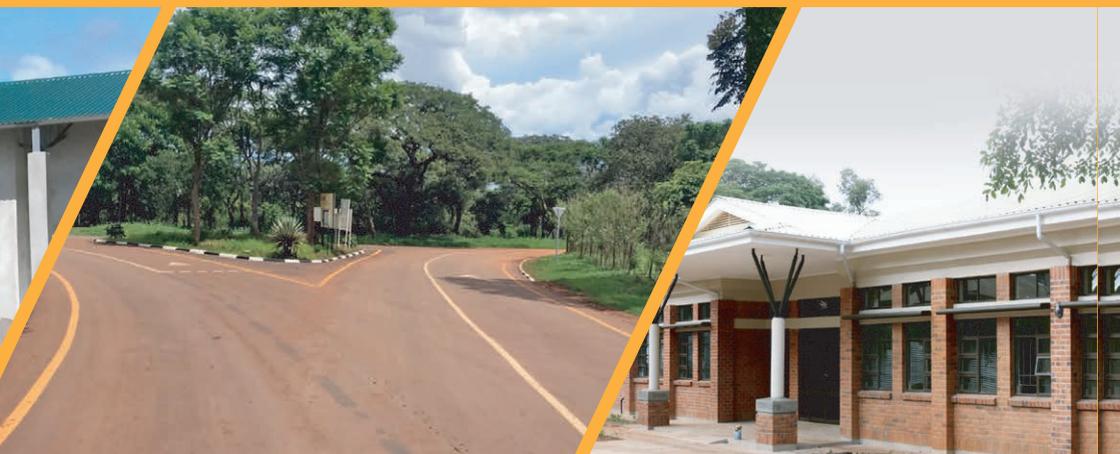


CCARDESA

Centre for Coordination of Agricultural Research and Development for Southern Africa



APPSA IMPROVES REGIONAL CENTRES FOR LEADERSHIP (RCoL) INFRASTRUCTURE IN MALAWI, MOZAMBIQUE, AND ZAMBIA



AGRICULTURAL PRODUCTIVITY PROGRAMME FOR SOUTHERN AFRICA (APPSA)



Government of Malawi



Government of Mozambique



Government of Zambia



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Background

Limited capacity by National Agricultural Research Systems (NARS) in generating demand driven agricultural technologies results in low productivity among smallholder farmers in the Southern African Development Community (SADC) region. Inadequate infrastructure was ranked as one of the major factors negatively affecting technology generation and dissemination in the region. Investment in building or rehabilitating research facilities such as laboratories, irrigation schemes, water reservoirs as well as expanding fields for trials was, therefore, identified as key to accelerating the process of agricultural development in general and technology generation and dissemination in particular.

Since 2013, the Agricultural Productivity Programme for Southern Africa (APPSA) has been contributing to infrastructure improvement at the Regional Centres of Leadership (RCoLs). Three centers of excellence were created under APPSA. Malawi, led by Chitedze Research Station, was designated the RCoL for maize and maize-based farming systems, Mozambique is the RCoL for rice, while Zambia is the RCoL for food legumes.

The primary beneficiaries of APPSA are smallholder farmers, livestock producers, and other potential end-users of the improved technologies and knowledge generated and/or disseminated by the project.

The objective of APPSA are to improve the availability of agricultural technologies within and across SADC countries.

APPSA Investments and Impacts

Strengthening RCoLs has continued for the past six years covering the upgrading of research infrastructure including physical infrastructure including farm, laboratory, office equipment, IT, and knowledge management systems. The upgrades have also seen major improvements in seed production capacity and related services. Besides infrastructure upgrades, APPSA has also invested in developing human capital by providing scientific training at graduate and post-graduate levels and by upgrading skills through short courses in order to ensure future sustainability of the RCoL programmes.

Accomplishments

The APPSA R&D was not only on technology generation and dissemination, but also on infrastructure development. The high capital intensity of the APPSA infrastructure investment will help to

encourage R&D by the scientists in the future. The investments in APPSA R&D have achieved invaluable benefits for the three participating countries and the entire SADC region.

Malawi (Maize RCoL)

- Enhanced irrigation facilities and road networks at Bvumbwe and Kasinthula Research Stations;
- Increased availability of office buildings and laboratory services, conference hall, and road network at Chitedze Research Station; and
- Improved availability of relevant research goods such as farm inputs, protective wear, IT equipment, laboratory reagents and equipment, stationery and consumables.



