

# THE VALUE OF EARTH OBSERVATIONS TO SUPPORT RISK ASSESSMENT AND RESILIENCE

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# Progress on Research and Systematic Observation and Adaptation

# Progress on Research and Systematic Observation and adaptation

## COP27 DECISION:

**1.**

Recognizes the need to enhance the coordination of activities by the systematic observation community and improve its ability to provide **useful and actionable climate information** for mitigation, adaptation and early warning systems, as well as information to enable understanding of adaptation limits and of attribution of extreme events

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**2.**

Stresses the importance of **addressing gaps in early warning systems and climate information services in developing countries** through Earth observations, and recognizes the EW4All Initiative

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**3.**

Encourages Parties to **consider Nature-based Solutions** or ecosystem-based approaches for mitigation and adaptation

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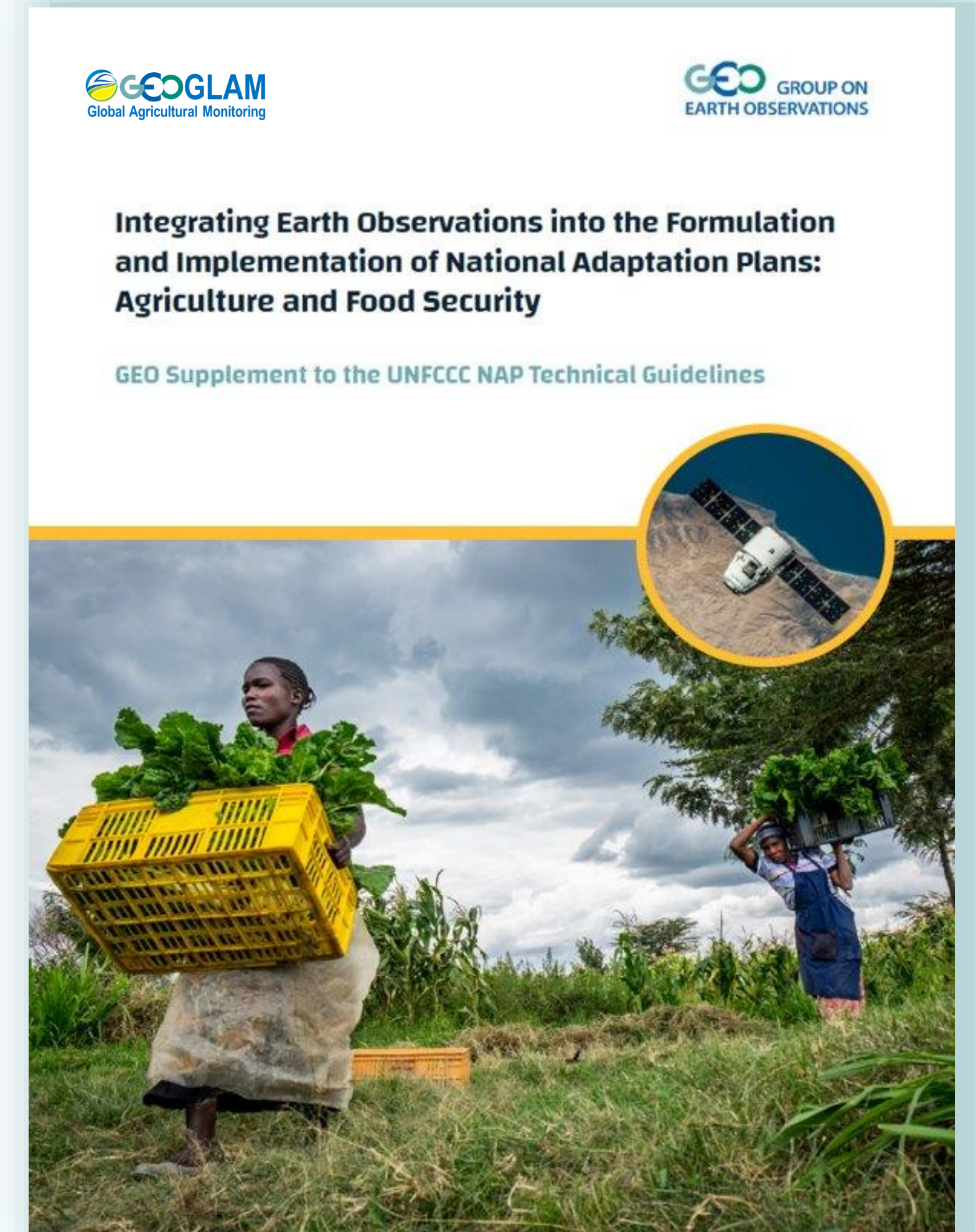


# Earth Observations for precise risk assessment and innovative climate resilience solutions

**Earth observations align with the Paris Agreement's call for enhanced adaptation efforts** by providing real-time, high-resolution data for accurate risk assessment.

