

# UPDATES ON DEVELOPMENT OF NATIONWIDE GEOSPATIAL DATA MANAGEMENT

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BADAN INFORMASI  
GEOSPASIAL

# CONTENT:

- 1. LEGAL AND POLICY ASPECT**
- 2. GEOSPATIAL INFORMATION FOR SUSTAINABLE DEVELOPMENT**
- 3. NATIONAL GEOSPATIAL REFERENCE SYSTEM AND DATASET DEVELOPMENT**
- 4. STRENGTHENING INA-SDI**
- 5. ONE NATION, ONE GATE, ONE MAP POLICY**
- 6. COLLABORATION WITH PARTICIPATORY MAPPING COMMUNITIES**
- 7. SUMMARY**

# INSTITUTIONAL TRANSFORMATION

LAWS, REGULATIONS, AND POLICIES IN GEOSPATIAL INFORMATION MANAGEMENT

## *BAKOSURTANAL*

- THE NATIONAL BODY OF TRUSTEE IN THE FIELD OF SURVEYS, MAPPING AND SDI



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GEOSPASIAL**

## *GEOSPATIAL INFORMATION AUTHORITY (BIG)*

- THE NATIONAL ORGANIZER IN THE FIELD OF THE TOPOGRAPHIC SURVEY, BASE MAPPING, AND SPATIAL DATA INFRASTRUCTURE
- THE NATIONAL BODY OF TRUSTEE FOR DEVELOPMENT OF THEMATIC MAPPING

# INSTITUTIONAL TRANSFORMATION

LAWS NO. 4 YEAR 2011 REGULATES NATION-WIDE GEOSPATIAL INFORMATION MANAGEMENT



1. TO ENDORSE SINGLE REFERENCE SYSTEM AND DATASET FOR INTEGRITY;
2. TO ENSURE THE AVAILABILITY, ACCESS, AND UTILIZATION WITH ACCOUNTABILITY;
3. TO ACHIEVE USEFULNESS THROUGH COOPERATION , COORDINATION, INTEGRATION AND SYNCHRONIZATION; AND
4. TO ENCOURAGE THE USE OF GEOSPATIAL INFORMATION IN GOVERNMENT ACTIVITY AND PEOPLE'S DAILY LIFE

