Open Acces

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Introduction

Weather forecasting has been practiced since human civilization. Today humans largely depend on weather information to aid in their decision making. According to Muchetu (2014), most activities done by people particularly outdoor activities have to be done with weather in mind. Globally 2014 has been the hottest year since 1891. e information is important as weather can a ect human health [1]. e damaging e ects include oods, heat waves and droughts while in Zimbabwe most adverse e ects are related to rainfall [2]. However, weather forecasts provide early warning information which assists in alleviating these adverse impacts.

Weather forecasting helps in agricultural planning. Agriinfo (2011) write that weather forecasting is of cruitial importance in agriculture as it allows farmers to plan ahead and put in place measures to deal with shortage of rainfall. Farm operations like sowing, application of fertilizer, irrigating, harvesting and transport are done with weather in mind. Hague (2010) also points out that farmers can reduce the e ects of droughts by engaging in water conservation activities like water harvesting and mulching. Growing of small grains has also been identi ed as another strategy to cope with un01.575 -1.83(t)-5()12(t)6(w)8(.6(p)-5(in)8(s h))-5(l)6(. F)20egoaimweraty

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big anomaly. World Weather Online deviated greatly from actual observations by MSD. Some days which were dry were reported as having received moderate amounts of rain. As a result World Weather Online had a wet bias in their observations. WUWT [14] supports this by adding that the same global forecast models produce di erent result when run on di erent computers. e reason point to increasing mathematical uncertainty from initial starting conditions as well as

weather information bene ted from making informed decisions about their routine jobs, lifetime and leisure activities. It has been noted that using weather information serves life in the face of weather hazards. In the long term it bene ted farmers as they were able to grow crops that matched each season [16]. As a result the e ects of weather extremes were minimized. Business people in the urban centers were also able to stock their ware in accordance with probable weather demands. As a result they were able to stay a oat in business due to use of weather information.

Conclusions

e study discovered that World Weather Online forecasts are reliable in Kadoma. Forecasts for temperature were more accurate than those for rainfall and this can be due to the popular high spatial variability exhibited by rainfall. Using the percentage correct showed that World Weather Online rainfall forecasts were better than MSD in both one-day and two-day rainfall forecasts for the period considered. However, the Hanssen-Kuipers scores showed negligible di erences.

e study revealed that users of weather information face some challenges in accessing which include lack of knowledge, resources and connectivity to communication networks. e bene ts enjoyed range from saving life to some more economic bene ts which come with the use of weather information. Although sources such as World Weather online provide reliable forecasts, they are not accessed by most users in Kadoma. Users in Kadoma mostly preferred forecasts issued using national radio and television broadcasters. However, there is need to train the users on terminology used as well as raising their awareness on accessing other sources of this vital information.

Recommendations

1) In light of the conclusions made in the study, it is recommended that:

2) e Civil Protection Unit and other stakeholders should educate people on importance of weather information use.

3) Post and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ) should continue with e orts to install communication towers to increase access to communication media and educate people on how to use certain communication technologies

4) People need to be made aware of the accuracy levels of the weather information supplied by various weather information providers.

5) e Meteorological Services Department should reduce the sizes of its forecast area as they are currently too broad and general.

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