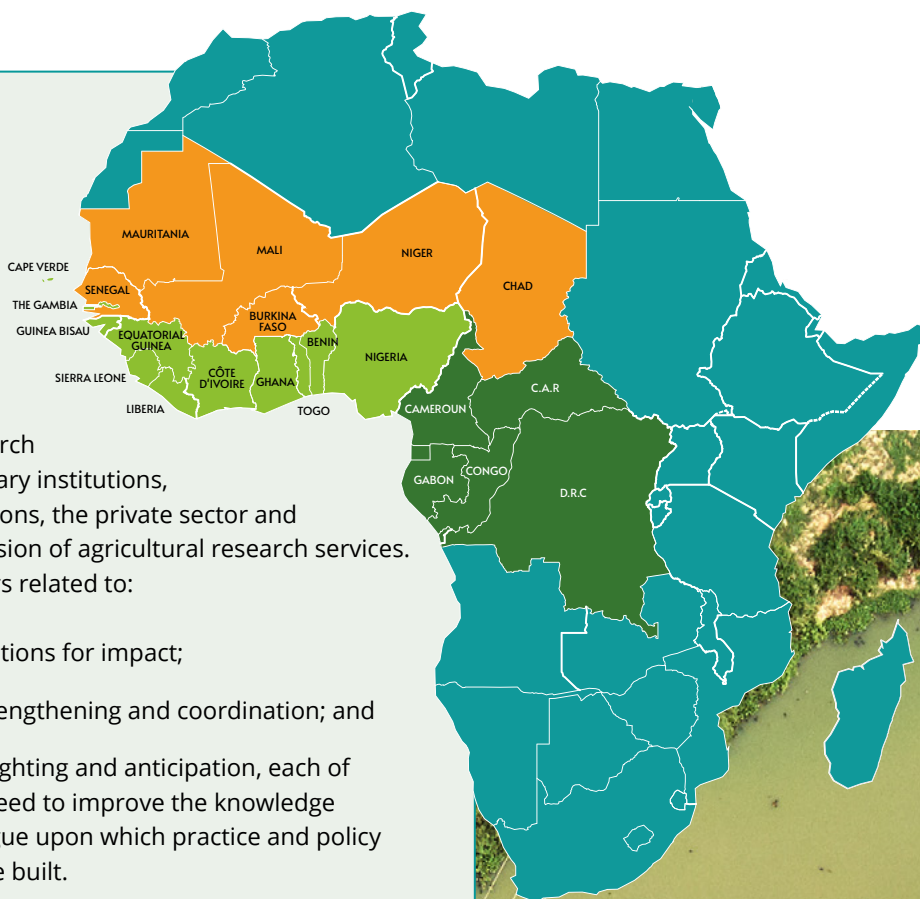


Partners in applying foresight methodologies for climate resilience

CORAF works in 23 countries in West and Central Africa, and at the country level, partners with national agricultural research systems (NARS) consisting of public agricultural research institutes, universities and other tertiary institutions, farmer groups, civil society organizations, the private sector and any other entity engaged in the provision of agricultural research services. CORAF delivers on three activity pillars related to:

- A** Scaling technologies and innovations for impact;
- B** Regional integrated capacity strengthening and coordination; and
- C** Knowledge management, foresighting and anticipation, each of which can address the urgent need to improve the knowledge base and evidence-based dialogue upon which practice and policy responses to climate change are built.

CORAF's 2018-2027 Strategic Plan emphasizes foresighting (modelling future scenarios to draw conclusions about actions to be taken in the present) to build consensus and inform decision-making on research priorities.



As a regional institution, CORAF aims to provide leadership on strategic foresight planning in the region beyond individual projects.

The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) in West Africa in partnership with CORAF, has carried out numerous country-level efforts in convening researchers and policy makers to revitalize an effective engagement to meet the challenges of climate change. Leveraging off this work, AICCRA supports CORAF to further their agenda to provide actionable foresight technical support in the region. The AICCRA project helps deliver a climate-smart African future driven by science and

innovation in agriculture. It is led by the Alliance of Bioversity International and the International Center for Tropical Agriculture and is supported by a grant from the International Development Association of the World Bank. AICCRA aims to increase access to climate information services and CSA technologies in Africa including supporting the training and application of foresight methods and tools, enhancing actionable science-policy linkages and strengthening stakeholder engagement.

