

# **Involvement with National Programs**

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# GEO Global Land Cover Task

- Provide a suite of global land cover datasets, initially based on improved and validated moderate resolution land cover maps and eventually including land-cover change at high resolution.
  1. Advocate existing internationally-agreed approaches for land cover characterization and validation
  2. Utilize and validate moderate resolution time series data and land cover data sets and earlier 1-km resolution maps
  3. Formulate specifications and implement production of a global high-resolution land cover and land change data set and report
  4. Set up web access to land cover and associated input data
  5. Identify opportunities for applying land cover data in areas related to key societal benefits
  6. Strengthen national level capacities to produce and use these products especially in developing countries

# The Challenge...

- Achieving these objectives will require the participation of many organizations - spanning research to operations.
- This is especially the case for the objective to:  
*“Formulate specifications and implement production of a global high-resolution land cover and land change data set and report.”*
- GOFC-GOLD can assist the GEO Global Land Cover Task by providing leadership in organizing and identifying consensus practices and standards.

# Creating a high resolution global land cover change product...

- Will require continuing consideration of:
  - Earth observation capabilities and advances
  - Land cover standards
  - Land cover mapping methods
  - Resources
- Will require the coordinated participation of a network of land cover mapping organizations.

# National land cover mapping programs...

- Should be an essential part of a global high resolution land cover foundation.
- Are necessarily organized to meet agency priorities within the constraints associated with budgets and human resources.
- Often lack contact with research groups and other national mapping programs.
- Must have access to ideas, data, and other resources in order to continue, improve, and sustain their activities.

# The question - how do we...

- Engage national cover mapping agencies for the purpose of contributing to global land cover characterization?
- Strengthen national capabilities and contribute to their sustainability?
- Enable the use of best practices and standards across national programs?

# Questions that need to be addressed

- Where are the national programs and what is the health of their respective programs?
- What is the range of the technical practices in each program? What are the scales of analysis, classification schemes, methods, and periodicity of mapping?
- What can GOFC-GOLD and GEO provide that improves the strength of national land cover mapping programs?
- What are the standards needed to merge national land cover maps into a global framework?
- What are where are the gaps in national land cover capabilities and programs?

# One approach for involving national programs...

- GOFC-GOLD/GEO Global Land Cover Task could organize a workshop for national land cover programs and research leaders to:
  - Determine status of established national land cover programs (e.g., Africover countries, Australia, Brazil, Canada, China, EU, Mexico, South Africa, US, etc.)
  - Identify common:
    - Standards
    - Methods
    - Resources
    - Research needs
- Establish goals for a high resolution global land cover mapping capability
- Determine approaches for sharing experiences and resources between national programs



# Potential benefits

- Take a step toward solidifying the global land cover mapping infrastructure
- Achieve some level of agreement on common land cover mapping standards
- Gain a better understanding of the issues ahead for global high resolution land cover mapping
- Improve the basis for accessing validation data for other global land cover products.