**Decision-makers can utilize this information to identify at-risk areas,** evaluate potential threats, and align their strategies with the National Adaptation Plans (NAPs).

**Earth observations support innovative solutions** for NAPs.





# Earth observations for Early Warning Systems

Early warning services need to be integrated into disaster risk reduction practices, climate services, and adaptation to climate change strategies for effective early action and coordinated national action.





# Global Agricultural Monitoring

## Improving food security



### Results

The World Bank Disaster Risk Financing Program funded public works projects to offset the loss of food production, improving the outcome for approximately 300k people (150k+ households) in Uganda thanks to GEOGLAM.

### Value

Government of Uganda realized savings of USD 2.6M in a single financial year, also tackled social challenges ahead of time.



# Global Water Sustainability

## Saving lives and reducing costs



### Results

In 2022, Malawi experienced two tropical cyclone events inducing riverine and flash floods. Malawi deployed the GEOGloWS service to increase flood forecasting lead times from a few hours to 15 days.

### Value

The 15-day forecast led to timely evacuations and a relief program. GEOGloWS helped reduce financial impact from losses and damages by 40% compared to similar floods. No loss of life was reported.



# Earth observations for Monitoring and Evaluation of adaptation goal and targets

COP26 initiated  
Glasgow-Sharm El-  
Sheik Work  
Programme to  
define the Global  
Goal on Adaptation  
(GGA)

A successful  
framework requires the  
right data, metrics  
and indicators for  
reviewing overall  
progress in achieving  
the GGA

Alignment across  
UNFCCC – CBD –  
UNCCD - SDGs and  
other international  
processes is needed





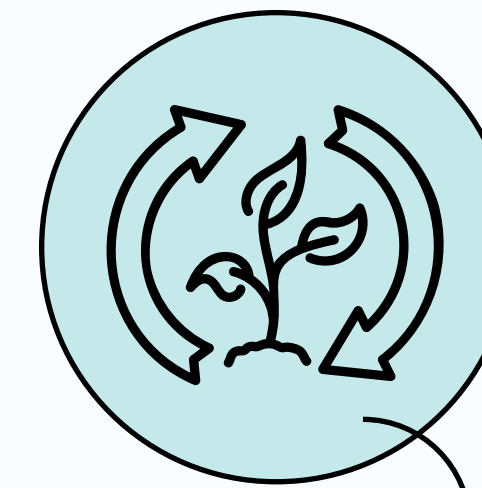


# Earth Observations for Indigenous People and Youth

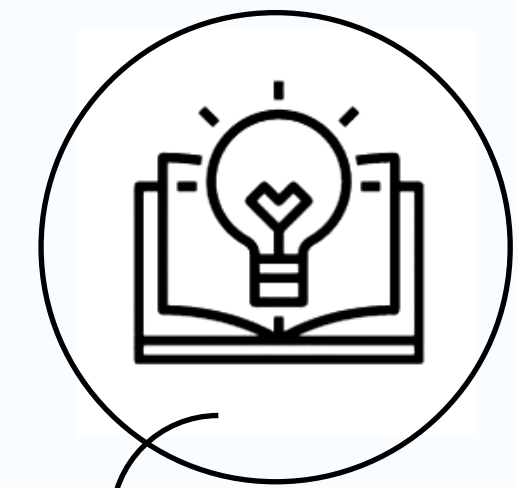
COP26 SBSTA conclusion on RSO encourages Parties and relevant organisations to “**furthering the contribution of youth and local, indigenous and traditional knowledge** to understanding climate change and its consequences, and weaving such knowledge into decision-making.”



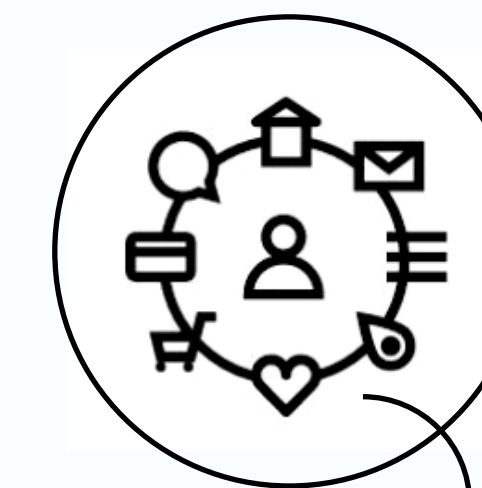
## GEO INDIGENOUS ALLIANCE Strategic Paths



