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AICCRA Country Scaling Vision: Senegal

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Impact pathways to achieve that vision and how outcomes are scaled

By the end of 2023, AICCRA Senegal aims to reach and have positive impacts on over 300k farmers and value chain players through the delivery of climate informed agro-advisories, building on enhanced climate information services (CIS), and new/improved climate smart agricultural (CSA) packages and technologies.

The strategy for this scaling vision uses multiple pathways and is achieved through partnerships with the National Agricultural, Research and Extension Services (NARES) and private sector in Senegal. A conceptual framework for this vision is adapted from the Scan tool following [Jacobs et al. \(2018\)](#)¹ (Fig. 1). This ensures that values such as

institutions, capacity building, exchange, improving knowledge and skills, improving access to finance as well as co-development of innovation are central to the scaling approach. Each stage of scaling is mapped against the focus areas just mentioned, to describe the trajectory or pathway taken towards scaling up. A summary of the main scaling up pathways is provided in Fig. 2. For inclusion, the project is expected to have evidence of stage 1 (development at the short term) and stage 2 (Dissemination at medium to longer term) targeting 3 major outcomes:

Outcome 1: Farming and (agro-) pastoralist households are accessing CSA technologies and practices bundled with CIS.

Outcome 2 : Value chain actors & influencers offer climate smart inputs and services.

Outcome 3: Farming and agro-pastoral households benefit from improved institutional performance.

