



Ministry of the Environment,
Agriculture and Livestock



ASARECA Contribution to Member States

REPUBLIC OF BURUNDI

Since inception in 1994, ASARECA has worked with the National Agricultural Research Systems (NARS) of its 14 member countries: Burundi, Cameroon, Central African Republic, Democratic Republic of Congo, Eritrea, Ethiopia, Kenya, Madagascar, Republic of the Congo, Rwanda, South Sudan, Sudan, Tanzania, and Uganda.

Between 1994 and 2023, ASARECA has mobilised over US\$ 258 million to implement Agricultural Research for Development (AR4D) initiatives in member countries. Out of these, US\$ 138 million was received directly by the Secretariat, which disbursed US\$ 101 million (73.5%) to member countries retaining US\$ 37 million (26.5%) for operational costs. The rest of the money (US\$ 120 million) was disbursed directly to select countries by Development Partners under the East Africa Agricultural Productivity Programme (EAAP), an initiative that was closely coordinated by ASARECA.

In Burundi, ASARECA works mainly with Institut des Sciences Agronomiques du Burundi (ISABU) and the Ministry of Agriculture to implement AR4D projects. To date, ASARECA has invested US\$ 5.22 million to catalyze agricultural transformation in Burundi through key beneficiary projects highlighted below:

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ASARECA work in the Republic of Burundi

Controlling the spread of Banana Xanthomonas Wilt (BXW)

ASARECA supported ISABU to promote proven and cost-effective measures to control the deadly BXW epidemic that caused up to 92% crop loss and affected 72% of the banana farmers in Burundi. Farmers in Cibitoke were trained on how to control the spread of BXW and regain banana production. Within six months of adoption, BXW prevalence reduced from over 90% to less than 5%, while the proportion of farmers who controlled the disease increased from less than 5% to over 60%. After 15 months, banana production recovered from zero percent in some places to over 80%.

Building capacity of scientists to deliver AR4D

As part of enhancing capacity and regional collaboration among scientists, ASARECA sponsored 34 young, mid-level scientists from Rwanda, Burundi and Sudan to undertake leadership and mentorship training, and master's degree studies in various disciplines through the Strengthening Capacity for Agricultural Research and Development in Eastern and Central Africa (SCARDA) project. A total of five scientists in Burundi received Master's degrees, and returned to take up various leadership positions in the ISABU research structure.

Fighting the Maize Lethal Necrosis (MLN) Virus

ASARECA coordinated seven countries (Burundi, Ethiopia, Kenya, Rwanda, South Sudan, Tanzania and Uganda) to fight MLN. In collaboration with CIMMYT, ASARECA supported the countries to adopt integrated and multi-pronged control strategies, including development and use of appropriate management practices, breeding and germplasm development. In Burundi, MLN surveillance was conducted in Ngozi, Kirundo, Ruyigi, Cankuzo, Rutana, Makamba and Cibitoke provinces that border countries with high MLN prevalence. The main virus (MCMV) that causes MLN was detected for the first time in samples from farmers' fields in Cibitoke, leading to testing and validation of seven (7) management practices by ISABU. Majority of the affected farmers have adopted the availed technologies and innovations.

Mitigating effects of climate change

Working with researchers from Kenya, Ethiopia, Eritrea, Burundi, Uganda, South Sudan, Madagascar and Rwanda, ASARECA implemented two projects to increase the availability and productivity of water in rain-fed and irrigated farms. The projects built capacity to harness water resources from rain, runoff surface, and ground water at farm, and at the watershed level. In

Burundi, the project was implemented in Muhembuzi (Kirundo) and Kibimba (Gitega) watersheds. Following the transformation of one of the hilly landscapes in the watersheds into agricultural land, the participating farmer groups generated US\$ 17,358 from sale of cabbages, onions, amaranths, tomatoes, beans, chicken and fish, besides 592 households reporting improved nutrition levels.

Promoting clean potato planting materials

Research in the early 2000s established that 95 percent of farmers in Eastern and Central Africa were using poor quality tubers riddled with bacterial wilt and viruses, leading to low yields. In response to the challenge, ASARECA in collaboration with the International Potato Center (CIP), supported scientists from ISABU to increase the productivity of Irish Potato through the seed plot technology. The technology involved maximizing the production of disease-free seed tubers using best practices. Farmers who adopted the technology in Bunyengero, Mugongomanga and Muruta, witnessed a production increase from 10 to 30 tons per/ha.

