

## **PRESS RELEASE**

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### **CLIMATE SMART AGRI WEATHER STATIONS PROVIDE LOCALISED DATA TO IMPROVE FARM EFFICIENCY**

Agriculture is a key contributor to the economic development and GDP of South Africa. Over the last two decades, agriculture has been subject to economic changes which have impacted the industry. In addition, climate change is progressively changing the environmental, social and economic conditions in this sector. The effects of climate change pose a threat to the region's water resources, food security, health, infrastructure, ecosystem services and biodiversity.

The agriculture sector faces various risks associated with climate change. These include changes in rainfall patterns, increased evaporation rates, extreme temperatures, changes in diseases and pest distribution ranges and reduced yields in optimum growing regions.

Innovation is key to the development of technologies that can mitigate the risks faced by the agricultural sector. The Technology Innovation Agency (TIA), an entity of the Department of Science and Innovation (DSI) launched the EUREKA Climate Smart Agriculture localised weather stations developed by Metos SA (Pty) Ltd. The launch was held on Tuesday 13 June, at the Kloovenburg Wine Estate in Swartland, Western Cape, where a localised weather station is in use. This initiative is funded through the partnership of TIA, DSI and the global consortium comprised of TerraClim, Pessl Instruments GmbH, Metos SA (Pty) Ltd and Geosmart Space (Pty) Ltd.

The weather stations provide localised climate data to improve water use efficiency, reduce the impact of disease and adapt to climate change. These will also aid in the selection of crop varieties and cultivars that are optimal for a specific location.

This technology aims to reduce pesticide inputs that impact the quality of food and the lives of workers, reduce water use, reduce CO2 emissions by limiting use of machinery and on farm travel. This can also improve compliance with international export market requirements for Maximum Residue Levels, mitigate intra- and inter-seasonal vulnerability by protecting beneficial insect population through balanced smart spraying programmes.

More than 200 weather stations and 14 CropView cameras have successfully been installed across the Western Cape province. The weather stations have been positively received by the farmers using them as they give data specific to each farm.

“The importance of technologies such as the localised weather stations cannot be over emphasised. The benefits of this innovation are far reaching as they go beyond just the food produce but can extend to animal feed. The result is agricultural produce that meets export regulations thus impacting the GDP.

Agriculture is key to food security for the country, but with technologies such as this, we can produce better quality food, which means a healthier society,” says Mr Sibusiso Manana, Head: Agriculture at TIA.

As a EUREKA associate member country, South Africa, through the DSI, invested in successful local applicants to the EUREKA Network Projects multilateral call on disruptive technologies. These include technologies in various fields such as precision agriculture; and ICT solutions for the agro-food sector.

“The DSI is proud of the work that has been achieved by all the partners involved in this initiative. Innovation is more than just invention but includes collaborating for a wider impact. The consortium that was successful in the Eureka call for proposals has demonstrated that. It is also encouraging to see various stakeholders such as the Weather services, financial sector and others take an interest in the innovations that the National System of Innovation is investing in,” said Mr Toto Matshediso, Director: Global Projects - Department of Science and Innovation.

EUREKA Climate-Smart Agriculture is an intergovernmental organisation for market driven industrial research and development (R&D). It is a decentralised network facilitating the coordination of national funding on R&D and Innovation, aiming to boost the productivity and competitiveness of industries.

Ends.

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### **About TIA**

The Technology Innovation Agency (TIA) is a public entity in South Africa that serves as the key institutional intervention to bridge the innovation chasm (gap) between research and development from higher education institutions, science councils, public entities, and private sector, and commercialisation (beneficiation). TIA was established in 2010 and has a national reach with offices in KwaZulu Natal, Western Cape and Gauteng. The main thrust of the mandate of TIA is funding and supporting innovative technologies that show potential to be commercialised. The organisation also has programmes that provide non-financial support to innovators and SMMEs. Lastly, TIA is a catalyst and enabler of innovation through various partnership initiatives locally, in the African continent and globally.

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