The value of foresight

The benefits of an inclusive and evidence-based foresight analysis include:

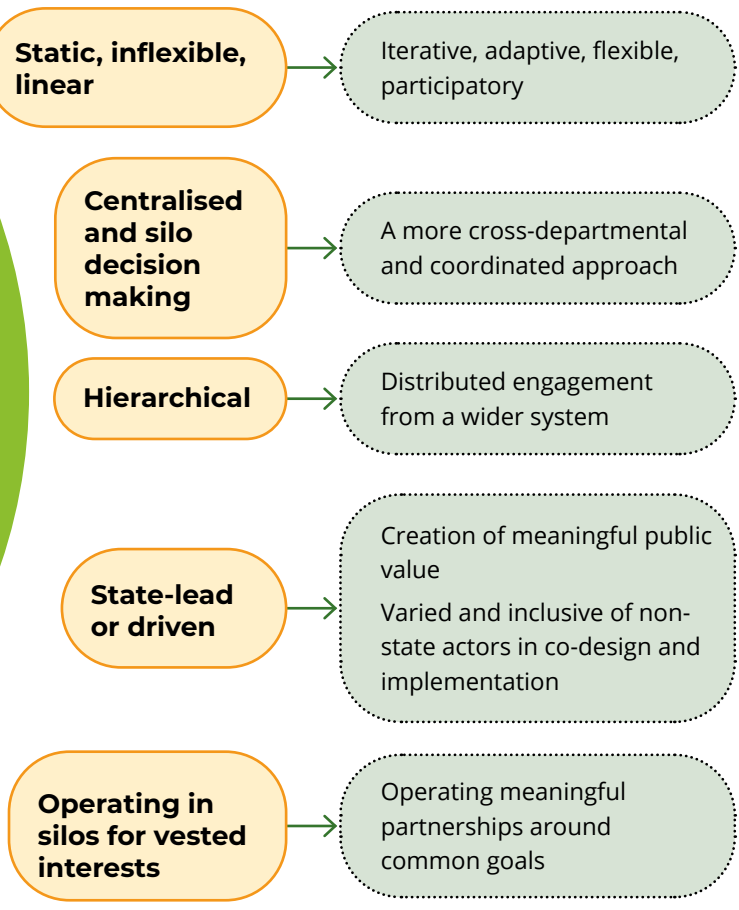
- A** An increased understanding of systems thinking, historical and emerging trends, and opportunities, threats and early warnings;
- B** The provision of a structured way to elaborate alternative futures based on evidence and uncertainty; and
- C** The future proofing of planning and decision-making through enhanced processes.



Applying foresight processes to influence policy and strategic planning



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Foresight requires a shift in mindset. **A list of key characteristics of future thinkers, drawn from diverse resources,² are summarized as follows:**

- Justifiably terrified, determined, and stubbornly optimistic;
- Maintains a solid vision and has capacity to shift the storyline or narrative to one of purposeful shared meaning;
- Thinks in systems and sees the larger picture;
- Wants an accurate version of reality and takes responsibility for one's destiny;
- Is curious and open to possibilities, is intrigued with contradictions;
- Is willing to test individual beliefs and cut through individual biases, always ready to ask the next question;
- Enjoys interacting with new data and information, balancing the creative and analytical; and
- Is grounded such that their self-worth is not tied to how right or wrong they are.



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Foresight analysis helps to understand:

What seems to be happening?

What's really happening?

What might happen?

What do we need to do?

Improving the understanding of foresight tools and methodologies

There is no standard way of carrying out foresight analyses and a number of institutions and groups are recognized for their efforts including, for example, Foresight4Food³, the Future School⁴ and the Foresight Academy⁵. Foresight frameworks, methods and tools depend on the context and the specific issues at hand, the setting, the objectives of the analysis and questions you want to answer.

