

# CCARDESA

Centre for Coordination of Agricultural Research and Development for Southern Africa



## APPSA uses the Lead Farmer (LF) Approach to increase awareness of improved technologies, innovations, and management practices to follower farmers



### AGRICULTURAL PRODUCTIVITY PROGRAMME FOR SOUTHERN AFRICA (APPSA)



Government of Malawi



Government of Mozambique



Government of Zambia



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# APPSA USES THE LEAD FARMER (LF) APPROACH TO INCREASE AWARENESS OF IMPROVED TECHNOLOGIES, INNOVATIONS, AND MANAGEMENT PRACTICES TO FOLLOWER FARMERS



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## Challenges

A major challenge facing agriculture is how newly developed technologies and practices tend not to reach farmers who need the same technologies to improve productivity and production on their farms. Dissemination of new agricultural technologies in research and development initiatives is hampered by poor or non-existent dissemination strategies. There are a number of advances in improved technologies, innovations, and management practices that end up being used only by a few farmers without being shared widely to encourage adoption. Awareness would enable both lead and follower farmers to adapt, innovate, and make better decisions. The Lead

Farmer (LF) approach has been widely adopted by most agricultural projects, indicating positive roles and contributions of LFs. A Lead farmer is an innovative and successful farmer within the local community who is committed to training fellow farmers on agriculture methods and technologies. He/she works in direct contact with research and extension agents to help champion the demonstration of a technology in his/her area.

## Background

The Agricultural Productivity Program for Southern Africa (APPSA) sought to improve technology

## Accomplishments

generation and dissemination within and among participating countries in southern Africa by building capacity within national research and development (R&D) systems and enhancing regional collaboration.

APPSA launched in 2013, was a six-year World Bank supported project promoting a regional approach to agricultural technology generation and dissemination. The project was launched with the participation of three countries; Malawi, Mozambique, and Zambia in the SADC. The Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA) was tasked with the coordination and support for the project. The project ended in January 2020.

CCARDESA recognizes that investments in dissemination strategies and finding new ways to share developed technologies and management practices must be prioritized to ensure that developed technologies do not remain “on the shelf” but reach their intended beneficiaries. It was against this background that APPSA’s key objective was to increase the availability of improved agricultural technologies in participating countries in the SADC region. This objective was pursued by:

- supporting regional collaboration in agricultural research, technology dissemination, and training; and
- establishing or improving platforms for dialogue and consultation around technology priorities.

In order to fulfil the main mandate of agricultural technology generation and dissemination, APPSA ensured that every developed and improved technology had proper dissemination tools, methods, and channels to reach the intended beneficiaries which were the farmers, livestock producers, and other end users. A number of strategies aimed at increasing awareness of improved technologies, innovations, and management practices were implemented by the project. Every R&D project financed under APPSA had a dissemination component and supported activities designed to ensure that new technologies were adopted by farmers. Technologies were disseminated to the farmers and other consumers using various pathways that included demonstrations (on-farm and on-station), field days, fairs (agricultural, seed, science, and trade among others), TV and radio programmes, printed media (policy

briefs, brochures, factsheets, online publications, participatory variety selection, and participatory assessments among others. The key dissemination pathways were on-farm demonstrations, field days, and training workshops, where researchers, extension officers, lead farmers, and smallholder farmers participated. On-farm demonstrations by lead farmers were the preferred mode of training in all three countries, followed by agricultural shows and access to information through print and electronic media.

The APPSA project was based on the plan that scientists and extension personnel would work with lead farmers, who would end up supporting follower farmers and provide backstopping at community level.

## Accomplishments

The three countries, Malawi, Mozambique and Zambia produced 104 Information, Education, and Communication (IEC) materials which included but not limited to: TV documentaries, radio programs, brochures, leaflets, policy briefs, newspaper articles, pamphlets, manuals, posters, recipe books, etc. These materials were used to

disseminate the technologies to the beneficiaries. Through the information awareness and dissemination tools developed by APPSA, the project reached a total of 41,300 lead farmers who in-turn shared the technologies, innovations, and management practices with other farmers in their communities. The sections below outline some of the activities carried out by the 41 300 lead farmers to ensure that developed technologies reached other farmers in the region:

## Field days and fairs

With the support of lead farmers, the project established at least 3000 demonstration plots and hosted more than 1000 field days during the 6 year project period. The objectives of the field days were to showcase the improved technologies that were generated and being promoted through APPSA and how the technologies or techniques could be practically used and applied. A total of 30 fairs (seed and food) were hosted to showcase improved seed varieties that were shared with farmers and the private sector for multiplication. Food fairs were conducted to demonstrate value addition to food legumes, maize, and rice grain.

## Promotion of Pro-Vitamin A and Quality Protein Maize varieties in Sub-Sahara Africa

Having realized the problem of Vitamin A deficiency in Sub-Saharan African region including Malawi, Zambia, and Mozambique, APPSA with other stakeholders worked on developing and promoting Pro Vitamin A and Quality Protein maize varieties. Various information dissemination strategies that included demonstrations, field days, agricultural fairs, TVs, Radios, training videos and



**On-station field day in Malawi**



**Mwaiwathu Women Fruit Juice association**



**Lead Farmer show casing processed products**



**Food fair in Zambia**

printed media were used by lead farmers to promote the bio-fortified maize variety in the three countries and in the Sub-Sahara Africa region. Additionally, there were other innovative approaches used by the countries. Malawi conducted mini field days that targeted commercial companies and other stakeholders interested in the new maize varieties. In addition, they developed training videos that gave step by step

recommendations in handling the varieties. Equally, Zambia used an innovative approach called seed drop where they distributed 300 kernels or grains of Pro-Vitamin A and Quality Protein maize to farmers for free. A total of 500g packets of Pro-Vitamin A and Quality Protein maize were distributed to 500 school pupils and they were advised to plant them at their homes with their families. This was an effective approach for testing and bringing awareness to many households within one production season.

The collaborative platform shortened the breeding process through sharing of germplasm, data, information and experiences across countries. So far, through collaborative efforts, APPSA released a total of 11 maize varieties that are rich in Vitamin A. The collaboration and awareness initiatives put together by APPSA and other partners and the lead farmers helped other farmers, producers, and other consumers realise the nutritional benefits of using orange maize varieties in the three countries. This strategy proved to be an ideal solution across all social classes including small-scale farmers and other marginalized societies since maize dominates the

diets in all three APPSA countries. SAAIKS Knowledge Hub

Information on the improved technologies, innovations, and management practices by lead farmers was also made available online in the form of the SAAIKS Knowledge Hub which is accessible on the CCARDESA website: [www.ccardesa.org](http://www.ccardesa.org)

The SAAIKS Knowledge Hub is intended to facilitate and promote the sharing of agricultural research and extension information across Southern Africa thus availing agricultural research to SADC member states.

Through the SAAIKS Knowledge Hub, CCARDESA allocates gender markers and youth markers on all content to ensure that users are able to understand which content addresses gender and youth needs directly and those which do not.

APPSA's efforts to raise awareness of the new technologies developed through various projects led by lead farmers and other professionals within the agricultural sector has succeeded thus far and has been proven to be not only useful but also appreciated by beneficiaries such as follower farmers.



**Lead farmer showcasing processed products for nutrition improvement**



**One of the field demonstrations hosted by a lead farmer.**





**Participatory technology evaluation**



**A lead farmer explaining about improved soybean management practices**

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