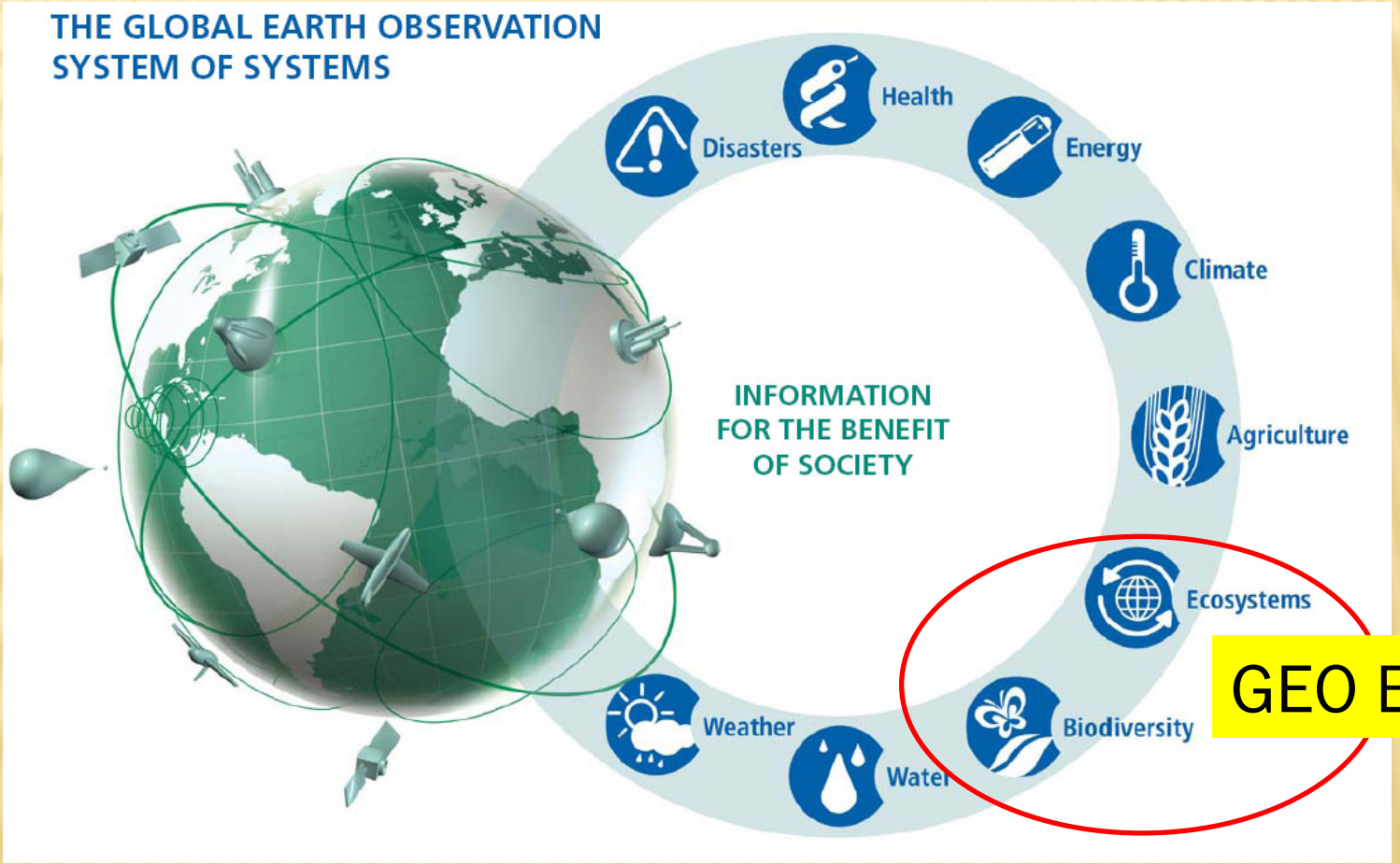
Tetsukazu Yahara

Kyushu University, Japan

ASIA-PACIFIC BIODIVERSITY OBSERVATION NETWORK (AP-BON)

