

Rwanda local government adopts use of online climate information Maprooms for agricultural planning and support for farmers

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Using crop water deficit calculations based on climate information, Bugesera District authorities provided supplemental irrigation water, pumped from a lake into a lined reservoir, to enable 188 farmers with supplemental irrigation to cope with prolonged dry spells.



Figure 1: Tomato field under irrigation, Bugesera district-Rwanda. Photo courtesy by Patrick Mvuyimbwami

In the drought prone areas of Eastern Province of Rwanda, the advanced suite of online climate information products and tools (Figure 1) available through the Rwanda National Meteorological Agency (Meteo Rwanda) are helping government officers in making informed irrigation decisions. Mr. Theophile Gatoya is an agronomist in Bugesera district who was trained on the use and applications of advanced suite of online climate information products and tools known as the “Rwanda online climate maproom”. Mr Theophile uses climate information to calculate how much irrigation water would be needed to meet crop requirements during drought conditions. Based on this calculation, authorities pumped water from a lake into a lined reservoir, or “damsheet,” to provide supplemental irrigation water to 188 farmers to protect their crops through prolonged dry spells. This helps the farmers to grow different crops throughout the year, even in dry season (**Figure 1**).

These damsheets have different capacities ranging from 200m³ to 500m³ of sizes. This helps 188 farmers from five cooperatives to irrigate 43 hectares in five sectors (Figure 3). As a results of a proper irrigation management, farmers grouped into cooperatives grew water melon and different types of vegetables including onions, tomatoes, eggplants and chili pepper (**Figure 2**).

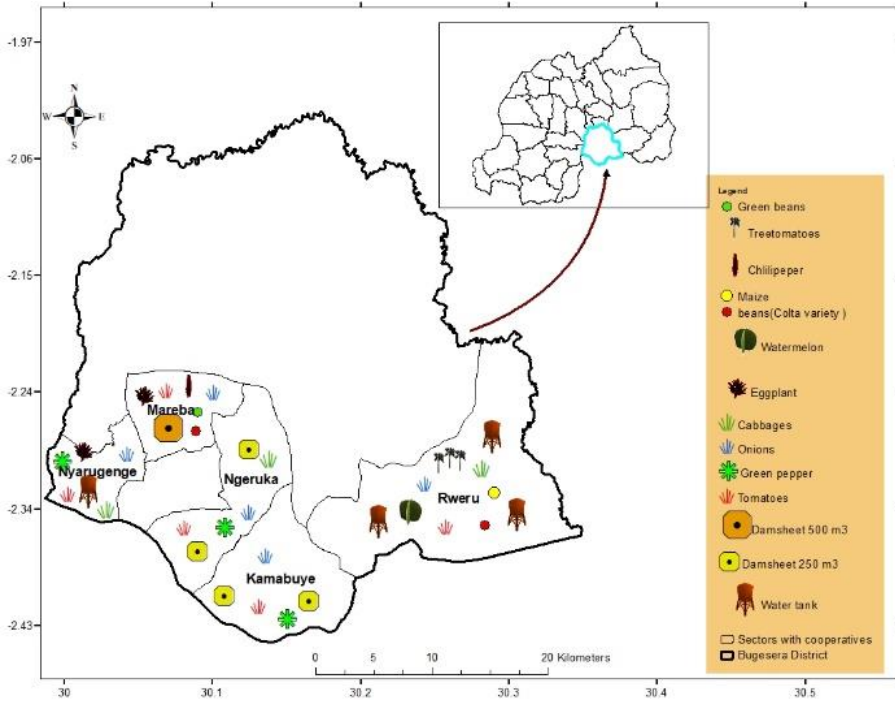


Figure 2: Location of fields under irrigation and types of crops under irrigation through farmers' cooperatives in Bugesera district, Rwanda

Mr Theophile considers the Rwanda online climate maproom as a very useful tool in his day-to-day activities. Prior to the training, the district agronomist did not have any benchmark to facilitate irrigation decision-making. Consequently, they would either supply less or excess water to the farmers and would negatively affect the amount water available for irrigation. They now efficiently supply only the required water and make sure that crops get water in sufficient quantity for their optimum growth. This improved the wellbeing of the farmers as their income has significantly increased.