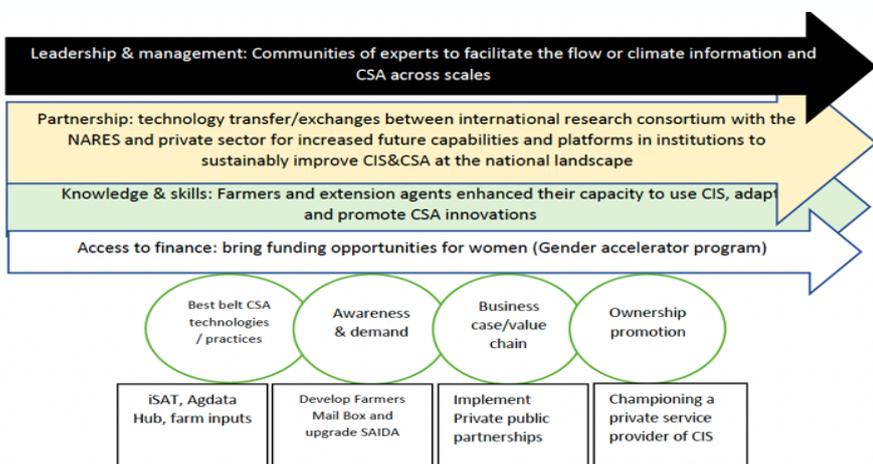


Figure 1: Ingredients of key focus for scaling

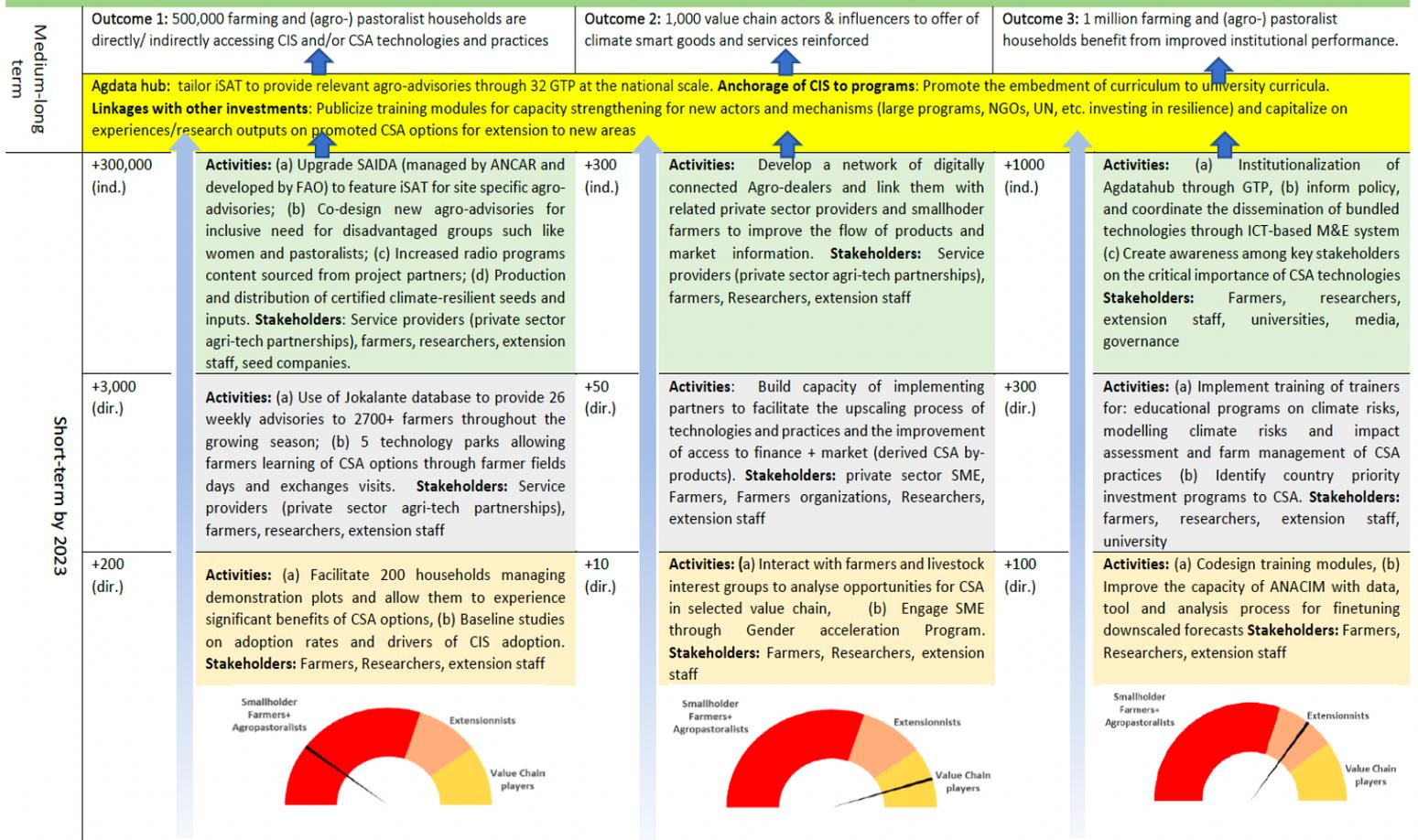


Figure 2: Impact pathways for scaling CIS and CSA technologies

How the different activities at the country level are contributing to this vision

AICCRA-Senegal builds on a rich legacy of the USAID funded CINSERE project which built the capacities of the national meteorological agency (ANACIM). During the 2023 wet season, AICCRA-Senegal targeted three areas of intervention which contributes to the scaling ambition:

(a) Promoting participative CSA/CIS innovations : 108 demonstration plots and 5 technology parks installed across three (3) of the fourteen (14) administrative regions in Senegal allow providing technical advisory to farmers and stakeholders on: improved millet, groundnut and cowpea germplasm and agronomic packages, soil fertility management, bundled CIS (e.g. onset and cessation of rainfall, prediction of dry spells, daily/weekly forecasts of rainfall, temperature, etc.), best practice fodder production for dairy, meat etc. [2,3,4,5,6](#)

(b) Strengthening partnerships: Via three-way partnership the NARES, which have the national mandates for climate (ANACIM), extension (ANCAR) and agronomic and crop research (CERAAS), are working together to integrate CIS and CSA. Developing the agric-tech ecosystem and mass media (community radio) are powerful tools for communicating with farmers and stakeholders at low cost over vast areas. These methods provide additional pathways for creating and disseminating targeted, context specific agro-advisories considering language, literacy, demography and gender. Moreover, building on expertise across staff of the national agencies, IRI codesigned with key stakeholders training curriculum on climate risk management.