GEO: GROUP ON EARTH OBSERVATION

Launched by the G8; its first plenary meeting held in May 2005 in Geneva



2005-2015: 10 year implementation plan

DEVELOPMENT OF AP-BON

GEO BON Conference

GEO BON Meeting

AP-BON Workshop

1st AP-BON

2nd AP-BON

3rd AP-BON

4th AP BON

Dec 2-4

4th AP-BON

GEOSS-AP symposium

2nd GEOSS-AP

3rd GEOSS-AP

4th GEOSS-AP

5th GEOSS-AP

Postponed due to the disaster

Apr 2-4

5th GEOSS-AP

MOE project started from July 2011 to support AP-BON

AP BON WORKING GROUPS

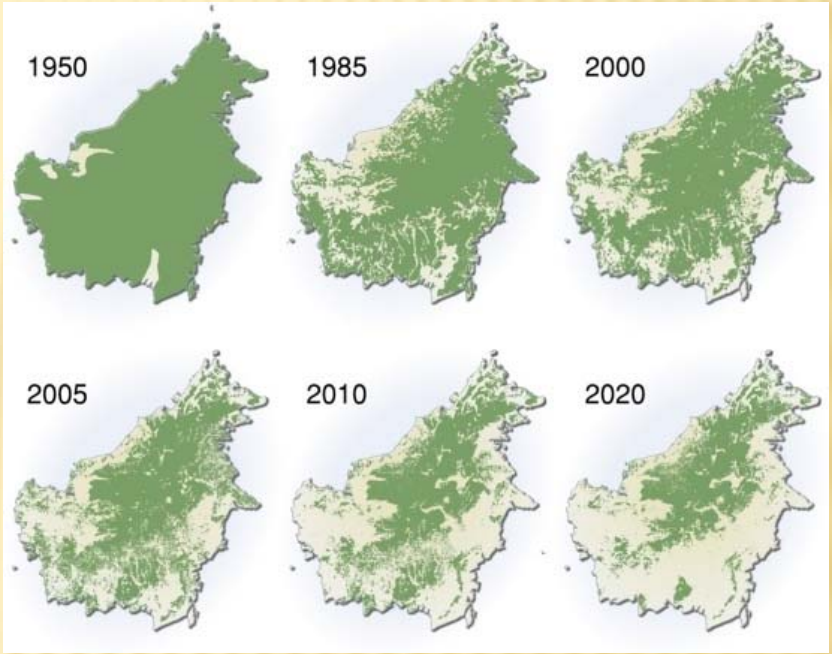
- 1: Genetics/phylogenetic diversity
- 2: Terrestrial species monitoring
- 3: Terrestrial ecosystem change
- 4: Freshwater ecosystem change
- 5: Marine ecosystem change

Draft implementation discussed in 4th AP-BON workshop

- 6: In-situ / remote-sensing integration

To be discussed in the parallel session

FOREST LOSS IN SOUTH EAST ASIA



http://maps.grida.no/region/geoasiap

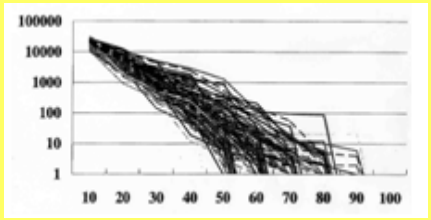
Estimates of species/ecosystem services loss are needed

MOE Strategic R&D 2011-15: themes

- Developing models and tools to observe/assess biodiversity changes in Asia
- Developing models and tools to observe/assess loss of ecosystem services in Asia
- Developing models and tools to identify hot spots and EBSA in Asia

