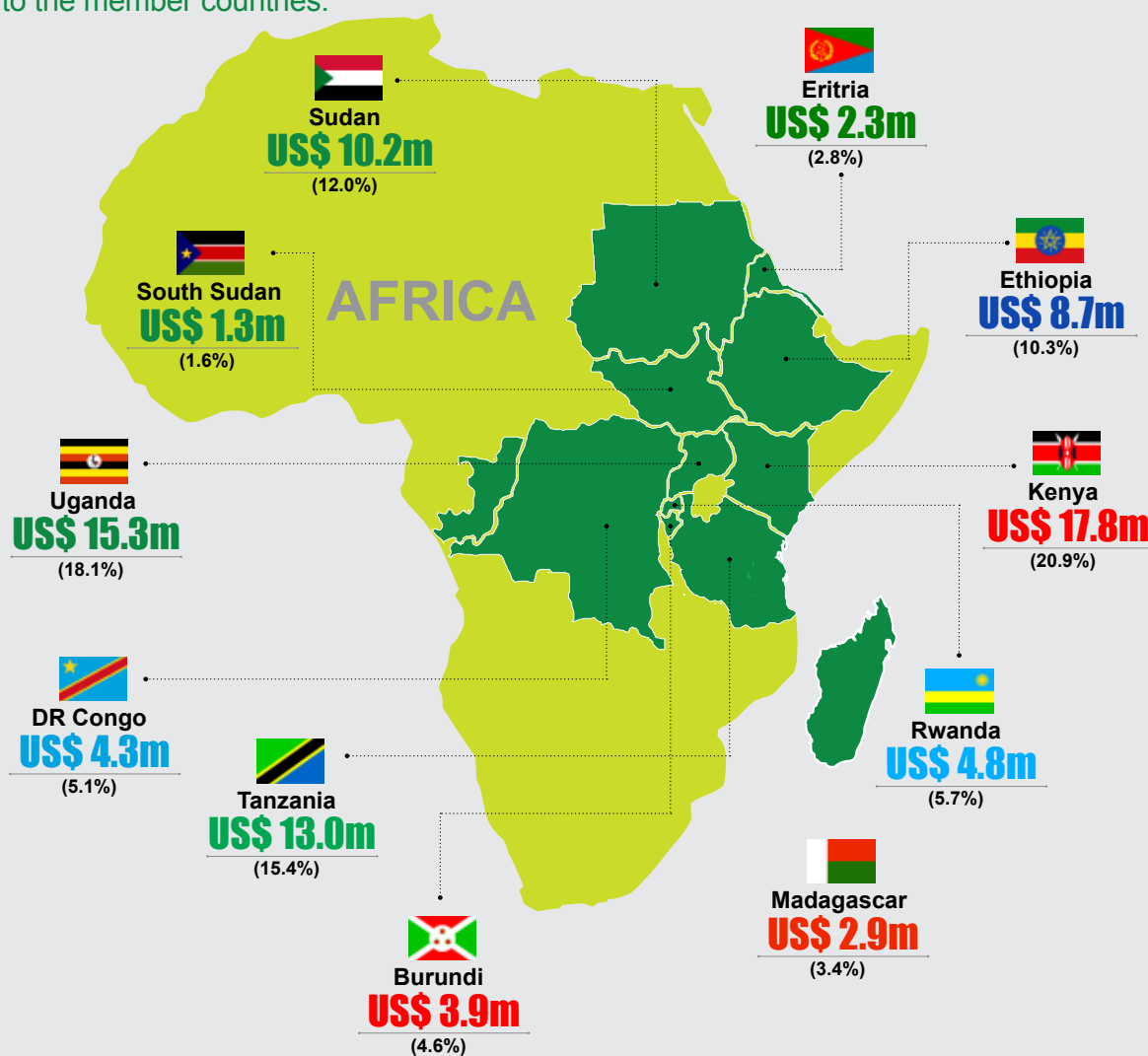


Contribution to Member Countries

Since inception in 1994, ASARECA has worked with National Agricultural Research Systems (NARS) of its twelve member countries: Burundi, Democratic Republic of Congo, Eritrea, Ethiopia, Kenya, Madagascar, Republic of the Congo, Rwanda, South Sudan, Sudan, Tanzania and Uganda. Between 1994 and 2018, ASARECA mobilized **US\$ 131 million** to implement Agricultural Research for Development (AR4D) initiatives in the countries. In addition, ASARECA coordinated the EAAPP programme in five member countries. Below are snapshots of ASARECA contribution to the member countries.



Ethiopia

Ethiopia is a founding member and one of the 12 constituents of ASARECA. Since inception, ASARECA has worked mainly with the Ethiopian Institute of Agricultural Research (EIAR) and the Ministry of Agriculture to jointly address AR4D challenges in the country. Over the last 25 years, ASARECA has invested US\$ 8.7 million to catalyze Agricultural transformation in Ethiopia through key beneficiary projects highlighted below:

