GEOSHARE Workshop Synthesis

The post-pilot workshop for GEOSHARE was held in Discovery Park, on the campus of Purdue University on September 10-11, 2014 with support from Purdue, CIMSANS, DFID, DEFRA and USDA. The purpose of this event was to take stock of the efforts undertaken over the past three years and determine whether this should be scaled up into a long term effort, and, if so, what form this activity should take. Background information on the pilot project is available here.

Seventy-five people attended this event from Europe, Africa, Asia, Latin America, Australia and across North America. Participants were extremely diverse, and are employed in private, public, non-profit, international and academic organizations. After an overview of the case studies undertaken during the pilot project, the workshop pursued four major themes: Cyber-infrastructure (HUBZero: https://hubzero.org/), Institutional Design, Data Endorsement and Data Fusion. Each of these was accompanied by breakout sessions in which small groups discussed a series of four questions. Reports from the rapporteurs, along with all of the accompanying presentations, are available on the GEOSHARE HUB: https://mygeohub.org/groups/geoshare/workshop2014 .

The high level of participation in this event, and the enthusiastic response to the presentations, suggests that there is indeed very keen interest in scaling up GEOSHARE to a long term, global activity. Participants felt that there is currently an absence of platforms for obtaining, comparing and modifying, high quality, reproducible, geospatial data products for analysis of food, agriculture and environmental issues at global scale. Existing efforts are typically one-off, insufficiently documented, one-way (not allowing modification) and incompatible with other efforts. There is also a great deal of inefficient duplication of effort and many communities-of-practice do not have easy ways of collaborating. Participants see great potential in adopting the HUBZero architecture as a vehicle for sharing data and analysis tools, endorsing datasets for particular purposes (“horses for courses”), managing workflows, and connecting diverse communities of practice in order to allow for more integrated analysis of global sustainability. Indeed, in the wake of this workshop, a number of datasets and tools are already being uploaded or under development by workshop participants for use on the HUB. International organizations are being encouraged to demonstrate improved external outreach and adoption of open data policies and these have a lot to gain from making use of GEOSHARE’s existing cyber-infrastructure.

Despite this great potential, participants also recognized the challenges posed in funding such an effort. This led naturally into discussions about how to design the institutional structure of GEOSHARE. It was generally agreed that an Advisory Board comprising major stakeholders in this field is an essential ingredient. This Board would have responsibility (via annual subscription and by assisting GEOSHARE “nodes” to access external funding) for providing funding for core activities. It would set the strategic direction for the project, identifying and approving new ‘nodes’ (each representing communities of scholars, practitioners and users specializing in various aspects of the global data base), endorsing the GEOSHARE data bases, and ensuring that GEOSHARE’s activities complement existing efforts already underway. The leaders of each node would be selected on a rotating basis by the relevant community of practice, in consultation with the Board, and these node leaders would form the Science Committee of GEOSHARE which would set standards, determine the specification of workflows, and generally ensure that the resulting data bases and analysis tools are of the highest possible quality. Activities of the nodes would be funded as part of their ongoing research efforts, with grants and contracts facilitated in some cases by the Board members. Support for the core activities (HUBZero, management and coordination) would be funded by the Board members’ annual fees.

In the wake of the workshop, a number of organizations have expressed interest in serving on the GEOSHARE Advisory Board. Once we have obtained five members, we will schedule the first meeting of the Board and the Science Committee. The near term goal is ten Board members, which would allow the project to move ahead with confidence. In the longer run twenty Board members will be required to maintain this activity at the level envisioned by participants in this workshop.