For this needs assessment, the AICCRA Foresight Framework was employed to build capacity within West and Central Africa and served as the basis for increasing the understanding of associated tools and methods.

2 Carnac T.R. 2020. [How Can We Shift Our Mindset To Fight Climate Change?](#) Ted Radio Hour.

Chesterman S., Neely C.L. 2021. [Foresight for Future Planning Training Series: Information Pack](#). Wageningen, the Netherlands: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Available online at: www.ccafs.cgiar.org

Galef J. 2021. [The Scout Mindset: Why Some People See Things Clearly and Others Don't](#). Penguin Random House.

Ross G. 2015. [8 Traits of A Forward Thinker](#). Wisdom Times.

3 www.foresight4food.net

4 thefutureschool.com

5 www.foresightacademy.com

The framework has two main stages comprising specific steps and related questions (Figure 1):



The **situational analysis** in which the context is articulated, and existing evidence, cross-sectoral trends and emerging trends are reviewed and analysed and then interpreted to understand what is happening and why it is happening.



Long-term future planning in which stakeholders prepare transformative pathways having taken into consideration the following:

- A** What they want to experience in the future, what obstacles may get in the way and initial steps to get there;
- B** What can happen that has not been thought about;
- C** What might the participants do; and
- D** What will be done differently.

These two stages, the steps and the proposed questions are used to guide the evidence and uncertainty informed approach to defining the pathways and practical actions to address the topic at hand.

The AICCRA foresight experts gave an overview of the Foresight Framework and then provided a detailed introduction to the tools and methods used in each of the steps (Figure 1). A key aspect of the Foresight Framework is the consistent input of data, evidence, knowledge and creativity and the continuous engagement and participation of stakeholders. Each of the tools and facilitated exercises used in a foresight analysis allow participants to fully understand, analyse and interpret the situation and clarify the pathways to achieve a desired outcome informed by evidence and uncertainty.

