ODA Funding to the intergovernmental Group on Earth Observation's (GEO) Global Agricultural Monitoring Initiative (GEOGLAM)

Request

Seeking confirmation/approval for the Overseas Development Assistance funds to GEOGLAM for FYs 202/2023, 2023/2024 and 2024/2025

Timeline	Value	Payable by
Year 1 (FY22/23)	£125,000	31 March 2023
Year 2 (FY23/24)	£125,000	29 March 2024
Year 3 (FY24/25)	£125,000	31 March 2025
Total	£375,000	

Note: These funds are held and distributed via the ODA Hub, but CSD DD approval requested to confirm spend.

Background to GEO and GEOGLAM:

GEO is a unique global network connecting government institutions, academic and research institutions, data providers, businesses, engineers, scientists and experts to create innovative solutions to global challenges using earth observations. <u>GEOGLAM</u> is a Work Programme initiative of GEO, with a policy mandate initially emanating the Group of Twenty (G20) Agriculture Ministers during the French G20 Presidency in 2011. The mandate has expanded in parallel to the G20 mandate to include food security concerns and GEOGLAM now works to support early warning for international agency response to emerging food emergencies.

It engages working group members from across the GEO community.

Relevance of GEOGLAM to Defra priorities:

GEOGLAM provides Stocktaking reports for the **G20** Agricultural Working Group (on which Defra represents UK). It aims to increase market transparency and improve food security by producing and disseminating relevant, timely, and actionable information on agricultural conditions and outlooks of production at national, regional, and global scales through strengthening the international community's capacity to utilize coordinated, comprehensive, and sustained Earth observations

As global food security against backdrop of climate change will continue to be a global challenge, the monitoring provided by GEOGLAM provides up-to-date information on crops and the related global markets and prices and shifts in those due to changing environmental conditions through its AMIS Crop Monitor. GEOGLAM since its inception has seen tremendous development of knowledge (peer-reviewed scientific papers to operational open-source tools) and to ensure efficient and effective curation and sharing of this knowledge has worked to develop a GEO Knowledge Hub to manage the outcomes from the GEOGLAM work programme, bringing open-source tools to cloud computing environments so they can be used by GEOGLAM nations to produce actionable agricultural monitoring information products on the state and changes in the agricultural landscape (supported by previous UK ODA funds outlined below).

GEOGLAM uses EO to provide early warning for timely and actionable information in response to emerging food security crises in these regions. Proactive responses based on GEOGLAM information can save lives, reduce human suffering and the cost of reactive emergency response. For example, during a 2017 drought in Uganda, the Prime Minister's office received a three-month early warning that enabled the government to proactively scale up public works projects to offset losses in income

from reduced agricultural production losses. This improved the outcome for 150,000 citizens while saving an estimated USD \$2.6m in emergency food aid. These interventions have dual benefit of UK overseas development support plus food security information and support that can benefit domestically.

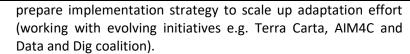
Most recently GEOGLAM has developed the <u>National Adaptation Planning (NAP) guidance (in line with UNFCCC) for the agricultural sector</u> to scale up agricultural resilience and adaptation efforts, with a focus on Africa. These were launched at UNFCCC COP27 in Egypt (November 2022), noting Defra is acknowledged in the guidance as providing supporting funding through its ODA.

Future ODA contributions (FY 2022-2023, ongoing and into 2023/2024) will support the related Capacity Development Activities to roll-out and build capacity in the use of the NAP Guidelines:

- GEOGLAM demo session at National Adaptation Planning Expo, Botswana, August 2022.
 Similar outreach at 2023 Expo planned and will include sessions on crop monitor project proposal writing and hands-on demo on crop monitor workflows.
- Capacity development training in early warning crop monitoring tools training (2023).
 Countries involved include Burundi, Djibouti, Ethiopia, ICPAC-Kenya, Malawi, Mali, Rwanda, Somalia, South Sudan, Sudan, Tanzania, and Zambia to support NAP Guidance implementation and co-development initiatives towards the utilization of existing open science crop monitoring resources.
- Capacity development support to the Least Developed Countries Expert Group (LEG) on NAP
 Project Proposal Writing, providing training on crop monitor project proposal writing to
 support LDCs to access funding to implement their national crop monitors as part of their
 climate change adaptation and early warning efforts.
- Engagement at Global Adaptation Week (Aug/Sept 2023) at which GEOGLAM will advance support for NAP implementation and further discuss financial support from Global Climate Fund for crop monitor implementation in LDCs.

Previous UK ODA contributions to GEOGLAM:

FY	Value	Activities	
2019-2020	£100,000	 Development of GEO Knowledge Hub, including GEOGLAM Portal Development of Cloud-Based Sen2Agri Services for Africa. Codevelopment, with South African National Space Agency (SANSA), to implement the Sen2Agri tools on Amazon Web Services (AWS) for crop mask, crop condition, and crop type mapping. 	
2020-2021	£100,000	 Development of GEOGLAM In Situ Data Strategy to support operational EO solutions through curation of open agricultural in situ data Launch of Climate Finance campaign: virtual workshop hosted by the GEO Secretariat to introduce the relevance of Earth observation in supporting climate finance decisions, and to gauge the level of readiness/understanding of climate finance among the GEO community. 	
2021-2022	£125,000	Development of National Adaptation Planning and developing supporting GEO Knowledge Hub Knowledge Packages, including Africa Coordinator to coordinate engagement and outreach and	



- Training and collection of in situ data to support national monitor development and development of in-situ data management lifecycle.
- Transition WorldCereal in-situ project to the GEOGLAM program Development of National Adaptation Planning guidance (in line with UNFCCC) for the agricultural sector to scale up agricultural resilience and adaptation efforts, with a focus on Africa.