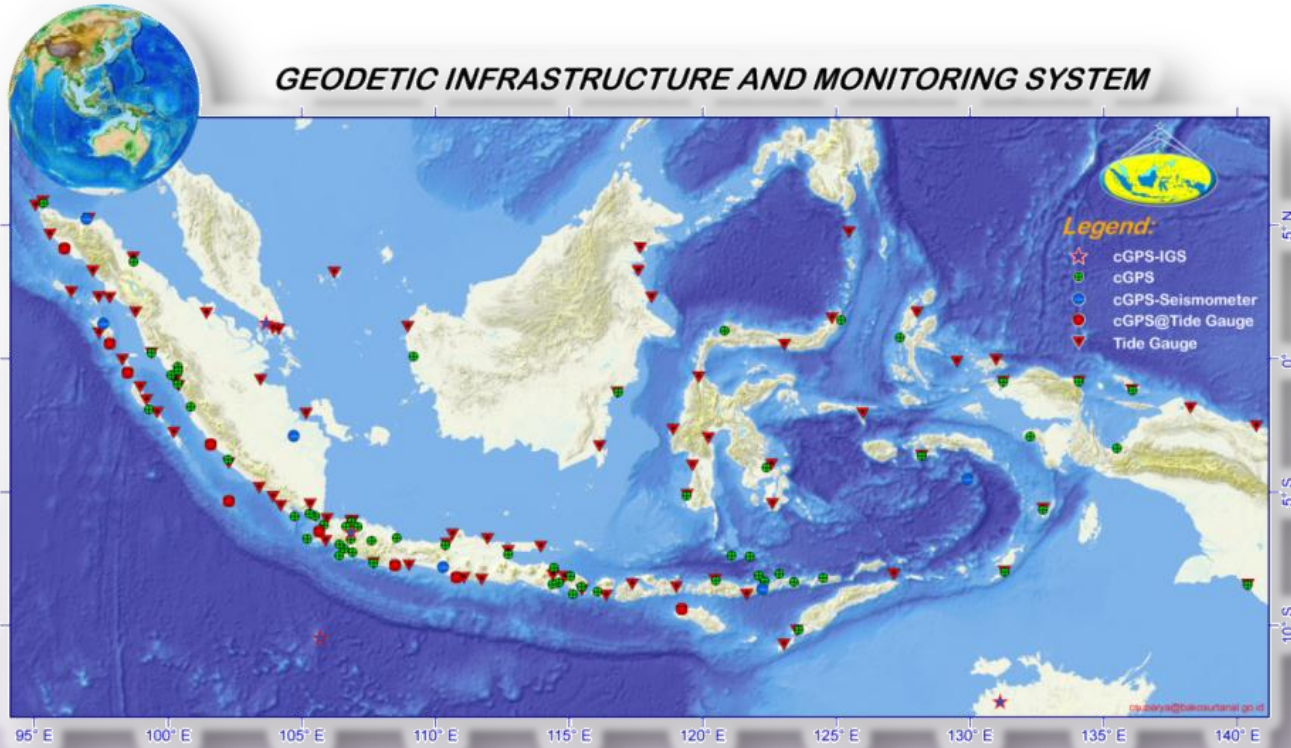
LAW 4/2011, DICTUM 22



**GEOSPATIAL INFORMATION AUTHORITY**  
***BADAN INFORMASI GEOSPASIAL (BIG)***

# GEOSPATIAL DATA FOR SUSTAINABLE DEVELOPMENT

NATIONAL REFERENCE SYSTEM: TO ENSURE INTEGRITY OF GEOSPATIAL INFORMATION

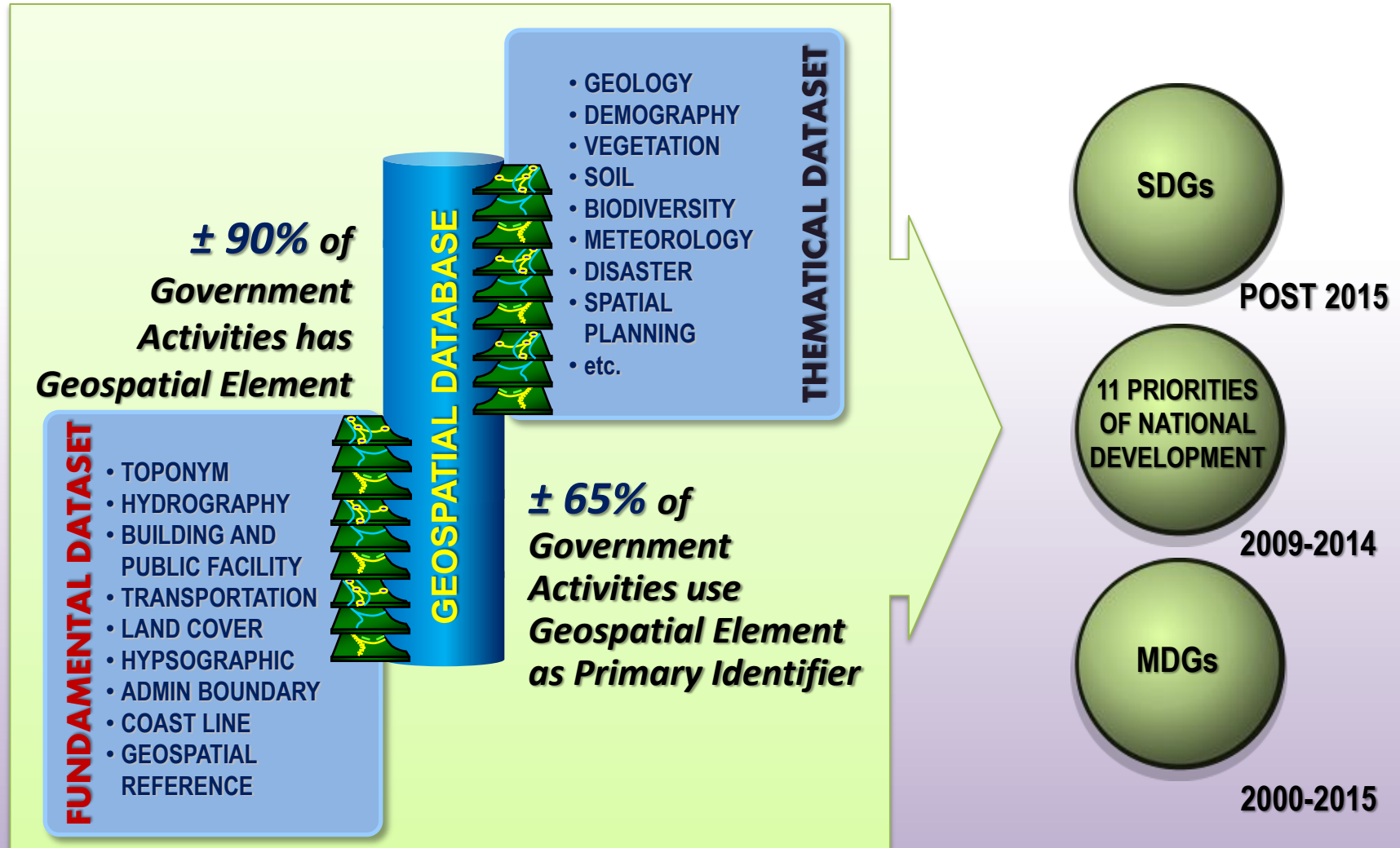


## GEODETIC NETWORK:

- APPROXIMATELY SIX THOUSANDS OF GEODETIC FRAMEWORK FOR NATION-WIDE GEOSPATIAL REFERENCE
- ESCALATING INDONESIAN GPS CORS FOR INTEGRATED GEODETIC NETWORK TO SUPPORT GEODYNAMICS STUDIES AND TSUNAMI EARLY WARNING SYSTEM, AS WELL AS SERVING RTK CORRECTION AND GEODETIC POST PROCESSING.