(c) Building a hub for extension : The AgDataHub⁷ is a key pillar for scaling that aims to support extension organizations (public and private), farmer facing organizations and other entities engaged in creating agro-advisory content for farmers through the GTP (Groupes de Travail Pluridisciplinaire) portal (hosted by ANACIM) which provides key agricultural, livestock, meteorological, hydrological data. The GTP relies on multi-disciplinary field teams operating in the 32 departments in Senegal. Another avenue is the SAIDA platform of ANCAR and FAO designed to reach farmers with agricultural advice. The SAIDA platform has been linked to the

How the different activities at the country level are contributing to this vision

The immediate contribution is to the World Bank RSFP design process for a \$300 million Senegal investment targeted towards the livestock sector. AICCRA scientists are providing inputs to the design teams through seminars and exchanges where expertise related to livestock production, climate risk management are being offered¹¹.

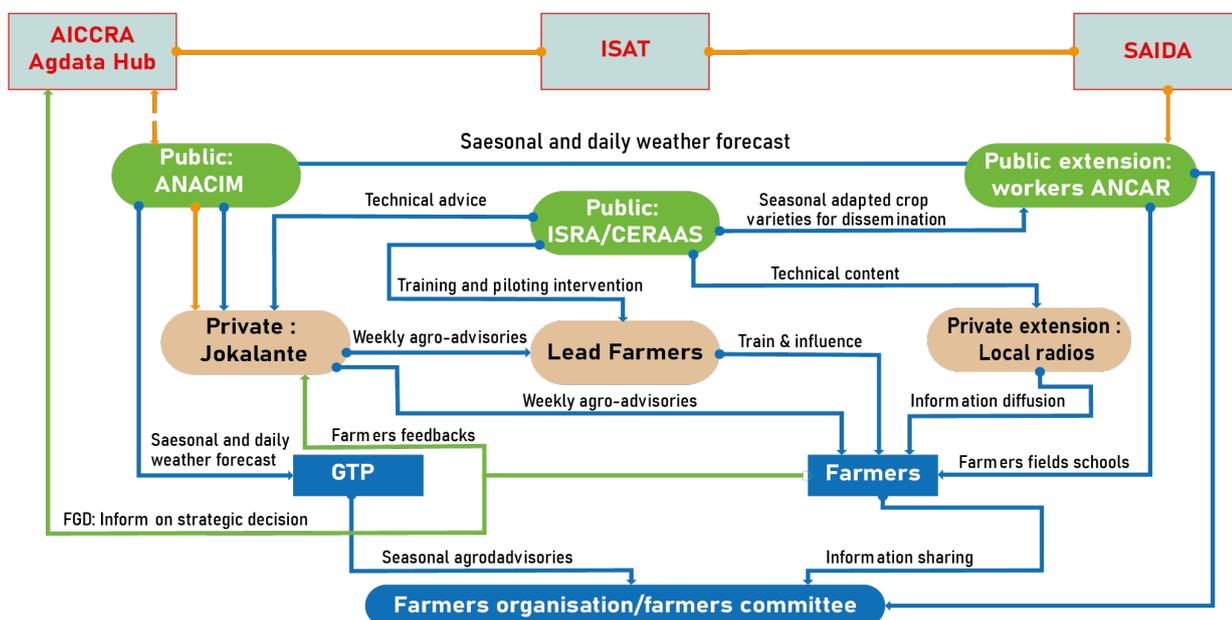


Figure 3: Strengthening digital climate advisory services

AgDataHub (via API) to become another popular channel for provisioning of agro-met advisories created through AICCRA partnerships. The AgDataHub supports partnership development, co-innovation, and weather advisory services through enabling innovations at various levels and points in the CIS value chain. ANACIM's capabilities were strengthened by: (a) extending its merged gridded daily precipitation and temperature data to include all parameters needed for crop evaporative demand and agricultural modeling applications; (b) installing the Automatic Weather Station Data Tool (ADT); (c) prototyping soil water balance tools; and (d) training staff in the most recent PyCPT version for seasonal and sub-seasonal forecasting^{8,9,10}.