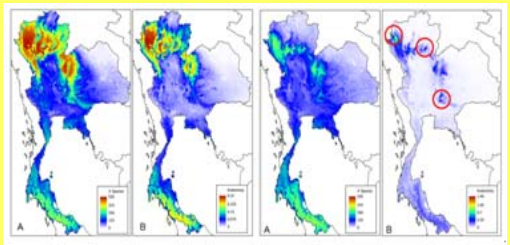
Theme 1

Modeling bio-diversity changes & developing policy



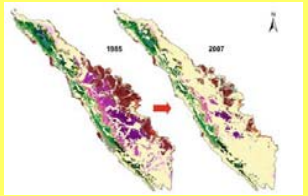
Theme 2

Gene and species diversity changes



Theme 3-5

Changes in forest, freshwater & marine ecosystem



Contribution to IPBES, GEO BON, CBD, REDD+, & National Strategy

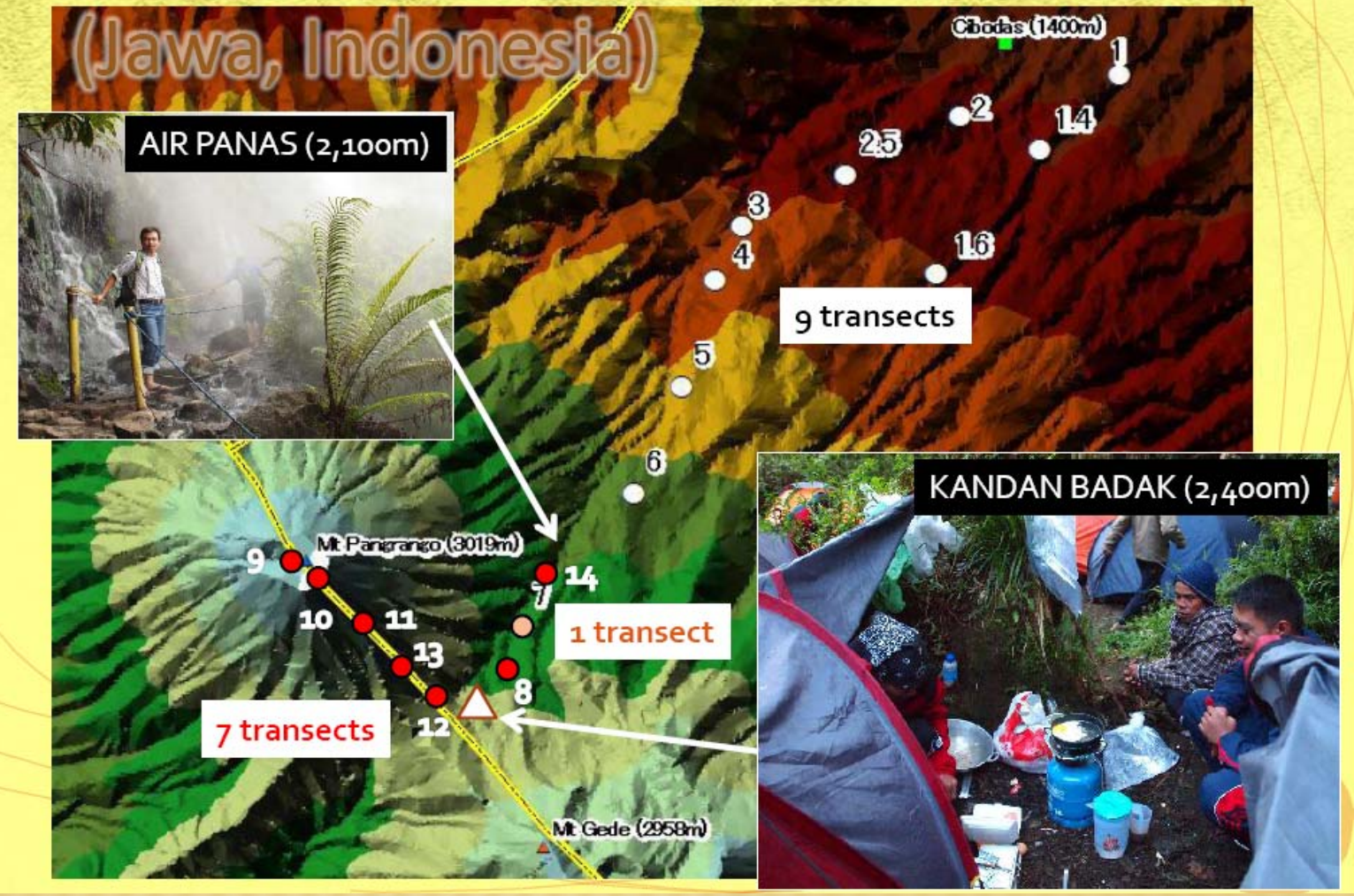
HOW TO QUANTIFY BIODIVERSITY LOSS?

- *Collecting ground data*
  - Plot-based approach
  - Specimen-based approach
  - Transect-based approach
- *Modeling distribution*
  - Niche modeling
- *Assessment with remote sensed data*
  - Time-series records of land use/climate changes
  - Projection of changes in future

How to share/manage/analyze /integrate biodiversity observation data?