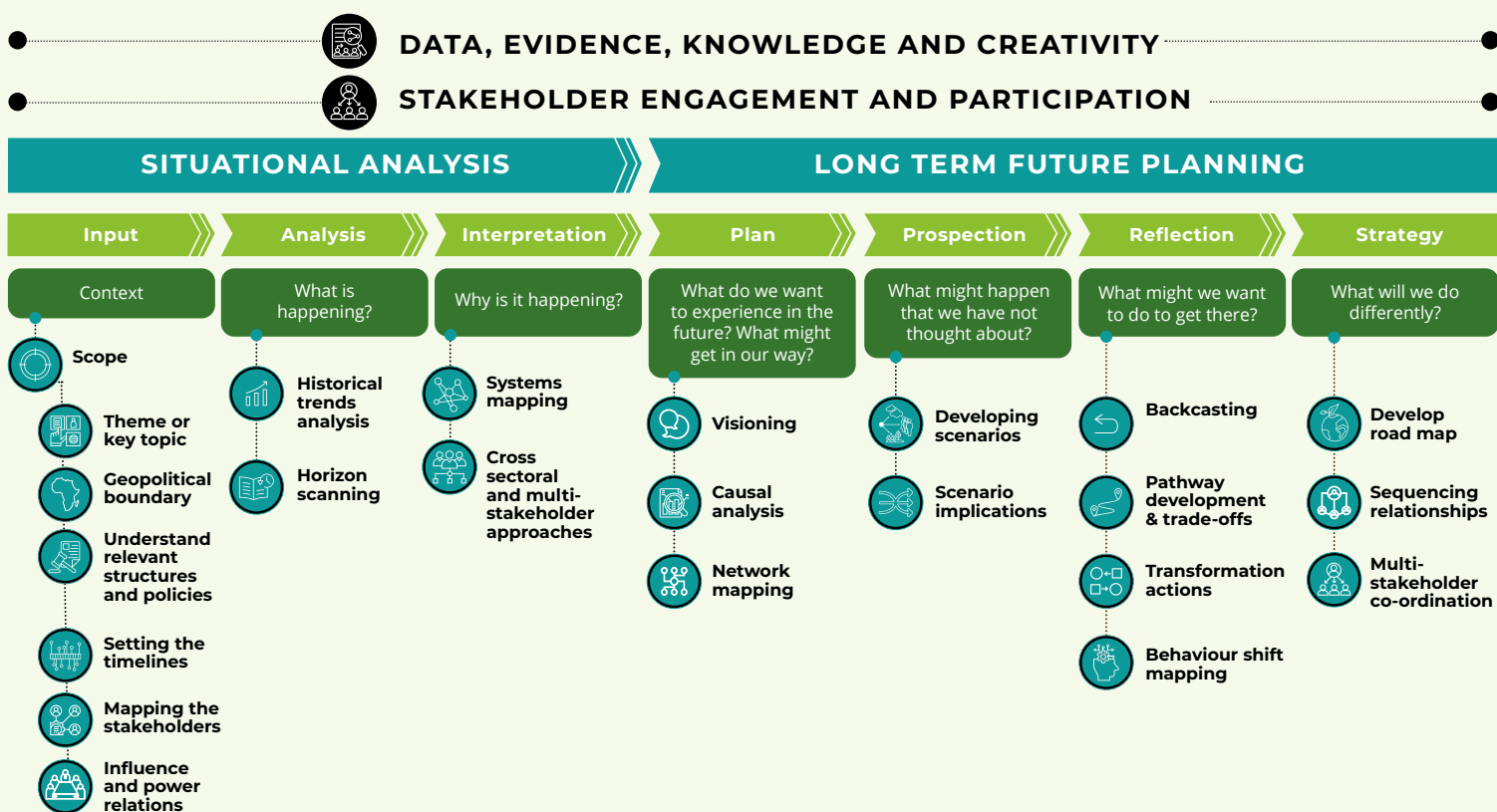


Figure 1. Expanded AICCRA Foresight Framework inclusive of elements and tools within the seven-step process, and the importance of constant input of data, evidence, knowledge and creativity and ongoing stakeholder engagement and participation

Assessing regional capacities in foresight analysis for planning agriculture and food systems

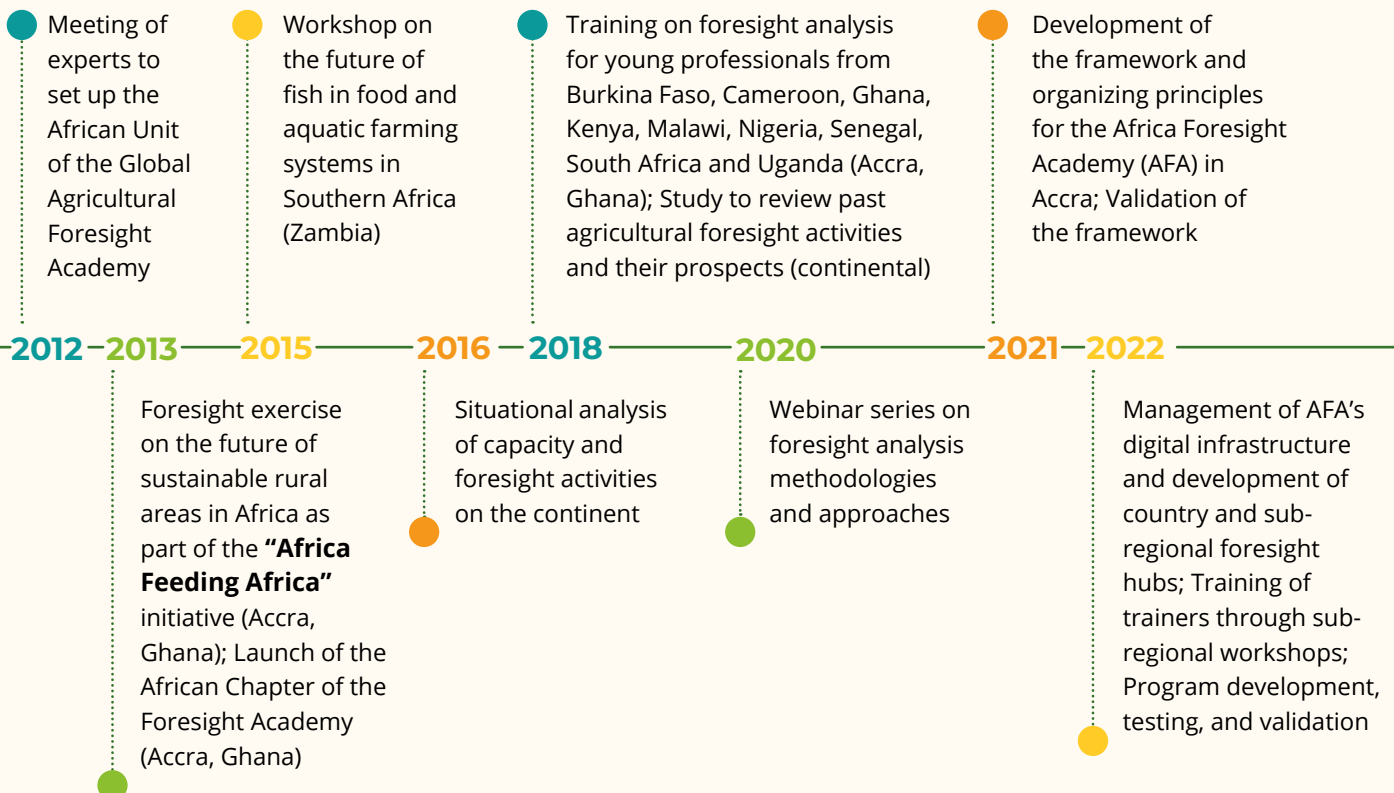
To understand the regional capacities and experiences of the stakeholders it was important to determine the participants' exposure to foresight analysis and the foresight-related activities that had taken place historically. Foresight was shown to be new to about 52% of the participants and approximately 10% of the participants can be considered as "expert" having either applied a foresight method or tool in their work or having trained others in foresight.