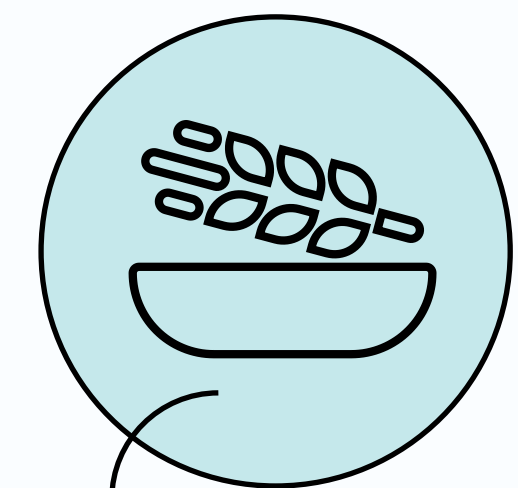
Climate Action  
/ DRR



Women Empowerment  
/ Education



Indigenous Data  
/ Sovereignty



Food Security





#TheEarthTalks

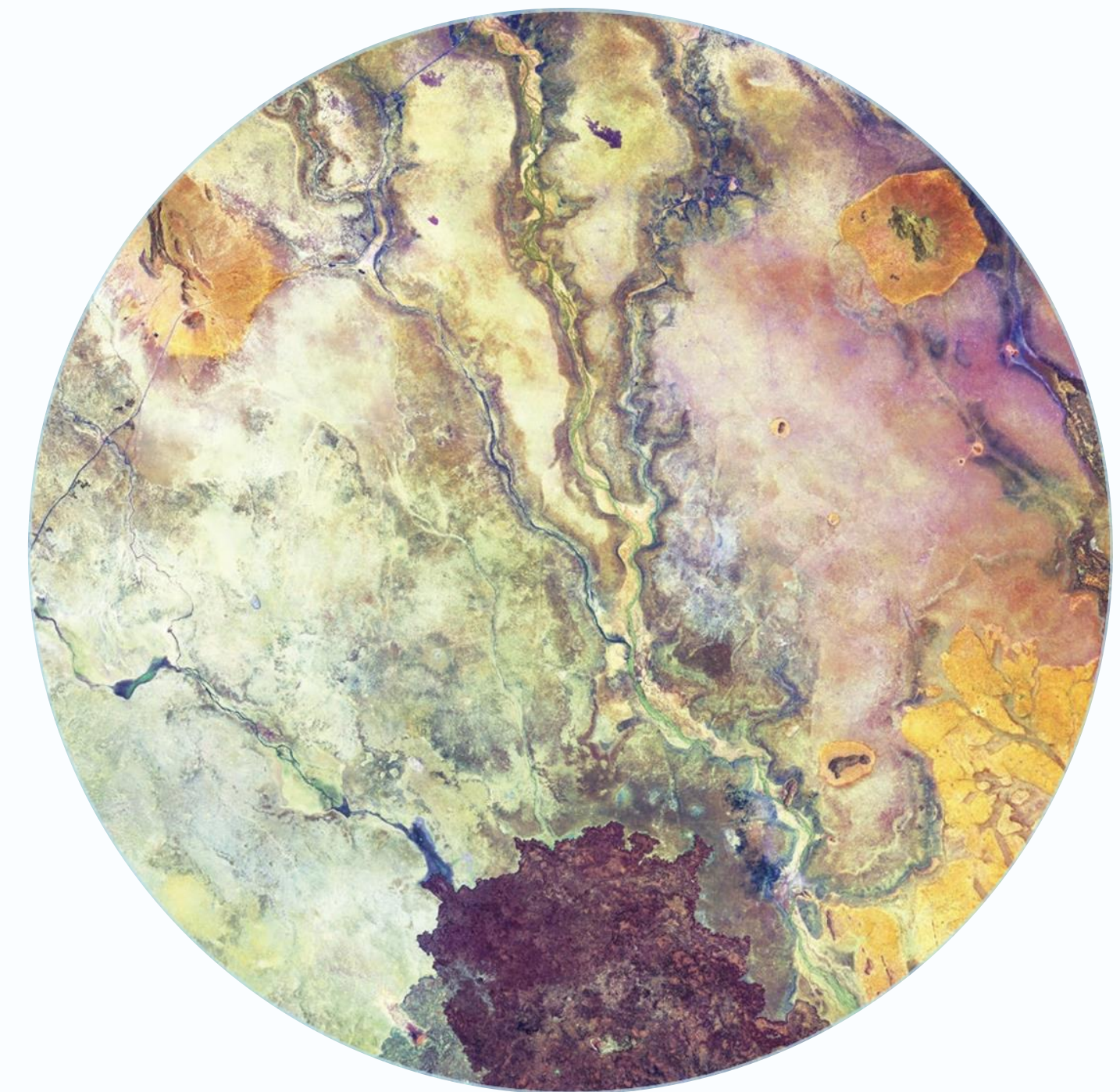
# Towards operational services: EARTH INTELLIGENCE FOR ALL

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Countries should **build on the decision from COP27** and provide the ground to **support the move of the systematic observation community towards providing operational services** to enable informed climate decision making with **Earth Intelligence**.

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**Earth intelligence** comprises integrated Earth and social science derived knowledge and insights that inform strategic decisions, build capacities and empower society to address environmental, societal, and economic challenges.





Let's move  
forward together!  
Thank you!

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 **GROUP ON  
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