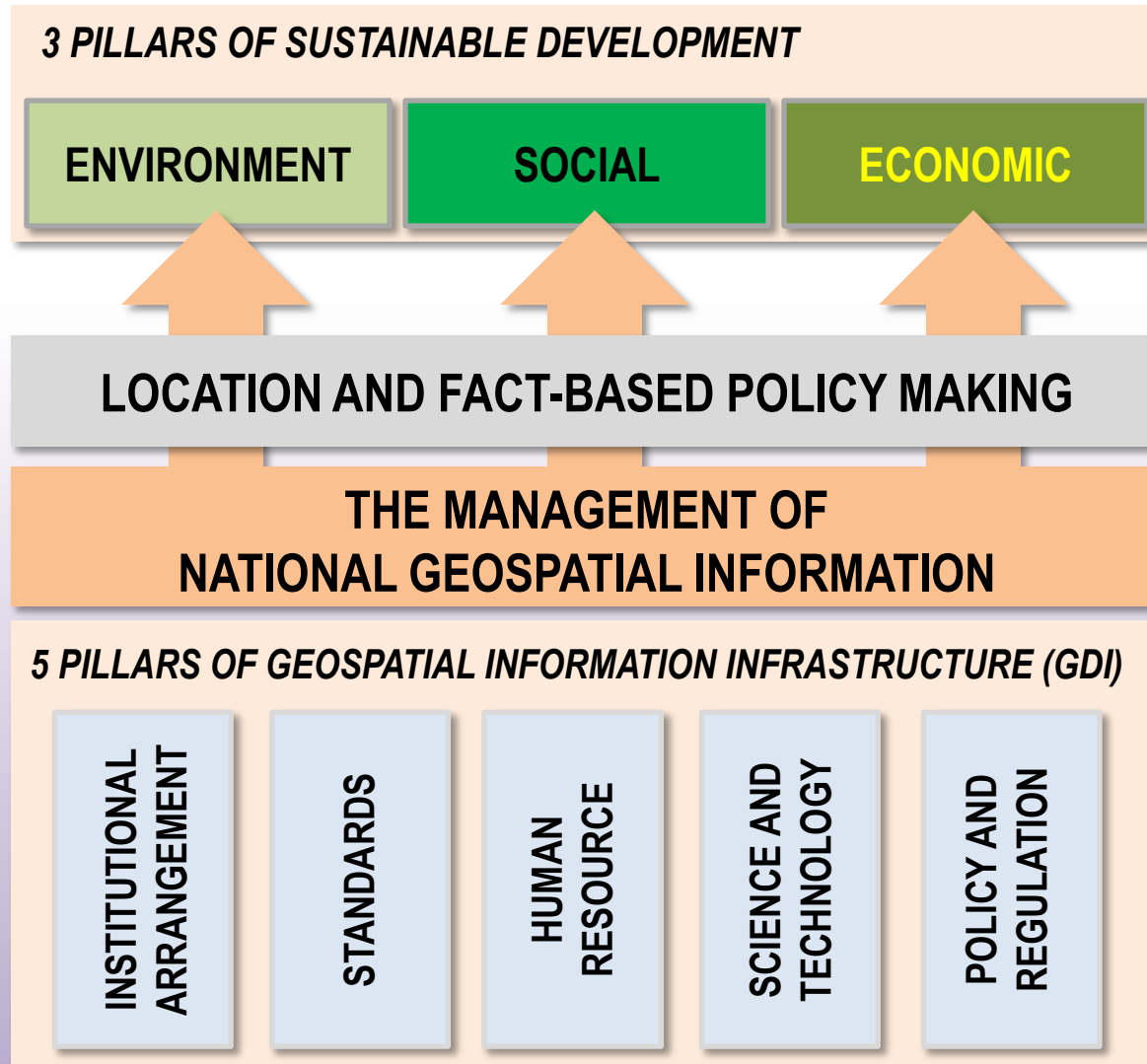
# GEOSPATIAL DATA FOR SUSTAINABLE DEVELOPMENT

