

## Utilizing Global Map for addressing Climate Change

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## What is Global Map ?

- Digital Geographic Dataset
  - Covering the whole land area of the globe
  - With unified specifications
  - Open to the public
    - freely downloadable for non-commercial use

## Aims of Global Mapping

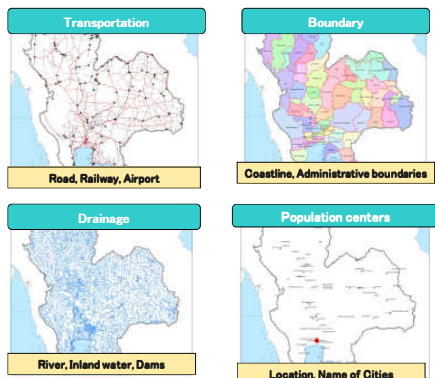
Global Mapping aims to contribute to

- Solving and tackling with global environmental issues
- Achieving sustainable development
- Mitigating large scale disasters

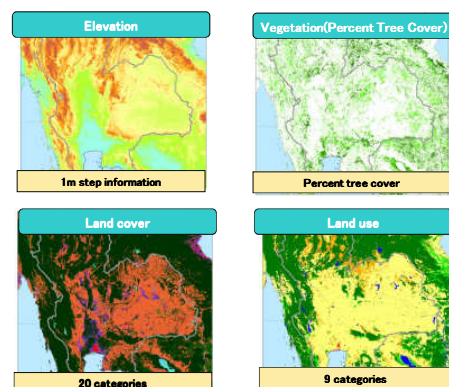
## Global Map Specifications

- Spatial resolution: **1km**  
(equivalent to **1:1,000,000** scale)
- **8** layers
  - Vector data (point, line, area)
    - Transportation (Roads/Railways/Airport)
    - Boundary (Administrative/Coast)
    - Drainage (Rivers/Lakes)
    - Population centers (Cities)
  - Raster data (grid)
    - Elevation, Vegetation (Percent Tree Cover),  
Land Cover, Land Use
- Update interval: Five years to be achieved

## Vector Data

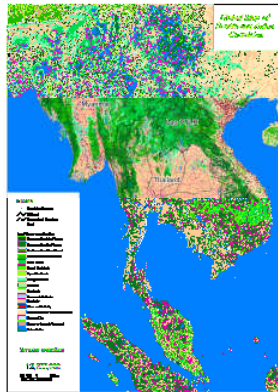


## Raster Data



### Output Sample

**Global Map of Southeast Asian Countries**  
**Transportation**  
**Population Centers**  
**Land Cover**



### Global Mapping Project

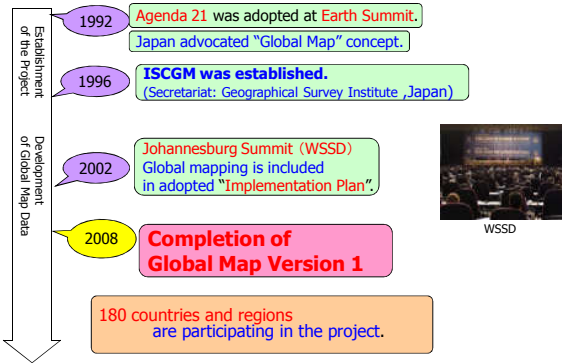
-Who makes Global Map?-

Each National Mapping Organization (NMO) is responsible for developing data of its own country Supported by other NMOs, aid organizations and private companies when required

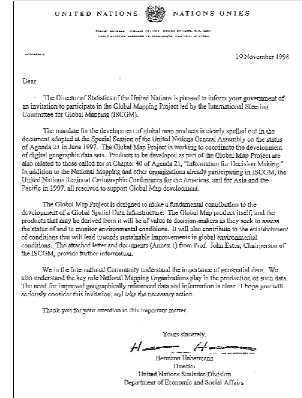
-Coordinating Mechanism-

ISCGM (International Steering Committee for Global Mapping) Established in 1996 Conducts policy making and progress management Secretariat :Geographical Survey Institute(GSI), Japan

