

# **UTILIZATION OF CLIMATE INFORMATION IN AGRICULTURAL LIVELIHOODS RECOVERY AND DEVELOPMENT IN UGANDA**

---

**United Nations/Morocco/European Space Agency  
International Workshop on the Use of Space Technology for Sustainable  
Development.**

**25<sup>th</sup> – 27<sup>th</sup> April, Rabat, Morocco**

**Johnson Owaro  
Department for Disaster Preparedness and Relief  
Office of the Prime Minister Uganda  
Tel: +256 712 859622  
E-mail: [owaro@agric.mak.ac.ug](mailto:owaro@agric.mak.ac.ug)  
[owarojohnson@yahoo.cm](mailto:owarojohnson@yahoo.cm)**

# Presentation layout

---

- Uganda's Agriculture system
- Climate related disasters in Uganda
- OPM/UNDP Agricultural livelihood recovery project
- Objectives of the project
- Applications of climate products in Uganda
- Project output
- Conclusion

# Uganda's Agriculture system

---

- Agriculture practice is predominantly subsistence and rain fed
- Mainly uses traditional tools
- Limited use of weather forecasting technologies and products.
- Low production and productivity.
- Limited access to land in some regions due to persistent insecurity (1.5 million internally displaced persons in northern Uganda)

# Climate related disasters in Uganda

---

- Over 70% of disasters in Uganda are climate related.
- Annually about 800,000 hectares of crop is destroyed, causing economic losses in excess of US \$90 million dollars.
- Major climate related disasters include; droughts, floods, landslides, windstorms and hailstorms and endemic diseases such as Malaria, Cholera and Nagana in cattle and land use conflicts (cattle rustling).

# Role of OPM and DDPR

---

- Prime Minister leads government business in parliament.
- DDPR coordinates all government and donor interventions in humanitarian and recovery efforts in the country.

# Role of OPM and DDPR cont...

---

- Major responsibility of DDP is to establish local capabilities to ensure that known hazards do not result into disasters and when they do, the people affected can continue to meet their minimum needs for food, water, shelter, health, and security through their own efforts and where necessary, appropriate assistance in terms of type, time, method of provision and duration is available.

# Agricultural livelihood recovery project

---

- Under the auspices of the Transition to Recovery Programme (TRP), Office of the Prime Minister (OPM/DDP) and United Nations Development Programme (UNDP) is implementing a pilot agriculture recovery project in northern Uganda, Kaberamaido district.

# Project Objectives

- Create awareness among the communities and decision makers on the benefits of use of climate information and products for agriculture production and disaster risk management.
- Develop area specific climate forecasts and products for specific decision-making purposes (Work with Department of Meteorology and Famine Early Warning Systems of MAAIF).
- Provide farmer communities in northern Uganda with weather stations for local weather data collection.
- Train participating farmers on modern farming technologies and provide improved planting materials.