## NATIONAL REFERENCE DATASET FOR SUSTAINABLE DEVELOPMENTS



# GEOSPATIAL DATA FOR SUSTAINABLE DEVELOPMENT

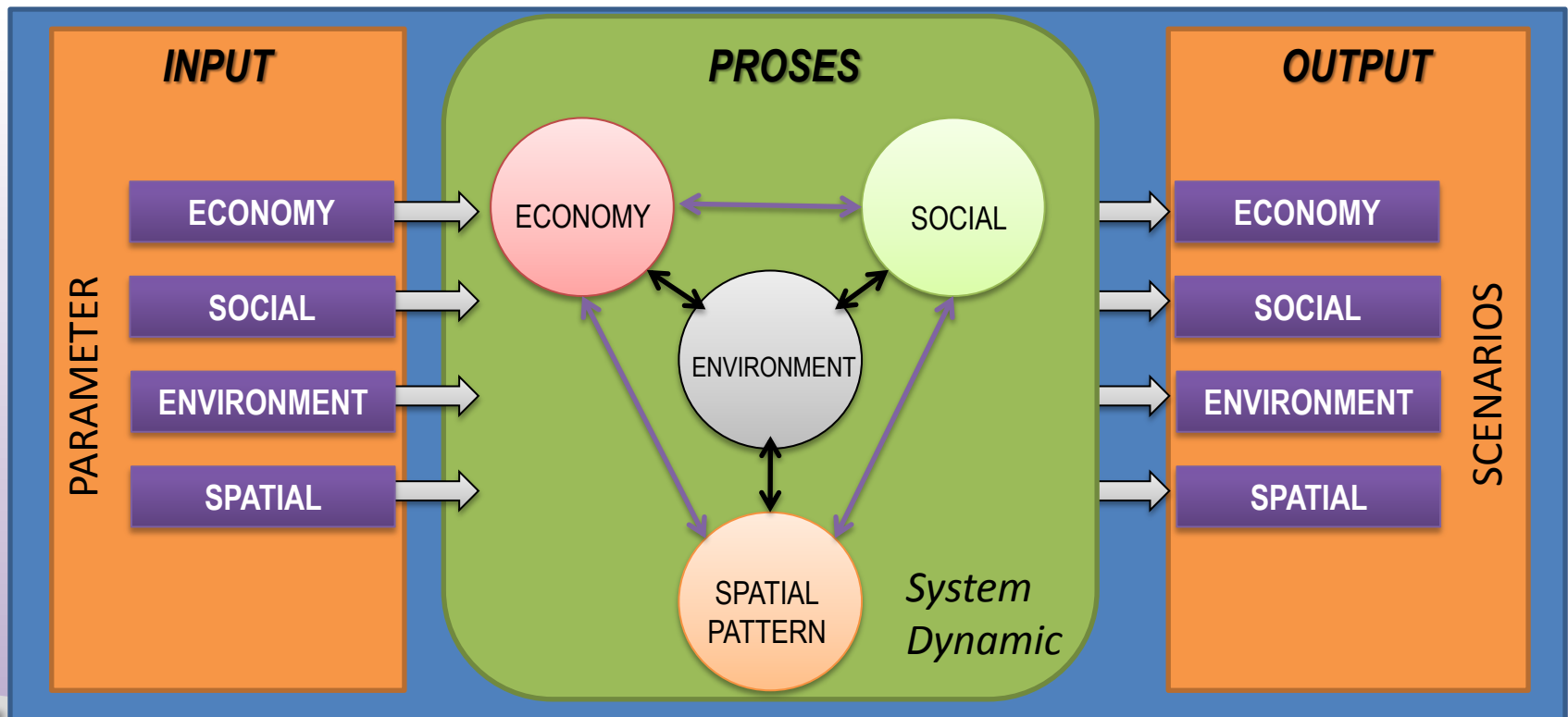
HOW GDI SUPPORT ENVIRONMENT, SOCIAL AND ECONOMIC DEVELOPMENTS



# GEOSPATIAL DATA FOR SUSTAINABLE DEVELOPMENT

## REGIONAL DEVELOPMENT PLANNING: UTILIZATION OF GEOSPATIAL ANALYSES

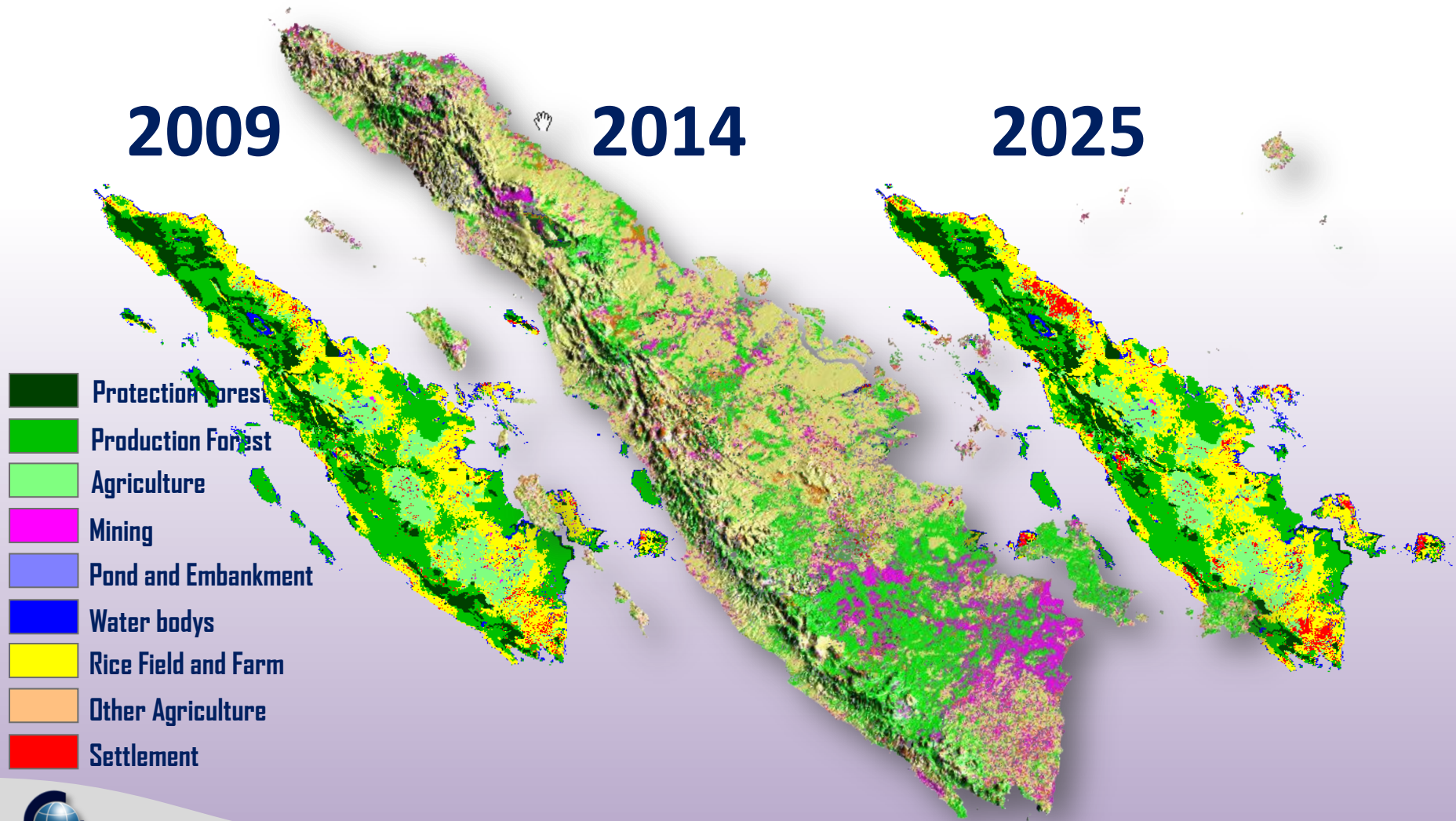
- GEOSPATIAL ANALYSES AND SYSTEM DYNAMIC MODELLING TO GENERATE REGIONAL DEVELOPMENT PLANNING SCENARIOS;
- MODEL USES SUSTAINABLE DEVELOPMENT PILLARS TO VISUALIZE PREDICTED LAND COVER SETTING.