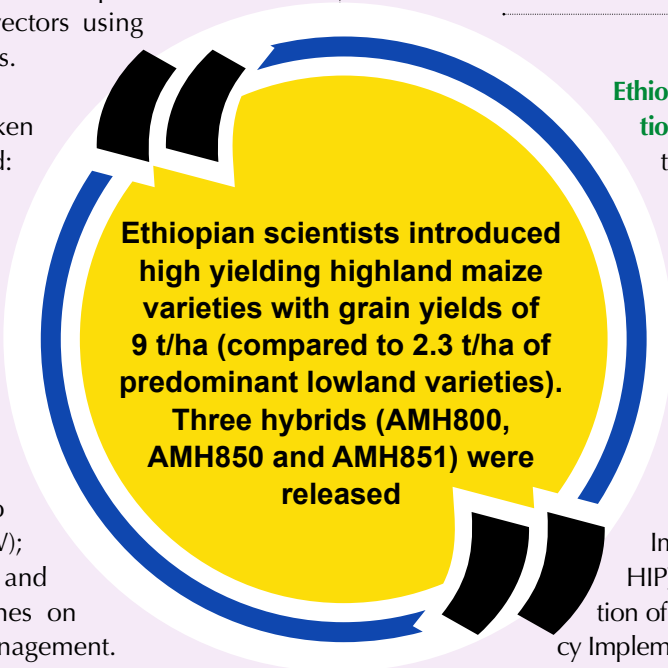
Fighting the Maize Lethal Necrosis (MLN) Virus:

ASARECA coordinated the fight against MLN in seven countries (Burundi, Ethiopia, Kenya, Rwanda, South Sudan, Tanzania and Uganda). In collaboration with CIMMYT, ASARECA supported these countries to adopt integrated and multi-pronged control strategies, including development and use of appropriate management practices, breeding and germplasm development. The practices included the use of clean and certified seed as well as crop rotation and control of different vectors using different chemical products.

Key activities undertaken in Ethiopia included: generation of information on population dynamics, incidence, survival and migration characteristics; conducting efficacy trials on new and locally available insecticides; studies on insecticide resistance to Fall Army Worm (FAW); and development and popularization of guidelines on insecticide resistance management.

Out of the 71 commercial seed samples sent for screening at CIMMYT in Naivasha, Kenya, MLND was detected in 4 out of 26,400 seeds, thus setting the stage for management of MLN in Ethiopia.

High yielding maize varieties: ASARECA supported Ethiopian scientists to introduce high yielding highland maize varieties with grain yields of 9 t/ha (compared to 2.3 t/ha of predominant lowland varieties). Three hybrids (AMH800, AMH850 and AMH851) were released, including one open-pollinated variety (Hora) for the highland zones. Some of the new varieties, including the four hybrids, have a potential yield of 12 t/ha, which is at par with global standards.



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Ethiopia seed policy harmonization:

ASARECA worked with the national partners in Ethiopia to review national seed laws and regulations and to align them to the COMESA seed regulations. ASARECA also provided technical support in the review of national seed acts, aligning them with COMESA seed regulations under the Seeds Regulations Implementation Plan (COMSHIP), as well as in implementation of the COMESA Biosafety Policy Implementation Plan (COMBIP).

Assessing human capacity needs for AR4D: ASARECA has just completed studies in Rwanda, Uganda,

Kenya and Ethiopia to derive credible evidence for human capital and institutional investments to deliver national strategic plans for agricultural transformation. In Ethiopia, three studies were undertaken including: Assessing and forecasting qualitative human capital requirements for agriculture in Ethiopia; interpreting the existing global yield gap atlas data to determine capacity gaps in Ethiopia; and review of NaFSIPs and implementation gaps in Ethiopia. ASARECA intends to use these findings to mobilize resources for capacity strengthening efforts in Ethiopia.

Mitigating effects of climate change

Working with researchers from Kenya, Ethiopia, Eritrea, Burundi, Uganda, South Sudan, Madagascar and Rwanda, ASARECA implemented projects to increase the availability and productivity of water in rain-fed and irrigated farms. The projects built capacity to harness water resources from the rain, runoff, surface, and ground water at farm, and at the watershed level. In Ethiopia, ASARECA worked with EIAR to rehabilitate hills in Adulala and Kechemba watersheds, which had long been degraded by human activities leading to accelerated soil erosion and consequently decline in the yields of crops such as teff, wheat, barley, field pea, field bean, haricot bean and maize. The communities were mobilized and sensitized on the benefits of reclaiming the hills through re-vegetation. Over 1,000 farmers benefited from integrated natural resources management techniques, including digging

benches to curb runoff and planting 120,000 seedlings of different tree species along fragile hillsides.

Three varieties including the fast maturing and high yielding CR-37 with a capacity of 25kg per hectare were promoted. As a result, over 500 households adopted the water-efficient technologies, leading to the rehabilitation of 1,000 hectares of severely degraded land. Over 500 households have adopted various crop technologies ranging from improved wheat varieties (danfi, kursht-drought resistant variety), malt barley and high value crops (apples) leading to increase in wheat yields by over 80% (from less than 5 quintal/ha before the intervention to 20 to 30 quintal/ha after the intervention). More than 1,200 households previously dependent on relief food are now food secure.

Eastern Africa Agricultural Productivity Project (EAAPP):

ASARECA coordinated this regional initiative of the Governments of Ethiopia, Kenya, Tanzania and Uganda. In as much as Ethiopia provided leadership as the Centre of Excellence for Wheat, it still sold over 63,500 doses of livestock semen within the collaborating countries. On the other hand, it received four rice varieties (TXD306, Tai, Komboka and Ziada) from Tanzania (with TXD306 being released); 159 Cassava accessions and botanical seed sprouting technique from Uganda; and elite wheat variety (Kingbird) from Kenya for multiplication and wider dissemination.



A degraded lanscape in Ethiopia