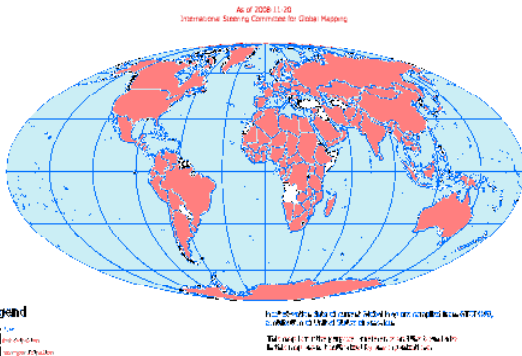
### History of Global Mapping Project



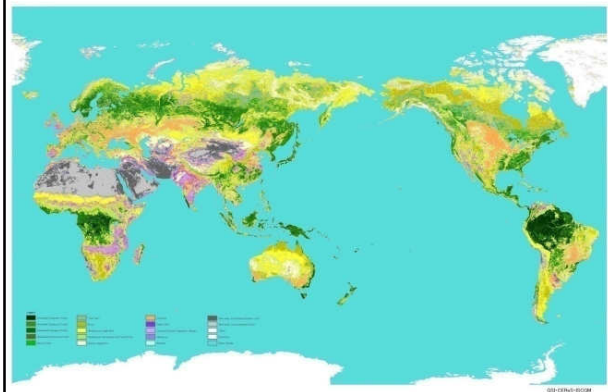
### UN recommendatory letter(1998)



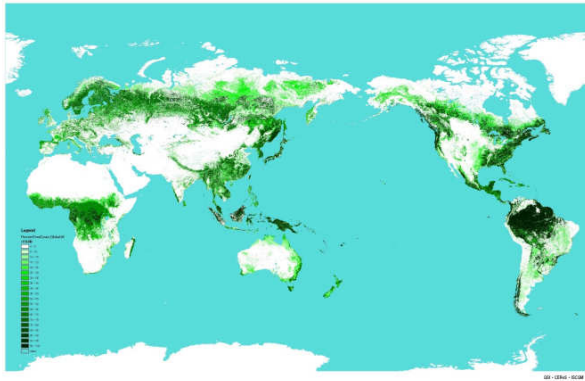
### Status of Participation in Global Mapping Project



### Land Cover



## Vegetation (Percent Tree Cover)



## Capacity Building Programs

- JICA Group Training Course on Global Mapping (implemented by GSI Japan)  
94 experts of 57 countries participated(1994~2008)
- Global Mapping Partnership Program (by MLIT Japan)  
Global Map Africa Seminar:  
86 experts of 35 countries participated(2002~2007)



## Why Global Map ?

-for addressing Climate Change-

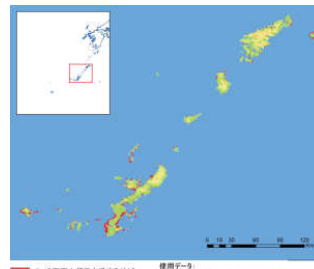
- |               |   |  |
|---------------|---|--|
| Comparability | ← | Global Coverage<br>Unified specifications<br>5-year update |
| Usability     | ← | Essential environmental data<br>Open data policy           |
| Reliability   | ← | Government authorization                                   |



Analyses based on Global Map can contribute to ensuring equitability and effectiveness in Climate Change Policy Framework

## Adaptation

- Global Map can be used for various simulations for adaptation measures.  
Ex: sea level rise, inundation, drought



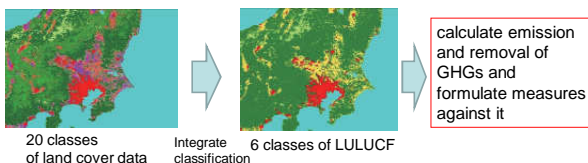
Red areas: to be inundated at 5m- rise in sea level, NANSEI SHOTO (Japan)

