Ufulu Gardens, Lilongwe, Malawi, 24 Nov 2021

Welcome remarks, Dr James Murombedzi

Weather and climate services to support climate ad adaptation. Need for targeted information for use by decision makers in agriculture sector. Investment in a model to inform production decisions. Significant foe policy making.

Meeting after conclusion of COP26. Climate impacts are already here and felt and require immediate responses. Stabilising emissions from agriculture. Calibration of weather forecast systems to keep emissions stable in agriculture.

Dr Brad Garanganga,

Introduction

Decision Support System

Climate Information Services beneficial to agriculture and wider economy. Floods and droughts affect 70% of production costs.

CIS supports on-farm strategic and tactical decisions.

After Tea Break

Data and implementation into the model, Mr Trymore Nyakutambwa

CAMDT based on Python programme which is going to be installed

CAMDT/DSSAT template

NASA Website: https://power.larc.gov/data-access-viewer/

Questions

What capacity of computer is needed to process data? COREi5 is sufficient

Can it process data for 100 stations rather than repeating the process a 100 times? *You can download one stations at a time.*

BREAK-OUT QUESTIONS

How do communities and different sectors prepare for agricultural production?

How is climate information services factored in crop yield projection?

What models are used for crop yield projections and their challenges?

What are the expectations on new technologies?

Soil tests in Mozambique? Done on a regular basis. Academia also does this.

Institutional arrangements regarding use of the model – Min of Agric, private sector. Intermediaries who then link with farmers and communities.

DAY 3, 26. 11. 2021

Breakout sessions

Workings of the model

Assessment of the usability of the model

- *It has many steps to follow and consequently it requires knowledge of computing and some other skills in data processing.*
- *The current version can only be used by people with high level of computing and deep insight in technical concepts.*
- *It should involve more stakeholders (ex. bankers and insurance companies and other relevant sectors)*

Limitations of the model

Assessment of the limitations of the model

- *Complex Installation process and then it is become complicated for practical use.*
- *Complex data preparation which is time consuming*
- *Once some steps require internet connection, it won't be applicable to most rural areas*
- *It may be huge challenge for extension officers to manipulate.*

Potential improvements for country adaptation

Areas that are feasible to improve and to what extent?

- *Simplification in the program dependences.*
- *Simplification in data preparation.*
- *The model should have a continuous validation.*
- *Outputs should allow easy interpretation and should be useful to different stakeholders.*
- *More cultivars should be included to make the model more robust.*

Main conclusions

- Although there is still a lot to do, overall the model is useful and can it be taken as a fundamental tool for decision making.
- The model should be adopted by the government to ensure its sustainability.