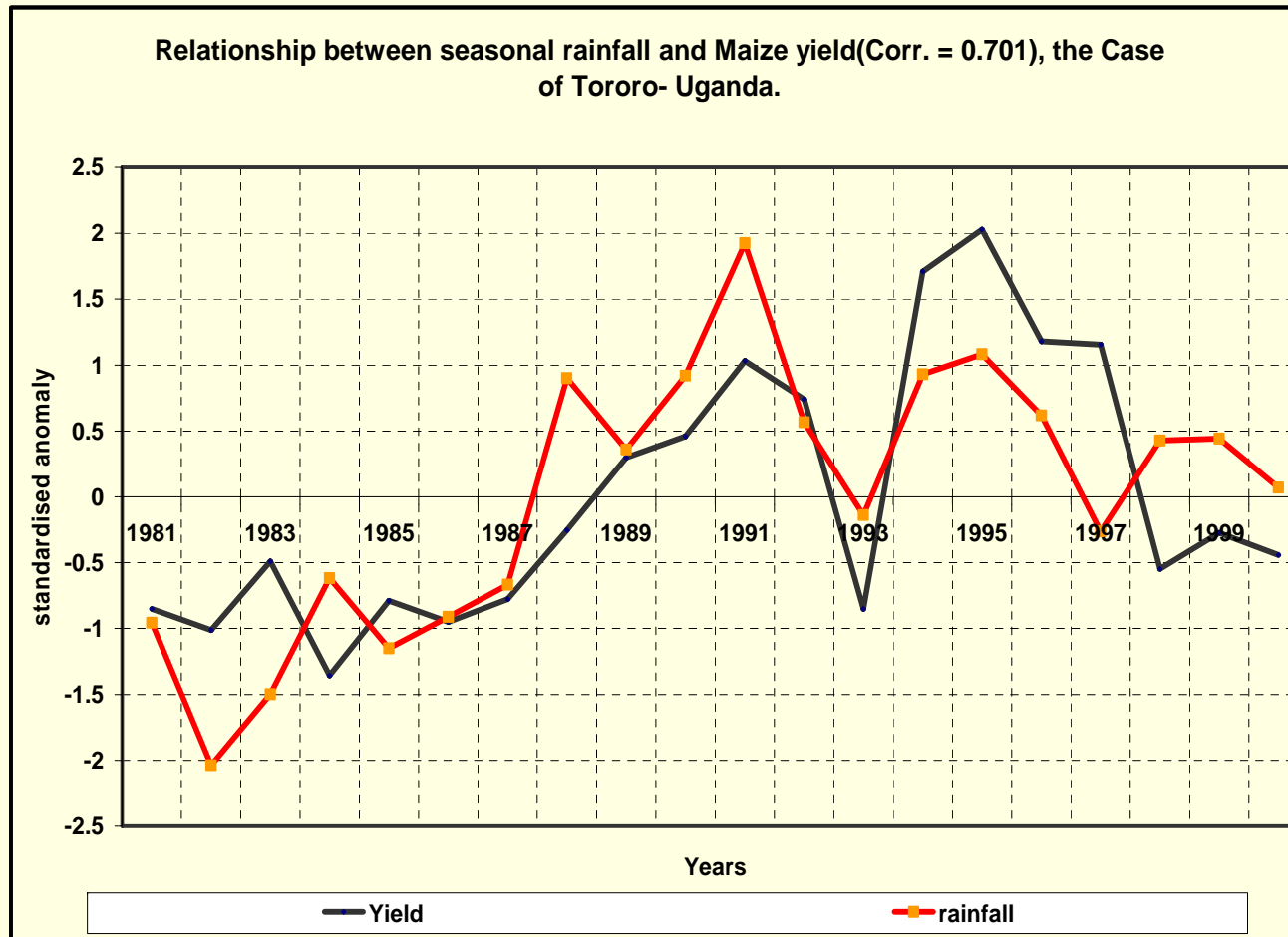


# Applications of climate products in Uganda

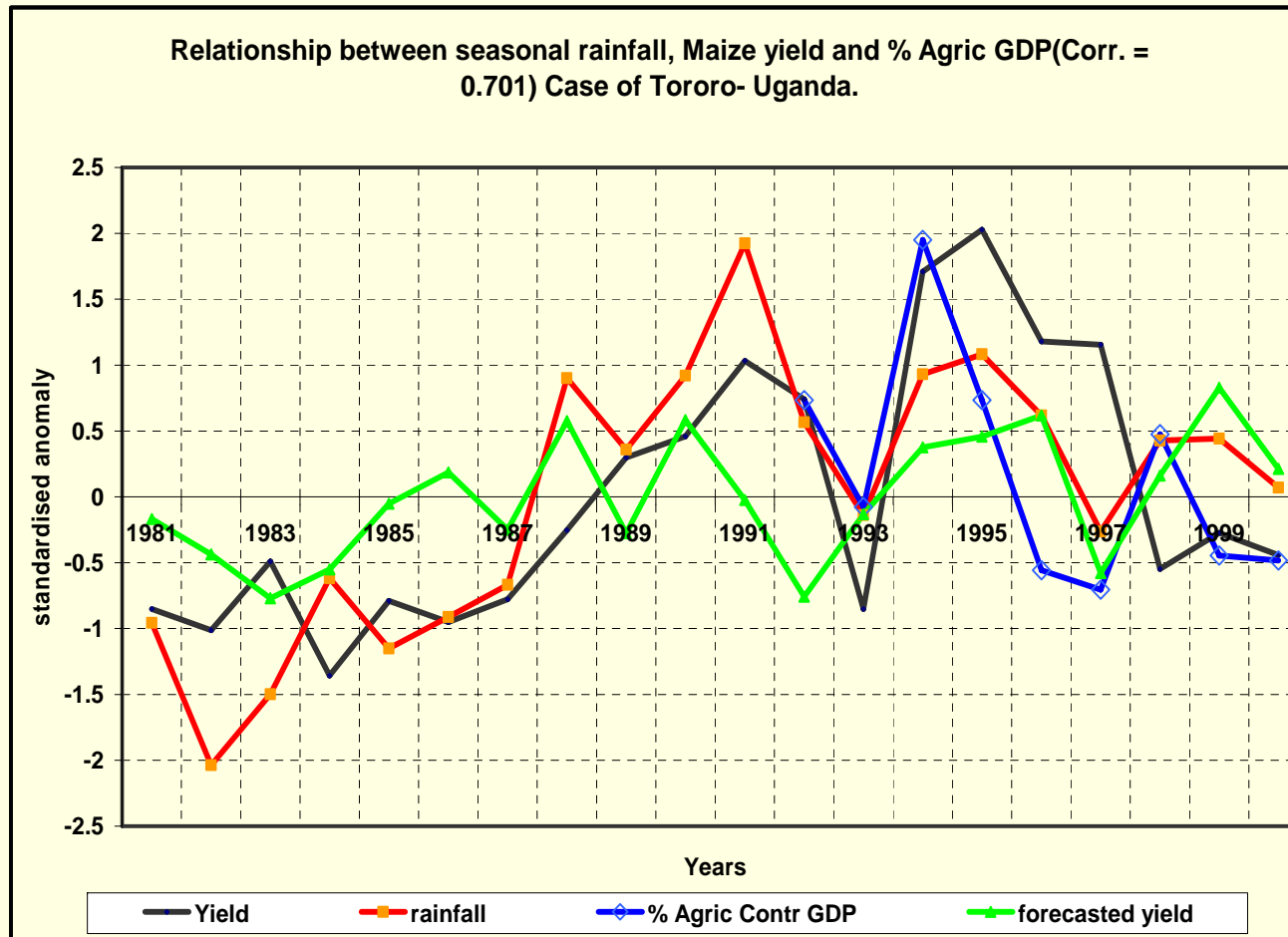
---

- Climate products, if used in applications to activities related to societal benefit areas such as agriculture, water resources, public health and disaster management can be crucial in sustainable development in Africa and particularly in Uganda.

## *Relationship between crop performance and rainfall.*

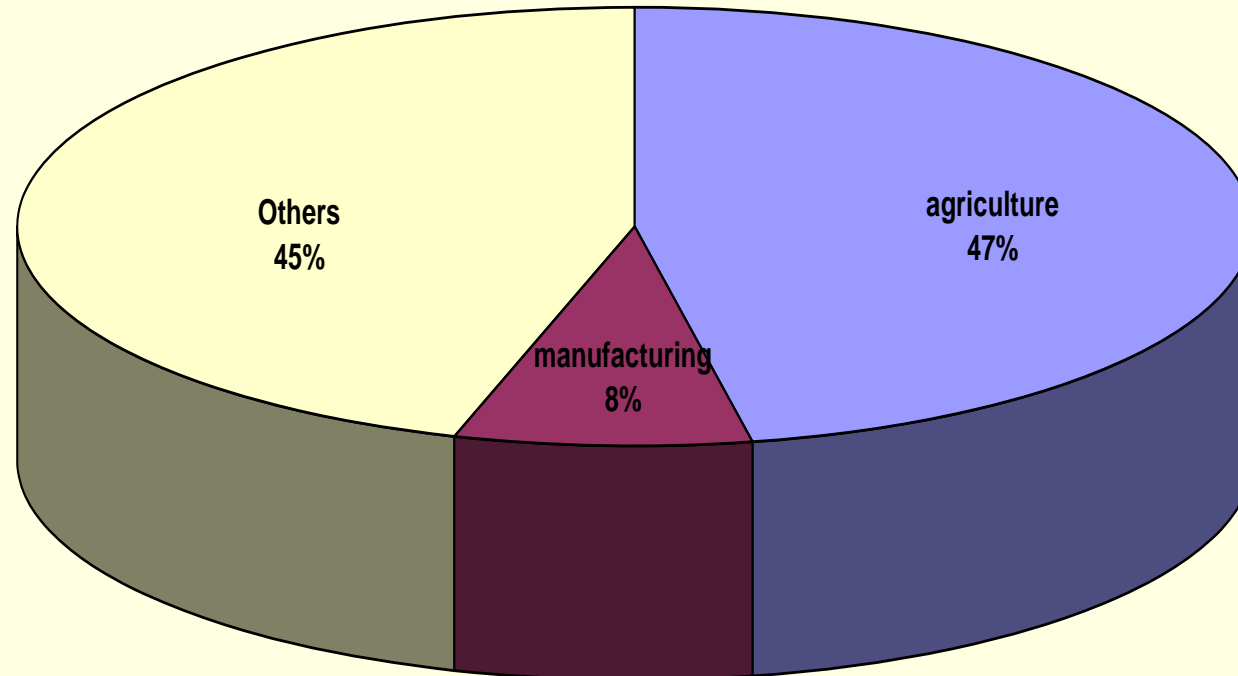


# Relationship between rainfall, maize yield and % agric GDP



# Sectoral % national GDP contribution

% GDP contribution by sector- 1991 to 2000



# Project output

---

- Sustainable and increased agricultural production and productivity for early and fast economic recovery of northern Uganda.
- Better community understanding and monitoring of climate related risks.
- Improvement in the delivery of climate information and products to decision makers and user community.
- Better managed livelihoods sectors of agriculture, water resources, ecosystems, infrastructure and health.

# Conclusion

---

- The implementation of this project is expected to result in improved food security, agriculture production and better health to the return communities of northern Uganda.
- Use of weather products in resource allocation and policy decisions will have wide applicability and synergies to other interventions by other development partners or NGOs and also in other areas of the country.
- The estimated cost/benefit ration is **1:5** of the initial project cost of **US \$150,000**

# Future Initiatives

---

- Expand the agric. Livelihood project to cover a wider beneficiary base (funds are available)
- Identify partners in the area of space technology applications.
- Explore opportunities for use of space technologies (GIS, GPS) in IDPs camp management.
- Capacity building in use of space technologies for disaster and humanitarian response (awareness, dynamic maps, training)



I thank you