## LULUCF

Land Cover data of GM can be used to

- GHGs inventory calculation
- Policy formulation and planning

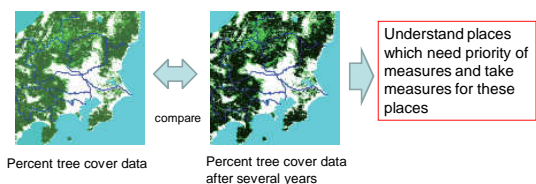
\*Global Map is introduced in "IPCC GPG for LULUCF" and "2006 IPCC Guidelines for national Greenhouse Gas Inventories"

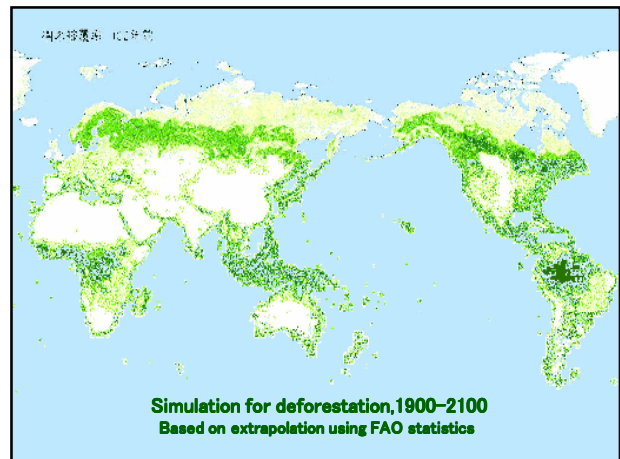
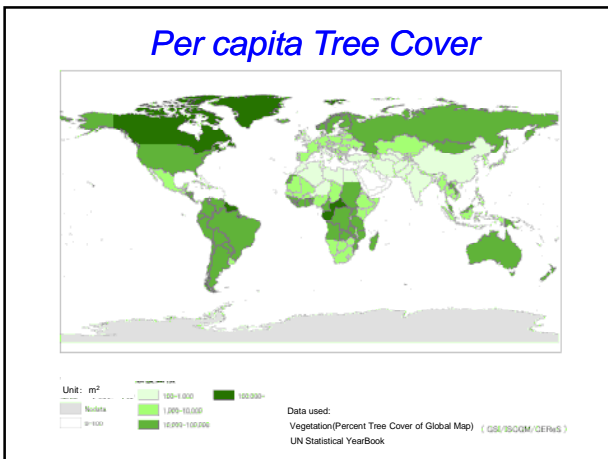


## REDD

Vegetation (Percent Tree Cover)of GM can be used to

- Grasp the forest areas and distribution and their changes
- Policy formulation and planning





### Release of Global Map

- Global Map of each country/region is released from the website of ISCGM (<http://www.iscgm.org>) or of respective participating organizations
- Freely downloadable for non-commercial use
- Depends on data policy of each country /region for commercial use
- Land Cover and Vegetation(Percent Tree Cover) are also available for commercial use.

### Global Map Portal Sites

Global Map data are available.

[www.iscgm.org](http://www.iscgm.org)

Browse on Vegetation (Percent Tree Cover) and Land Cover data. Provide information on examples of use.

[www.globalmap.org](http://www.globalmap.org)

### Summary

Global Map:

- Version 1 was completed and released in 2008
- Is available on the Internet and is free for non-commercial use
- Is authorized by National Mapping Organizations of 180 countries and regions.
- Can be used for addressing Climate Change.

### Thank you

<http://www.iscgm.org>  
<http://www.globalmap.org>  
[sec-iscgm@gsi.go.jp](mailto:sec-iscgm@gsi.go.jp)