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Where have we been?

There has been an evolution in capacity development and the use of foresight in West and Central Africa. Dr Abdou Razak Ibrahim, head of the Forum for Agricultural Research in Africa's Institutional Capacity and Future Scenarios Department, outlined the actions implemented in the broader framework of the foresight analysis in Africa since 2012.





What are some existing foresight analysis initiatives in the region?

- Implementation of a national action plan in Burkina Faso based on four possible scenarios defined on climate change;
- A cross-border project between Chad and Niger with a strong gender and youth focus has allowed the development of a national action plan to prevent and focus on risks and how populations can be resilient;
- The Senegal Institute for Agricultural Research's experience in implementing the Niayes zone project; and
- The State of Côte d'Ivoire is investigating how the climate will evolve over the next 50 years. A temperature and rainfall model has been developed, as well as a projection on the future of the cocoa crop.

Some ongoing large-scale initiatives and opportunities were shared including:

- The Comprehensive Africa Agriculture Development Programme ex-Pillar 4 (CAADP-XP4) has initiated a West and Central Africa region-wide project to enhance science-led climate relevant agricultural transformation in support of the National Agriculture Research Institutes. The project, designed to contribute to the achievement of the CORAF Strategy (2018-2027), supports improved capacities to strengthen and support agricultural knowledge and innovation partners at all levels. Included in the activities of the CAADP-XP4, are to establish and operationalize multi-stakeholder partnerships for innovation (2.1) and to develop capacities for the application of foresight (3.2).
- Agricultural Technologies and Innovations for Increasing the Resilience of Production Systems and Family Farms in West and Central Africa (TARSPRO), led by CORAF, has a foresight analysis component.
- The Food System Resilience Program (FSRP), funded by the World Bank, has a component on foresight analysis which CORAF is leading.
- Africa Foresight Academy (AFA)
- United Nations Food System Summit and Foresight
- Foresight4Food and Foresight4AgriculturalExtension
- Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA)



What were the challenges participants have faced in applying the foresight analysis?

