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Introducing the Climate Smart Agriculture project



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Articles of climate change and how the weather will impact the coming season are doing their rounds. Experts predict that the summer rainfall areas in South Africa will experience wet weather for the next 3 months, with a high chance of a dry spell afterwards. Although the wet weather is generally good news, it can also present producers with challenges. Extended wet and overcast weather makes it difficult to plant and spray, and may also affect yield due to reduced photosynthesis.

Having accurate, reliable weather data is therefore crucial to a producer to plan for the season. Unfortunately, the weather station network in South Africa is not up to the standard necessary for this data to be freely and easily accessible.

Metos SA partnered with Pessi Instruments, TerraClim, GeoSmart and the Centre for Geographical Analysis to develop and improve the weather station network in the Western Cape as part of the Eureka Climate Smart Agriculture project. For this project, 200 weather stations will be installed across the province to collect data which can be sent to TerraClim. TerraClim is a web application which combines climate and terrain data, showing weather data in a map view.

To get the highest quality data for the TerraClim app, the weather stations should be installed at pre-defined points which meet a certain criteria. 200 GPS locations were identified, but contact had to be made with the land owners for permission to install the weather stations on their farms. With their direct link to the producer, retailers were able to bring Metos SA closer to the farmer. At the



date of writing, 40 weather stations have already been installed.

The short-term benefits of these weather stations include providing the agronomist and his producer with insights to the weather conditions on the farm and the surrounding area. It is also capable of calculating disease risk based on environmental factors, equipping the producer to act in a timely manner. The farmer can now make informed decisions on when to plant and spray, based on data.

Looking at the bigger picture, however, the data collected by these stations will enable Metos SA to conduct research and analysis to better understand the impact of the weather on the agricultural landscape. This will allow Winfield United SA to better serve the South African farmer who will increasingly face the effects of climate change.

The success of this project is dependent on the collaboration of various parties, internal as well as external.

Over and above for the ones who physically install the weather stations and coordinate the process, thank you to all staff that has contributed by means of invoicing, arranging deliveries, human resource management and marketing. Additionally, a big thanks to all individuals hosting our weather stations on your farms. We would not have been able to get this far without you.

We're in it together for the future of REAL Ag.



climate smart agriculture

SCAN ME