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GERMAN GOVERNMENT AND FEDERAL STATES PROGRAMME
BUND-LÄNDER-PROGRAMM (BLP)

A digital weather station in Rulindo, Rwanda, provides up-to-date location-specific data

Adapting to climate change using digital applications in Rwanda's agricultural sector

Federal state - partner country
Rhineland-Palatinate - Rwanda



Title
Digital information system for sustainable and climate-smart agriculture in Rwanda

In cooperation with the GIZ programme
Digital solutions for sustainable development (Rwandan Digital Transformation Center) II and the follow-on project Digital4Rwanda

Financing arrangements
BMZ contribution 355.630 EUR
Rhineland-Palatinate contribution 237.087 EUR

Duration
01.07.2023 - 31.12.2024

Responsible ministry
Ministry of Economic Affairs, Transport, Agriculture and Viticulture Rhineland-Palatinate

This project helps to achieve the following Sustainable Development Goals (SDGs):



Local situation

Around 75% of the Rwandan population works in the agricultural sector, and women account for significantly more than half of these workers. Rwanda is facing considerable challenges to reach the overarching goals of improving food security, modernising the sector and adapting to climate change. Farming in this extremely densely populated country largely takes place in the form of subsistence farming or in smallholder structures, whereby agricultural productivity is comparatively low.

From 2018 to 2024, in response to this situation, Rwanda has been implementing its general guidelines for modernising the country's agricultural sector – the Strategic Plan for Agriculture Transformation phase 4 (PSTA 4) – with a view to enhancing economic, environmental and social resilience in the sector. Measures include integrating women's needs and strengthening their digital competencies in the agricultural working process.

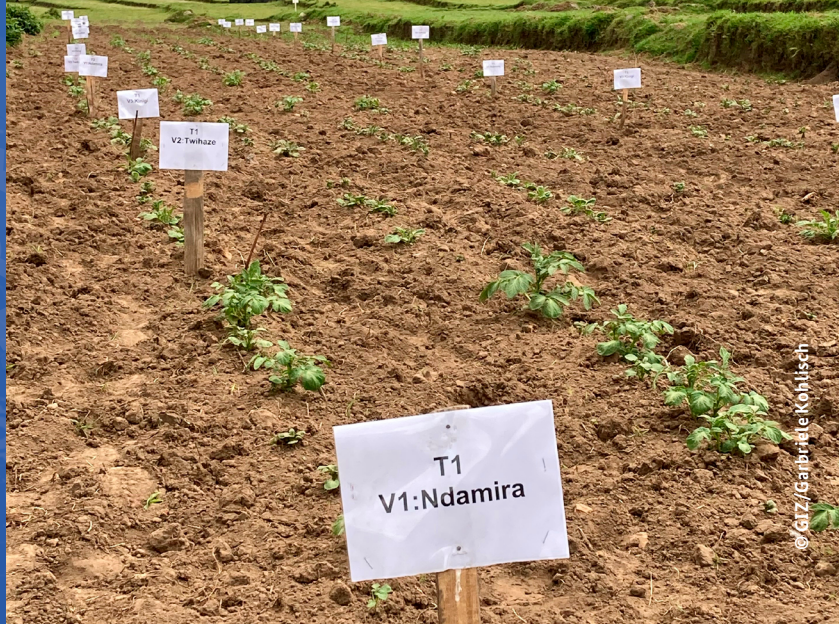
Cooperation arrangements

Co-financed by the Ministry of Economic Affairs, Transport, Agriculture and Viticulture of Rhineland-Palatinate (MWVLW), the project's implementation partners on the German side are Bingen Technical

“Climate and weather information are essential for farmers in Rwanda to make informed decisions about crop planting, irrigation, and pest control. The project is expected to package weather information and providing it to farmers in a way that is easy to understand and use in order to grow more and nutritious food.”

Moussa Senge

Expert with MINAGRI, RAB and One Acre Fund Partnerships



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Test fields in Kinigi, Rwanda

University of Applied Sciences (TH Bingen), the Rhineland-Palatinate rural service centre DLR RLP and the private company AgroScience GmbH (AS).

The political partner on the Rwandan side is the Ministry of Agriculture and Animal Resources (MINAGRI). The implementation partners in Rwanda are Meteo Rwanda, the Environmental Systems Research Institute (ESRI), the Rwandan Agriculture and Animal Resources Development Board (RAB), the Imbaraga farmers' organisation and the Institute of Applied Sciences (INES-Ruhengeri). There is also close cooperation with the GIZ project Digital4Rwanda.

What we are doing - and how

The project continues on from the work of a predecessor programme that supported Meteo Rwanda and MINAGRI in building capacity and knowledge to develop agrometeorological services for the agricultural sector.

The current project aims to improve information systems for the sector to enable (smallholder) farmers in Rwanda to become more environmentally sustainable and to adapt to climate change. To do so, it seeks to advance the development of a digital information system for Rwanda's government institutions. The system is designed to make specific recommendations on action to increase harvest yields and reduce the

use of fungicides. Two phases are being implemented to devise a data structure and a database and to develop a digital application tailored to users' needs. The system will subsequently be deployed and farmers will be trained on how to use it in two pilot regions. Finally, the project will be evaluated and the idea of introducing the system throughout the country will be examined.

Useful links

- Further information on the BLP:
<https://www.giz.de/en/worldwide/132983.html>
<https://bund-laender-programm.de/en>
- GIZ Programme “Digital Solutions for Sustainable Development (Rwandan Digital Transformation Center) II”:
<https://www.giz.de/en/worldwide/121793.html>
- Partnership between Rhineland-Palatinate and Rwanda:
<https://www.rlp-ruanda.de/en/about-us/grassroot-partnership-rhineland-palatinate-rwanda/>

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