While the participants understood the value of foresight in its application in different projects, opportunities arising through donors and the willingness and commitment of decision makers, the key challenges they identified in applying foresight analysis included:

Skills required

- Lack of expertise in foresight analysis;
- Mastery/knowledge of scenario analysis;
- Facilitation skills; and
- Overcoming the abstract nature for practical implementation.

Alignment

- Building a common vision; and
- Alignment of actions and scenarios.

Stakeholder engagement and leadership

- Diversity of participant profiles;
- Gender integration;
- Integration of university researchers and teacher-researchers;
- Inclusiveness in identifying drivers, as it is a participatory process; and
- Difficulties in convincing lead institutions on the impact of the application of foresight analysis.





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Roadmap for capacity strengthening and application

“The participants have been identified as relays who will deploy in their respective countries what they will learn during the workshop. Participants must therefore be ambassadors who will have to share information once they return to their home institutions.”

Dr Emanuel Njukwe, Director of Research and Innovation, CORAF

From a topic standpoint, several opportunities were outlined either regionally or nationally for deployment of foresight analysis including:

- Establish a Community of Practice of foresight analysis in West and Central Africa, including establishing sub-regional and country hubs of AFA;
- Develop action plans for West and Central Africa CSA;
- Develop sustainable and resilient agri-input systems in West and Central Africa in support of agroecological transitions;
- Support the development of early warning systems on pests and diseases in West and Central Africa;

The ultimate goal is that the participants of this event become foresight practitioners, foresight experts and trainers of others in how to carry out foresight analyses within West and Central Africa. Having been exposed to the Foresight Framework and articulated their own experience or lack thereof with the foresight methodology, the participants used the Foresight Framework steps and tools. They identified content areas for which further capacity development was needed as well as prioritized substantive areas for future application.

The participants outlined their interest in a robust training session on the AICCRA Foresight Framework and the tools and methods used to carry it out including sharpening their group facilitation skills. An important element that will be a focus of future trainings is enhancing the role of gender and youth representatives as stakeholders and resource persons and ensuring that foresight clearly takes into account the implications for these stakeholder groups. For example, gender-mainstreaming and gender-sensitive mapping of stakeholders, engagement of all social groups, and addressing power dynamics will be highlighted.

- Develop evidence-based resource mobilization plans for research and development in NARS of West and Central Africa, including support to the development of fundraising strategies for national research institutions, and the use of foresight analysis to advocate for resource-raising with government and sponsors to support research and development;
- Develop alternative futures for tree crop value chains in West and Central Africa;



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Next steps

To advance the capacity development of a group of foresight experts, two priorities will be instituted:

- During 2022, CORAF and AICCRA will host a training of trainers for the Community of Practice (CoP) on the facilitation of the foresight process and associated tools and methods.
- Further, the CoP, in collaboration with foresight experts, will apply foresight analysis with stakeholders from the region with an emphasis on early warning systems and the management of pests and diseases under different climate change trajectories. The foresight analysis exercise will enhance the capacity of CORAF stakeholders to develop a regional road map and strategy for pest and disease response.

- Support the revision of National Adaptation Plans and Nationally Determined Contributions in West and Central African countries with evidence-based analysis;
- Sensitize stakeholders on the relevance of foresight processes; and
- Support the development of curricula specific to foresight analysis and/or institutionalization of the approach.



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FURTHER INFORMATION

For more information on the foresight analysis capacity needs assessment, please contact:

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ACRONYMS

AFA	Africa Foresight Academy	CoP	Community of Practice
AICCRA	Accelerating Impacts of CGIAR Climate Research for Africa	CORAF	West and Central African Council for Agricultural Research and Development
CGIAR	Consultative Group on International Agricultural Research	CSA	Climate-smart agriculture
CAADP-XP4	Comprehensive Africa Agriculture Development Programme ex-Pillar 4	NARS	National agricultural research system



About this AICCRA INFO NOTE

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About AICCRA

Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA) is a project that helps deliver a climate-smart African future driven by science and innovation in agriculture. It is led by the Alliance of Bioversity International and CIAT and supported by a grant from the International Development Association (IDA) of the World Bank. Explore our work at aiccra.cgiar.org.