AICCRA-Senegal participated to in two CORAF-led fairs to improve awareness on CSA/CIS technologies in West Africa drylands¹². The vision of the AICCRA project is well aligned to the priority objectives of the country through the Emerging Senegal Plan (PSE, 2020). The plan supports climate change adaptation and resilience programs.¹³



Further Reading

1. Jacobs F, Ubels J, Woltering L . 2018. The scaling scan: A practical tool to determine the strengths and weaknesses of your scaling ambition. The PPP Lab and CIMMYT. <https://www.cimmyt.org/wp-content/uploads/2018/06/PPPLab-Scaling-Final-25-09.pdf>
2. Kebe A, Seck B, Jacob E, Dhulipala R, Faye A, Worou N, Whitbread A. 2022. Diffusion des conseils agricoles au cours de la campagne 2022 au Sénégal. AICCRA Report. Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA). <https://hdl.handle.net/10568/126970>
3. Yessoufou AN, Kumar S, Worou N, Faye A, Houessionon P, Diedhiou L, Whitbread A . 2022. Assessing the reach of climate and agricultural related content via community radio stations in Senegal. Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA). <https://hdl.handle.net/10568/126632>
4. Joseph EJ, Worou N, Diedhiou L, Dhulipala R, Houessionon P, Whitbread A. 2022. iSAT, the new generation digital agro advisory tool that empowers farmers to manage climate risks. Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA). <https://hdl.handle.net/10568/126269>
5. Faye A, Akinseye FM, Sow F, Joseph JE, Wowo GM. 2022. Formation des techniciens et producteurs du projet AICCRA sur la conduite des essais, la production de semences et des techniques de collecte de données agro-climatiques. Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA). <https://hdl.handle.net/10568/126658>
6. Farmers testimonies about AICCRA and its services. <https://youtu.be/olXmusfNOVA>
7. Dhulipala R, Joseph JE, Konte O, Faye A, Worou N, Whitbread A. 2022. Catalyzing the use of climate information in agriculture decision making through datahubs. AICCRA Info note. Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA). <https://hdl.handle.net/10568/125543>
8. Trzaska S, Hansen J, Diop L, Sal NA, Mbengue A, Grossi A. 2022. Training on Use of ANACIM Senegal ENACTS Platform and Maprooms. AICCRA Workshop Report. Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA). <https://hdl.handle.net/10568/119816>
9. Faniriantsoa R, Hansen J. 2022. Automatic Weather Station Data Tool (ADT) Installation and Training at ANACIM. AICCRA Workshop Report. Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA). <https://hdl.handle.net/10568/126633>
10. List G, Trzaska S, Braun M, Hansen J, Grossi A. 2022. Senegal Climate Risk Management for Agriculture Curriculum Design Workshop. AICCRA Workshop Report. Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA). <https://hdl.handle.net/10568/126800>
11. Climate-Smart Senegal: How to scale innovation in crop-livestock systems for resilient farmers: https://www.youtube.com/watch?v=OXF5s_mvGfXA&ab_channel=AICCRA CGIAR
12. https://twitter.com/cgiarclimate_WA/status/1588477132774187011?s=20&t=ro9iR_UseUI4tPROAt6vA
13. Kumar S, Beye A, Gueye F, Das A, Yessoufou A N, Faye A, Worou N, Whitbread A. 2022. Scoping study on building resilient groundnut and millet value chains in Senegal. AICCRA Report. Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA). <https://hdl.handle.net/10568/127191>

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