# GEOSPATIAL DATA FOR SUSTAINABLE DEVELOPMENT

## REGIONAL DEVELOPMENT PLANNING: UTILIZATION OF GEOSPATIAL ANALYSES



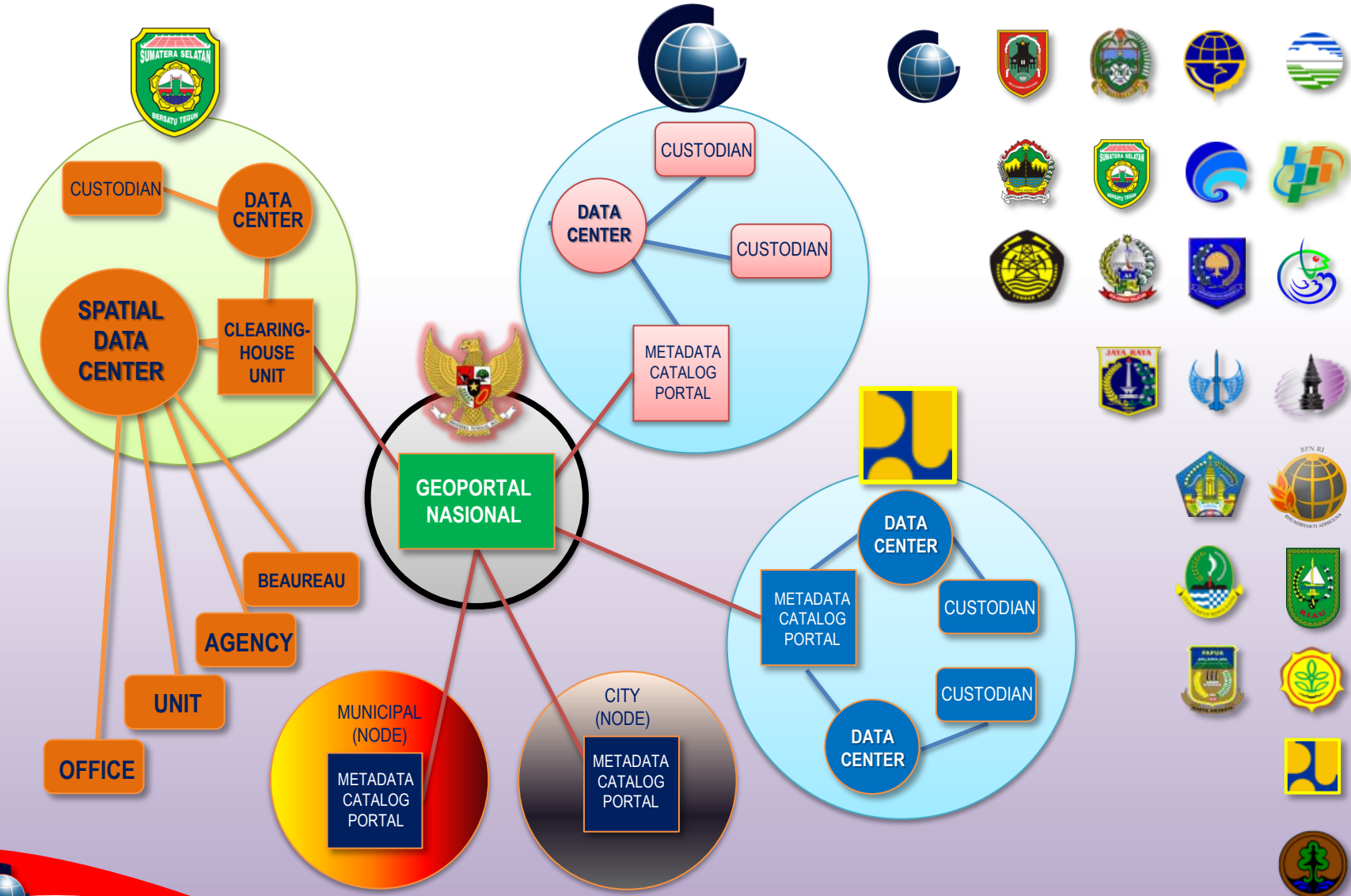
# GEOSPATIAL DATA FOR SUSTAINABLE DEVELOPMENT

## GEOSPATIAL INFORMATION AS A ECOREGION BASELINE FOR PRESERVING BIODIVERSITY



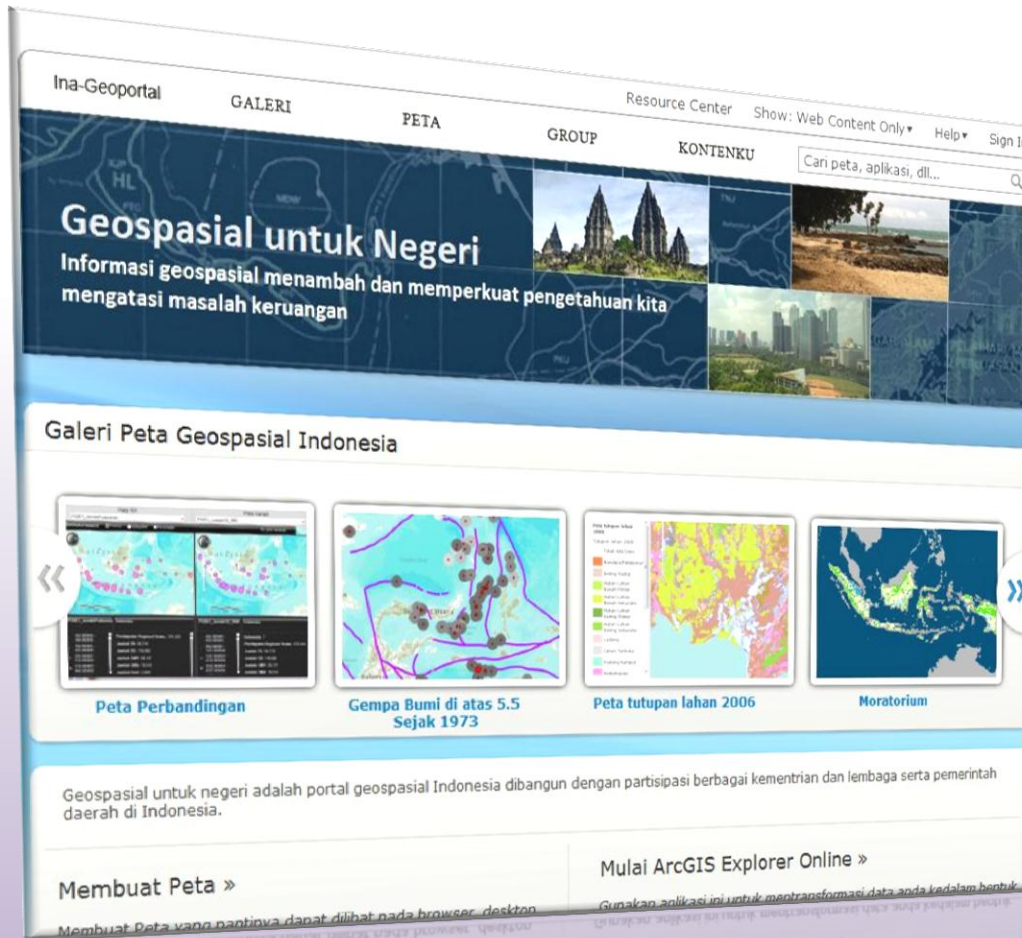
# STRENGTHENING INA-SDI (*Indonesia-geoSpatial Data Infrastructure*)