Promoting climbing bean innovations

Following decline in yields and quality of most bean varieties in Rwanda, Burundi and Democratic Republic of Congo, ASARECA supported researchers from these countries to identify and test the best bean cropping systems. Two systems, namely: intercropping beans with maize stalks (as stakes) and mono-cropping beans using sisal and banana fibre/strings were selected. Extension workers and farmers were trained on best agronomic practices.



A farmer of improved climbing bean in Burundi.



As a result, beneficiary farmers registered yield increases from 780 to 3,500 kg/ha, while those who intercropped climbing beans with maize realized yield increases from 367 to 2,100 kg/ha compared to farmers who did not use these technologies.

Improving wheat productivity

Despite being a major staple food crop, wheat productivity is marginal in Burundi. To reduce increasing importation of the commodity, ASARECA partnered with International Maize and Wheat Improvement Center (CIMMYT) to support ISABU to pilot productivity measures in Mugongomanga and Muruta communes. Using two new varieties, ISWSN 64 and HRWYT12, six proven wheat management practices and innovations were tested for techniques in sowing, fertilizer application, weeding, harvesting, threshing, and post harvest. As a result, the mean yield at project sites increased from 0.8 to 2.5 t/ha.

Establishing cassava and potato standards for EAC states

Aware of the dual roles of cassava and potato as food security crops and as commodities with high industrial potential, ASARECA in partnership with National Bureaus of Standards of East African Community (EAC) states including **Burundi** jointly formulated the East African standards for cassava, seed potato, potato and related products. Eleven (11) rationalized and harmonized standards for cassava and sweet potato were approved by EAC, hence opening up space for structured trade and industrialization of the commodities.

Support to Policy reform processes

ASARECA supported Burundi institutions to develop a seeds and varieties roadmap leading to the national review to draft changes to the Ministerial Orders, which were then forwarded to the Ministry of Justice for endorsement. Besides, as part of the process towards implementation of the COMESA Biosafety Policy Implementation Plan (COMBIP), ASARECA in 2016 provided technical support to Burundi to review the national seed acts, aligning them with COMESA seed regulations under the Seeds Regulations Implementation Plan (COMSHIP).

Facilitating learning through benchmarking

ASARECA organized two benchmarking exercises for eight (8) ASARECA member countries including Burundi, one in October, 2021 hosted by the National Agricultural Research Organisation (NARO), Uganda; and the other in July, 2012 hosted by Tanzania Agricultural Research Institute (TARI). During the two exercises ASARECA facilitated a total of 88 researchers from the National

Agricultural Research Institutes (NARIs), farmers and selected private sector actors (43 in 2021, and 45 in 2022) to enhance their capacities in implementing climate relevant AR4D initiatives. The beneficiary countries were: Cameroon, Burundi, Central African Republic, Democratic Republic of Congo, Eritrea, Republic of Congo, South Sudan, and Sudan. They were supported to visit sister NARIs in Uganda and Tanzania to enhance their skills through peer-to-peer learning and mentorship. The researchers interacted in key areas such as: (i) laboratory diagnostic tools; (ii) bio-policy and bio-safety; (iii) aflatoxin management; (iv) tissue culture, biotechnology and hydroponics; (v) bio-fortification of banana; (vi) livestock nutrition and embryo transfer; (vii) integrated pest management; (viii) marketing and private sector involvement; (ix) soil analysis; (x) crop production using CSA practices; and (xi) strategies for livestock management, among others.



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Climate Smart Agriculture Alliance (ACSAA)

ASARECA mobilised the National Agricultural Research Institutes (NARIs) of member countries, including Burundi to form a united front to mitigate the effects of climate change. Through this initiative, which was adopted by the Directors General of all the 14 member countries including Cameroon, the ASARECA Climate Smart Agriculture Alliance (ACSAA) was established in

August 2021 with the overall objective of bringing together all climate relevant multi-stakeholder platforms, partnerships and networks within the region to scale up CSA. All researchers from the 14 member countries are members of this alliance which has already embarked on an ambitious collaborative effort to: (i) Define a framework for institutionalizing CSA among partner institutions; (ii) act as a clearing house for exchange of CSA TIMPs; (iii) facilitate exchange of knowledge among the partners; and (iv) provide a platform for CSA partners to engage with governments and global partners on climate relevant priorities. .

