GEOGLAM Phased Implementation Overview

GEOGLAM aims to enhance agricultural production estimates through the use of Earth observations, and to address concerns about market volatility for the world's major crops raised by the G20 Agricultural Ministers[1]. It hopes to strengthen the international community's capacity to produce and disseminate relevant, timely and accurate forecasts of agricultural production at national, regional and global scales through the use of Earth observations. GEOGLAM will support the Agricultural Market Information System (AMIS)[2] to enhance food market transparency and encourage coordination of policy action in response to market uncertainty. The initial focus of AMIS is on four crops that are particularly important in international food markets, namely wheat, maize, rice and soybeans.

The GEOGLAM Implementation Plan utilizes a phased approach. Phase-1 spans the 2012-2014 time frame and focuses on foundation activities, building on existing activities and pilot projects for a small number of countries, and scoping the program for future phases. During the Phase-1 period, GEOGLAM will support JECAM (Joint Experiments on Crop Assessment and Monitoring) to develop and operationalize its monitoring techniques including sampling approaches (29 test sites in 21 countries), allow countries to build capacity to collect and process Earth observation data and allow time to validate and incorporate results into decision-making processes. The *CEOS Acquisition Strategy for GEOGLAM Phase-1* (Nov 2013) defines the countries and regions of interest (including rice sampling in Asia as part of the Asia-RiCE initiative, whose Phase 1 will extend until 2015), product specifications, measurement requirements, sampling approach, and acquisition strategy for relevant missions (core, contributing and potential).

GEOGLAM will move into Phase-2 in the 2014-2016 period. This phase intentionally overlaps Phase-1 and will seek to evaluate the Phase-1 foundational activities while expanding the scope of GEOGLAM and building toward an operational program in the future (~2017). GEOGLAM will increase the number of countries, including the addition of smaller "at-risk" countries, and increase the size of sampling regions with a long-term goal of including all of the AMIS participants and more. In addition, GEOGLAM will expand its use of mission data by utilizing new mission datasets (i.e., Sentinel-1A,2A,3A, SPOT-7, ALOS-2, GPM-Core, and SMAP), archive datasets, continue development of sampling strategies, and investigate methods for data management and distribution. Phase-2 will strive to improve the accuracy, reliability, robustness, and efficiency of the products generated to support local decision-making and AMIS reporting. Finally, Phase-2 will seek to establish and increase the GEOGLAM governance capacity required to underpin an operational system.

The CEOS Ad Hoc Team for GEOGLAM will continue to provide a bridge between the GEOGLAM and the CEOS community. CEOS will provide coordinated planning to fulfill the required mission data requirements while attempting to optimize the use and distribution of this data for many global initiatives.

---

[1] *The G20, formed in 2003 to discuss economical issues, is a group of developing nations that make up 60 % of the population of the world. The G20 includes: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, the United States, and the European Union (EU).*

[2] *Participants in AMIS include the G20, Spain and 7 major producing countries (Algeria, Egypt, Kazakhstan, Ukraine, Thailand, Vietnam, Philippines).*