TARGET: 57 MINISTRIES/AGENCIES, 34 PROVINCES, & 500 MUNICIPALITIES



# STRENGTHENING INA-SDI (<http://tanahair.indonesia.go.id>)

NATIONAL GEOPORTAL AS SINGLE GATEWAY TO AUTHORIZED GEOSPATIAL INFORMATION



## MAIN FUNCTIONS:

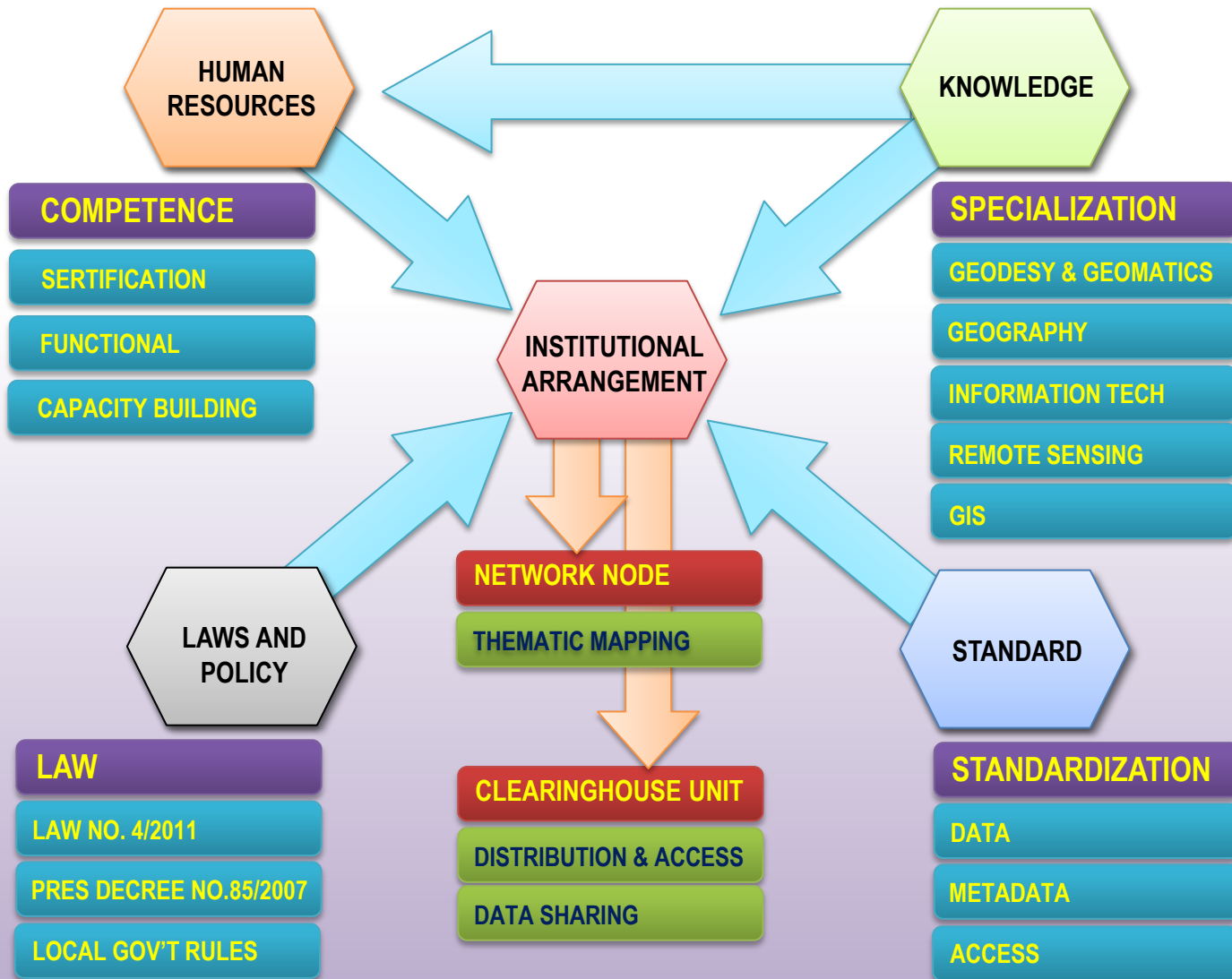
- ❖ SEARCH & DISCOVER
- ❖ INTEGRATE
- ❖ SHARE DATA AND APPS
- ❖ PRODUCE THE MAPS
- ❖ PUBLISH MAPS
- ❖ ACCESS VIA MOBILE DEVICE