Building a pool of experts on AIS

ASARECA in collaboration with FAO facilitated two Training of Trainers (ToT) workshops to support integration of the Tropical Agriculture Platform (TAP) Common Framework (CF) into ASARECA member NARIs including Burundi and farmer organisations. The selected cohort of trainers who have now been constituted into a database included Researchers, Directors of Research, Private sector actors, farmer organizations. At the end of the training held in March 2022 and July 2022, the ToTs became certified trainers on Integrating the TAP framework for Capacity Development in the Agricultural Innovation System.

They have since implemented their Participant Action Plans (PAP) by training other trainers in the TAP AIS concept in their respective countries. Through this action, ASARECA and the NARIs have built a common pool of experts in the NARS who are now enhancing the utilisation of AIS tools and approaches.

Commercialization of CSA Technologies

ASARECA convened researchers from its 14-member NARIs; other actors from the National Agricultural Research Systems (NARS) **including Burundi**; and the private sector for a dialogue to chat out sustainable pathways for commercialization and scaling up of gender responsive and climate smart agricultural technologies. During the Dialogue held in Nairobi, Kenya, in March 2022, the participants showcased the best bet climate-smart TIMPs of regional importance for commercialization and scaling. They: (i) identified over 100 technologies and innovations that are ready for commercialization; (ii) established a platform comprising private sector actors, researchers, and civil society organizations to advance the initiative; (iii) identified barriers and pathways for commercializing and scaling identified TIMPs; (iv) and identified and documented digital climate advisory capacity gaps in ECA.

Agricultural Trade Policy Reforms

ASARECA convened the Regional Policy Dialogue on Agricultural and Trade Policy Reforms in Eastern and Central Africa for all the 14 member countries, including **Burundi** to enhance the capacity of member states to comply with quality standards for cross border trade in agricultural inputs and commodities. The Dialogue was attended by 50 participants drawn from NARIs; Ministries of Agriculture; Ministries of Trade; National Revenue Authorities; National Bureaus of Standards; farmers' organizations; youth groups; the private sector; the African Union Commission; and the Regional Economic Communities. The participants discussed recent agriculture related policy and trade policy reforms in ECA; and mechanisms to address barriers to cross border trade. Overall, it was noted that challenges such as political instability; overlapping membership to Regional Economic blocs; uncoordinated macro-economic policies; and poor compliance to international standards cut across member states. The meeting agreed to resolve these through review and harmonization of regional trade

policies and standards; adoption of harmonized certification and regulations for seed by all member states; strengthening customs administration procedures; and establishing measures to eliminate trade barriers.

Financial Commitments by Member States

To facilitate operations at the Secretariat, fund jointly conceived priority Research for Development Projects, and indeed as a badge of ownership, the Member States earlier committed to make a one-off capitalisation payment of US\$ 100,000 and an annual membership fee of US\$ 50,000. The Business Committee of the General Assembly on February 7, 2023 approved the revision of annual fees to 100,000 to match-up the demand for the Secretariat to catalyse the creation of impact in Member States. The Business Committee also made a passionate appeal to the Member States to clear outstanding arrears currently standing at US\$ 1,819,206 as of December 2022. The Secretariat anticipates that fulfilment of these obligations is the beginning of a journey towards self-sustenance in the financing of ASARECA.

Council of Patron Ministers

The ASARECA Constitution has placed the ASARECA Council of Patron Ministers for Agriculture at the helm of the Governance of the Association to ensure close oversight, guidance and value for money for the Member States. Similarly, ASARECA is currently affiliated to COMESA, IGAD, and the EAC, through mutually agreed arrangements to serve as their technical arm. The main purpose of such an affiliation is to reinforce full ownership from Member States and mainstream their issues and priorities through the joint Meeting of Council of Ministers of Agriculture, Environment and Natural Resources at the COMESA level.



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