Rain for Africa Project (R4A)

The Rain for Africa (R4A) project will make a significant contribution to empowering the most important actors in the food production chain: the farmers. The project aims at providing the correct information at the right moment to food producers, to help improve the quality and quantity of food production in a sustainable manner, so ensuring local food security. Information from in-situ monitoring, earth observations with satellites, geo-data and modelling will be translated into agricultural advice. This will be accessible via the web and mobile technologies (computers, cellular telephones and tablets) and facilitates higher crop yields and more efficient use of seed, water, pesticides and fertilizer.

R4A envisions one central entrance for all historical, actual and forecast weather information in Africa through a portal supported by an operational data stream. There will be a straightforward connection (DCK) to any meteorological data source such as weather radars, satellites and weather stations.

Applications for integrating weather data with expert agricultural knowledge will be developed and made accessible at an affordable price to farmers, national weather services, added value providers and other potential clients in South Africa.

Target user group

Smallholder farmers will be engaged via a participatory model and will receive data and information for free. The projects services will meet the information needs of a number of differentiated users including national weather services, local commercial and subsistance small holder farmers, input providers and financial service providers. Applications will be tailored to provide user specified information to these diverse user groups.

Business Proposition

The co-creation business model of HydroNET (the IT engine of the system) encourages companies, institutions and governments to jointly develop, distribute and maintain information services to a wide range of users through web-technologies, a webportal and mobile device applications. The HydroNET platform is currently operational and licensed to 1 750 users in eight countries, including South Africa and Mozambique. The 'R4A platform' will be customised to meet the requirements of the specific applications and will be further developed, implemented and validated in South Africa.

The project aims to reach 125 000 small holder farmers, to increase their income by 10% and to also decrease their input

The best weather information available for (semi) professional users, enhanced with locally collected data, which offers weather and crop advice for free to smallholders farmers


Photo Credit: ESA/ATG medialab

resource use (water, fertilizer pesticides) by 10%. It is the intension of R4A to scale-up this initiative into southern Africa.

Sustainability is ensured through an innovative business model based on public/private partnerships and service charges based on user affordability.

Partnership

- Agricultural Research Council (South Africa)
- eLEAF (Netherlands)
- HydroLogic (Netherlands)
- HydroLogic Research Delft (Netherlands)
- Mobile Water Management (Netherlands)
- Royal Netherlands meteorology Institute (KNMI) (Netherlands)
- South African Weather Services (SAWS) (South Africa)
- Weather Impact (Netherlands)
- Waterschap Drents Overijsselse Delta (Netherlands)
- Wine Job (Netherlands)

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