**EMPOWER CITIZENS TO BE ABLE TO DEVELOP AND PUBLISH ACCURATE AND ACCOUNTABLE GEOSPATIAL INFORMATION**



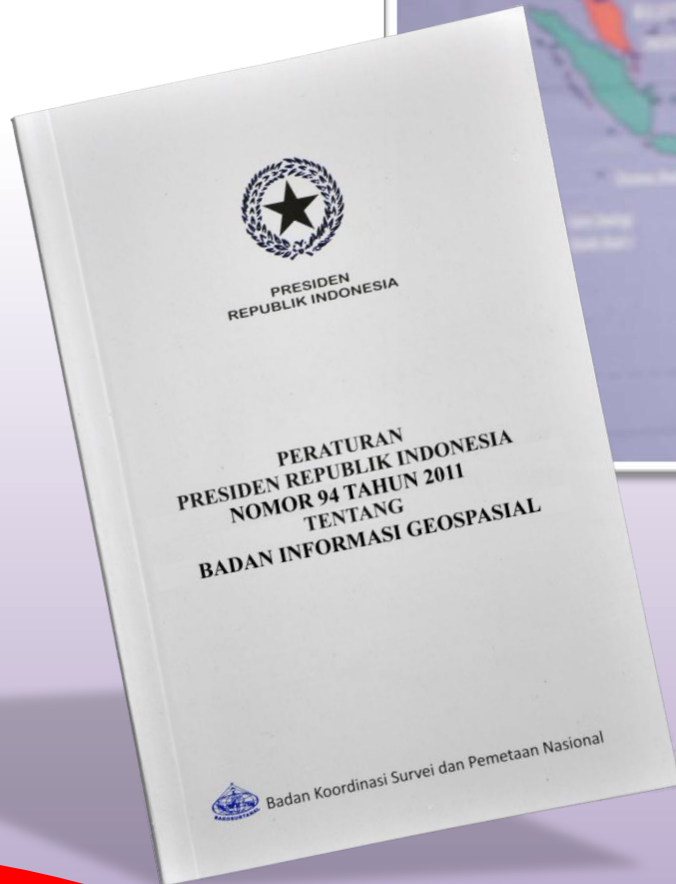
# STRENGTHENING INA-SDI

## MORE THAN JUST NATIONAL GEOPORTAL!



# ONE NATION, ONE GATEWAY, ONE MAP POLICY

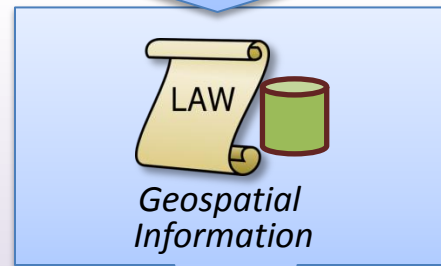
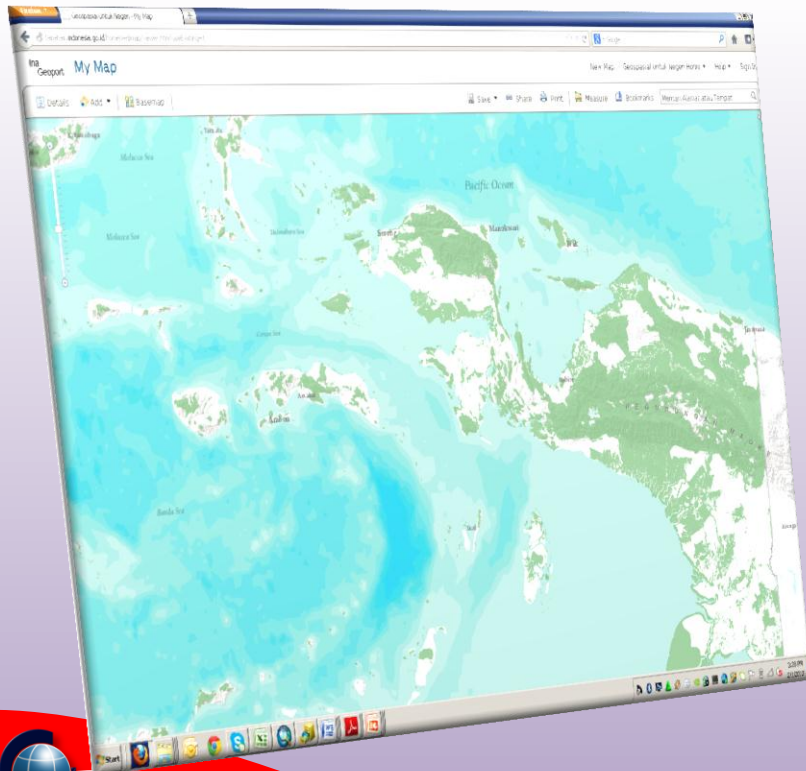
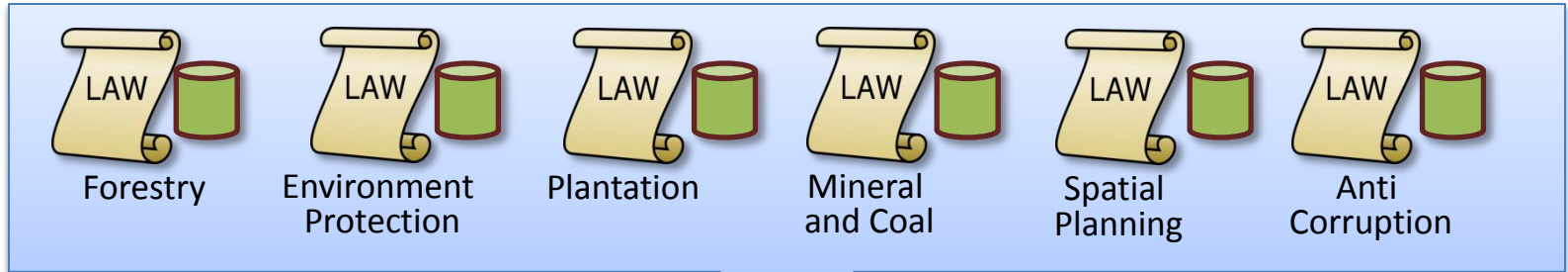
OUTSTANDING SUPPORTS FROM OUR LEADERS



*Geospasial data are needed by all government institutions and communities to improve quality of decisions making in all aspects of national developments.*

# ONE NATION, ONE GATEWAY, ONE MAP POLICY

GOOD GOVERNANCE FOR SUSTAINABLE FOREST MANAGEMENT



*a reliable reference for enabling decision makers to avoid boundary dispute and make the right decisions*