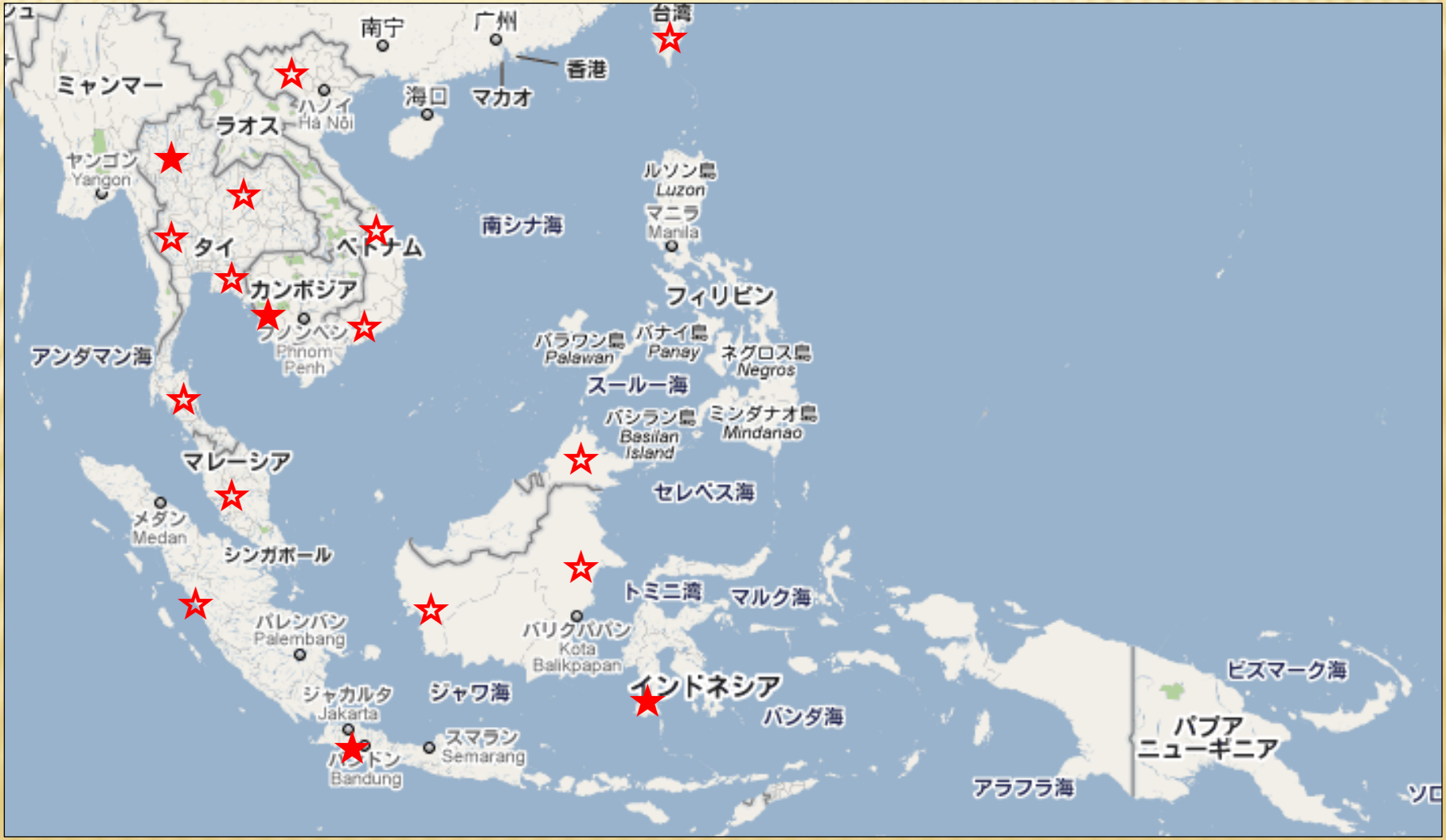
TRANSECT-BASED APPROACH

Gede Pangrango National Park



CANDIDATE MOUNTAINS FOR TRANSECT SURVEYS

Collaboration of Asian scintists is inevitable



FUTURE EARTH: A FRAMEWORK TO UNIFY EXISTING BODIES

four Global Environmental Change Programmes

www.icsu.org/future-earth/home

FUTURE EARTH

1991

2008

1980 1986 1996 2001 2013

GEO BON

Promoted by
DIVERSITAS & NASA

all co-sponsored by ICSU

Toward Green Growth