The New Administration Office at Bvumbwe



Office Complex at Chitedze Research Station

Mozambique (Rice RCoL)

- Improved research buildings (around 24 buildings rehabilitated) and other structures (dormitories, houses, threshing floors, warehouses, laboratories, greenhouse, machinery sheds) at Umbelúzi, Chókwe, Sussundenga, and Lichinga Research Stations as well as at Nametil and Nampula Agronomic Posts;
- Enhanced irrigation facilities in Umbelúzi, Chókwe and Ribaué Research Stations, which allows the RCoL to run trials throughout the year effectively;
- Establishing a new RCoL on 52 ha in Namacurra, Zambezia Province.region.



Water reservoir in Chokwe Research Station



Construction of the Rice RCoL in Namacura

Zambia (Legumes RCoL)



Reservoir at Mt Makulu Research Station



Soil Chemistry Lab at Mt Makulu Research Station

- Improved capacity of the soil chemistry laboratories at Mount Makulu and Kabwe Research Stations by its rehabilitation including irrigation system and box wire fencing of research fields at Kable and Msekera Research Stations as well as National Irrigation Research;
- Increased capacity of the delivery of soil test results with the mobile soil testing laboratory;
- Increased security by installation of box wire fencing at the de-silted dam at Mount Makulu Research Station;
- Increased research capacity on rice at Mochipapa Research Station and Mount Makulu Research Station;
- Increased capacity of convening research meetings by the design and construction of the conference centre at Mount Makulu Research Station;
- Enhanced irrigation system at Mount Makulu Research Station and Kabwe Research Station.

“Soil testing from the lab at central level is great but benefits a limited number of farmers but with the mobile soil testing lab now we are able to run on spot analysis and expand the number of beneficiaries”.

Dr Dickson N’guni, APPSA Coordinator in Zambia

Lessons Learnt

With these achievements many lessons have been gained that will inform future investments aimed at improving research and development capacity in the region and beyond:

- Strong engagement of governments since the inception is relevant for country ownership and sustainability of project activities;
- All preparatory works including consultancies should be timely concluded to ensure completion of construction activities within the project cycle; and
- Improved irrigation and other infrastructures have potential to enhance the generation of agricultural technologies because of the possibility of conducting research throughout the year. Thus, more investments

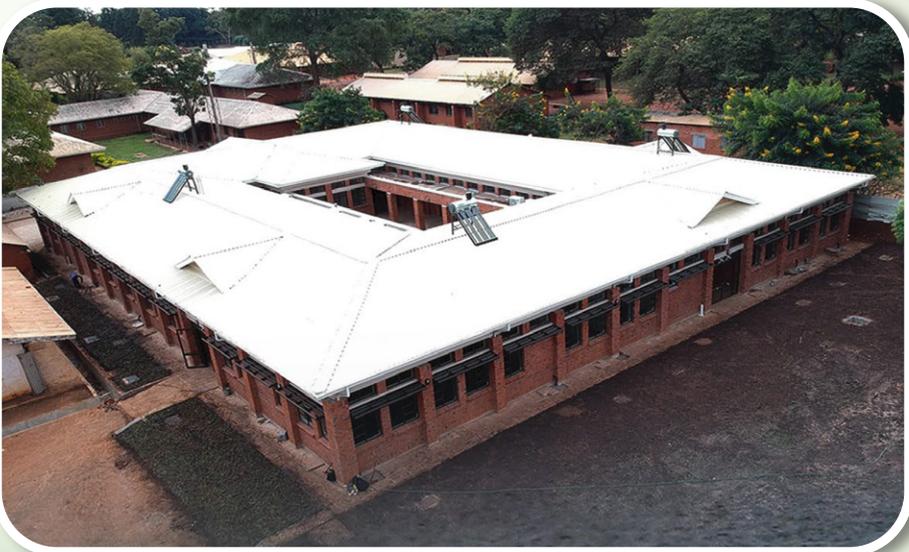
in infrastructures may contribute to the increased delivery of improved agricultural technologies.

APPSA project funded by the World Bank focused on improving agricultural technology generation and dissemination within and among participating countries in southern Africa. It has initially involved three countries: Malawi, Mozambique and Zambia. APPSA was established in 2013 where each participating country was given a loan facility of approximately USD30 million. Angola and Lesotho recently joined the programme focusing on cassava and horticulture respectively. Other SADC countries are expected to join in the future as the project evolves and expands. Office Complex

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IN MALAWI, MOZAMBIQUE, AND ZAMBIA



Building 30-31 -Supported and Elevated Reservoir



Laboratory Complex at Chitedze Research Station



Entomology Laboratory (RCoL) Mozambique

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