



GAP4A

Good Agricultural Practices for All - digitizing agriculture in Burundi

2018 -2021



In Burundi, one of the poorest countries in Africa, farmers are not reached sufficiently by extension workers to have access to fertilisers, improved seeds or good agricultural practices. The population is young and knowledge about both modern and traditional farming is limited. There is a clear need for timely, accurate and location-specific agricultural advice and information about the changing climate. The Good Agricultural Practices for All (GAP4A) project addressed this need by building a digital highway consisting of groups of farmers organised around a tablet supported by activators, called the G50 approach.

The GAP4A project was implemented by a consortium led by the social enterprise AUXFIN International with headquarters in the Netherlands and branch offices in Burundi and Nepal.



Provided Services

The agricultural services developed in GAP4A are provided through a mobile app called AgriCoach. The AgriCoach supports the farmer in the decisions: What to grow? When to grow? and How to grow?

The CropSelector provides information on which crops are suited for the specific location based on climate data and crop models. In addition it provides information about the nutritional value, the use, varieties, cultivation practice, information on common pests and diseases, and the cropping calendar.

The second service is the ActivityCalendar, which shows when to carry out the different cultivation activities for the selected crops during the growing season. The farmer can use the WeatherCenter to further optimise their timing. The WeatherCenter provides a nine-day weather forecast, based on satellite data and weather models, with a spatial resolution of 9x9 km. In addition, the SeasonalOutlook shows the expected rainfall in the coming months and the start and end of the rainy season.

The third service is Good Agricultural Practices information. GAP information is provided for 43 crops, including wheat, maize, sorghum, rice, cassava, yam, potato, soybean, groundnut, coffee and different types of fruits and vegetables. For 23 crops these best practices are provided by videos in the local language and the video database is still growing.

The farmers are organised in so-called G50 groups, where 50 neighbouring households join a group to get access to the services.

The G50 groups often start a demo plot to have a shared learning with the AgriCoach and to test the new techniques before using them on their own fields. There is dissemination of AgriCoach information outside of the G50 group, usually varying from five to ten people per weekly meeting. G50 groups have access to AgriCoach via tablets.

GAP4A used an extension approach with so-called activators, consisting of field agents, G50 group leaders and G50 group members. These AUXFIN activators make sure that the digital applications are understood by the group and its leaders and encourage the groups to start with their self-development. AgriCoach runs largely offline as part of the UMVA (Universal Method of Value Access), which is the basis of all AUXFIN applications. The GAP4A project also developed UMVA GEO. This internet application serves policy makers and value chain operators, companies and NGOs by visualising data from the UMVA platform in an aggregated and anonymised manner about the G50 groups, crops, livestock, land cover, erosion risk, availability of education and healthcare centres, the presence of diseases, land conflicts. The purpose of the tool is to inform farmer supporting organisations in the form of maps. Farmers also have the opportunity to provide feedback.

Suitability maps are created on the basis of using climate data series and crop models. All G50 group data in UMVA is localised.

Business Model

AUXFIN is a social enterprise and the business owner of the services developed in GAP4A. Smallholder farmers pay a fixed subscription fee per time period for using the service. Additional revenue is generated by the facilitation of sales of agricultural inputs and other products from local entrepreneurs.

The AgriCoach and G50 approach can be scaled as an agro-advisory solution. There is potential to offer this solution to other partners and projects. Bundling of services with those of other organisations is also an option.

The approach is currently scaled by Auxfin International to Uganda and Burkina Faso opening new branch offices with local partners and thereby also contributing to youth employment and economic development.

Impact

The AgriCoach of GAP4A is embedded in the holistic G50 approach. Besides from agricultural information there is a need for access to finance, inputs, access to markets and good health. The G50 approach provides a solution to that complexity, while paving the way to the farmers in the remote rural areas for other organisations.

Evaluation of the AgriCoach shows an increase in good agricultural practices and yields. Farmers appreciate the AgriCoach app as if it is their personal extension officer. The model of self-help groups for social and financial inclusion supported by a tablet and a key activator is feasible. AUXFIN Burundi has expanded to almost 800 people providing quality employment in the rural areas. The network does not only support farmers, but also local entrepreneurs.

AgriCoach uptake by > **10,000** G50 groups, which translates into > **500,000** households or approximately **3,000,000** beneficiaries

Active in **11** provinces
in Burundi

Of the total number of users
38% were female and **28%** were youth

Approximately
25,000 people
trained, including
activators and group
leaders

Approximately
400,000 hectare is covered

94% of surveyed farmers rate
the AgriCoach as very good

Average yield increase of **35%** (wheat) and **110%** (beans)

**Numbers are approximations based on M&E results.*



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Get inspired

The Geodata for Agriculture and Water Facility is a grant programme by the Netherlands Ministry of Foreign Affairs within the policy priorities for food security and water, which is executed by the Netherlands Space Office (NSO). G4AW established 25 public private partnerships in 15 countries to develop and support satellite based information services which positively impact the lives of smallholder food producers in developing countries.

g4aw.spaceoffice.nl



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