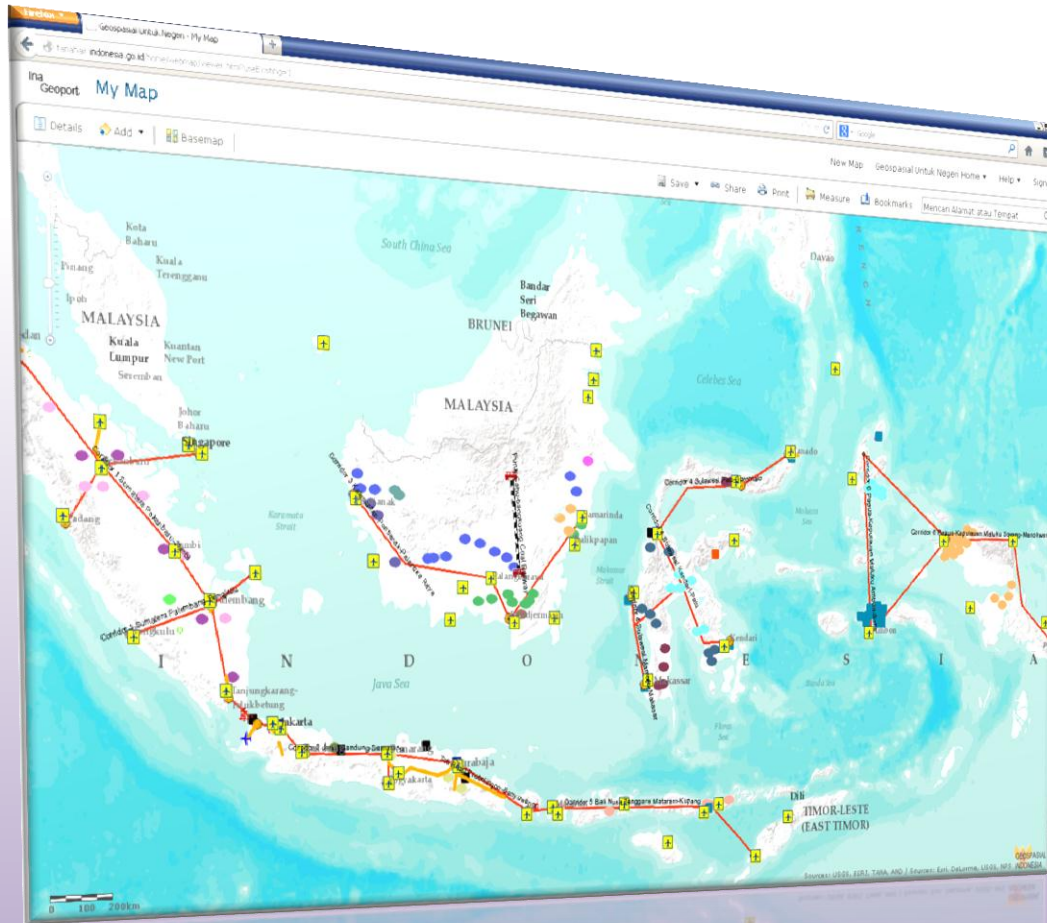
**REVISED SINGLE FORESTRY MAP EVERY SIX MONTHS WITH PUBLIC PARTICIPATION FROM (AS PEER REVIEW)**

**ONE LAND, ONE NATION AND ONE LANGUAGE. INDONESIA also needs to be united by ONE MAP.**



# ONE NATION, ONE GATEWAY, ONE MAP POLICY

PROVIDING ACCESS TO GEOSPATIAL INFORMATION TO SUPPORT INDONESIAN ECONOMIC ACCELERATION AND EXTENSIFICATION



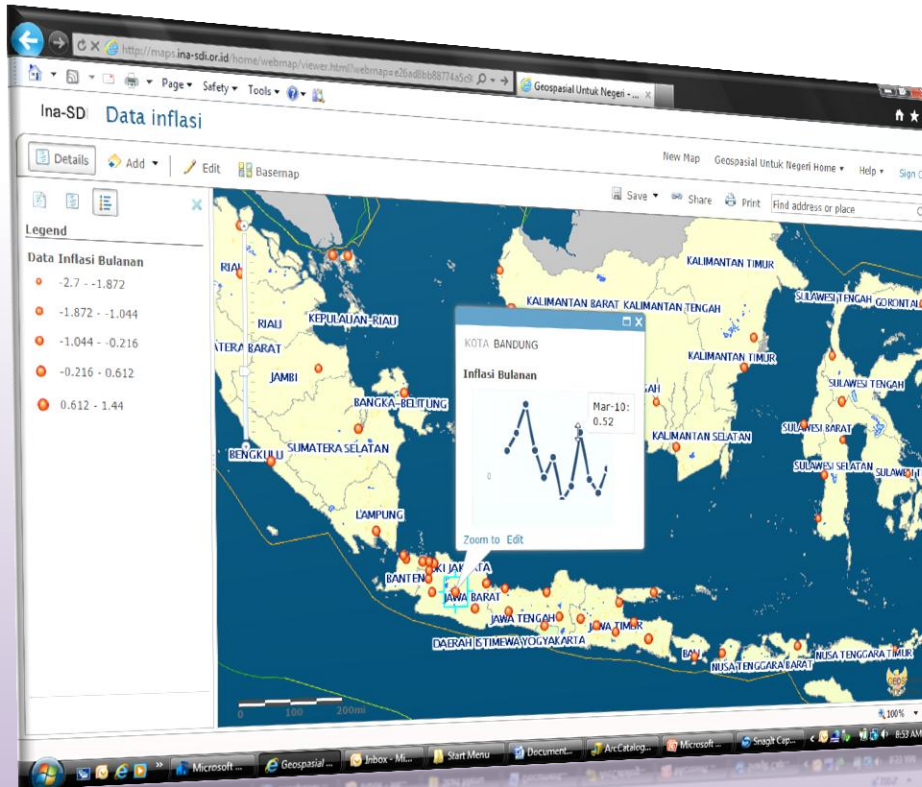
GLOBAL DYNAMICS AND ECONOMIC CONDITION DRIVES COUNTRIES TO DO **ECONOMIC TRANSFORMATION**

- CHANGING GLOBAL SITUATION RAISES COMPETITIONS
- BOOSTING EXPORT PRODUCTS NOT RAW MATERIALS
- RAISING PROSPERITY LEVEL TO MEET CONSTITUTION DEMAND
- OVERCOMING HIGH RATE OF POVERTY AND ECONOMIC GAPS



# ONE NATION, ONE GATEWAY, ONE MAP POLICY

PROVIDING A TOOL TO COORDINATE IN INDONESIAN ECONOMIC ACCELERATION AND EXTENSIFICATION



<http://geoservices.ina-sdi.or.id>:

Power Plant 10.000MW Phase I (MoESDM);  
Fishpond (MoKKP);



<http://geoservice.bakosurtanal.go.id>:

State Border; Provincial Border; Land Cover



<http://gis.dephub.go.id>:

Poverty Line (BPS)



<http://sigi.pu.go.id>:

Spatial Plannings

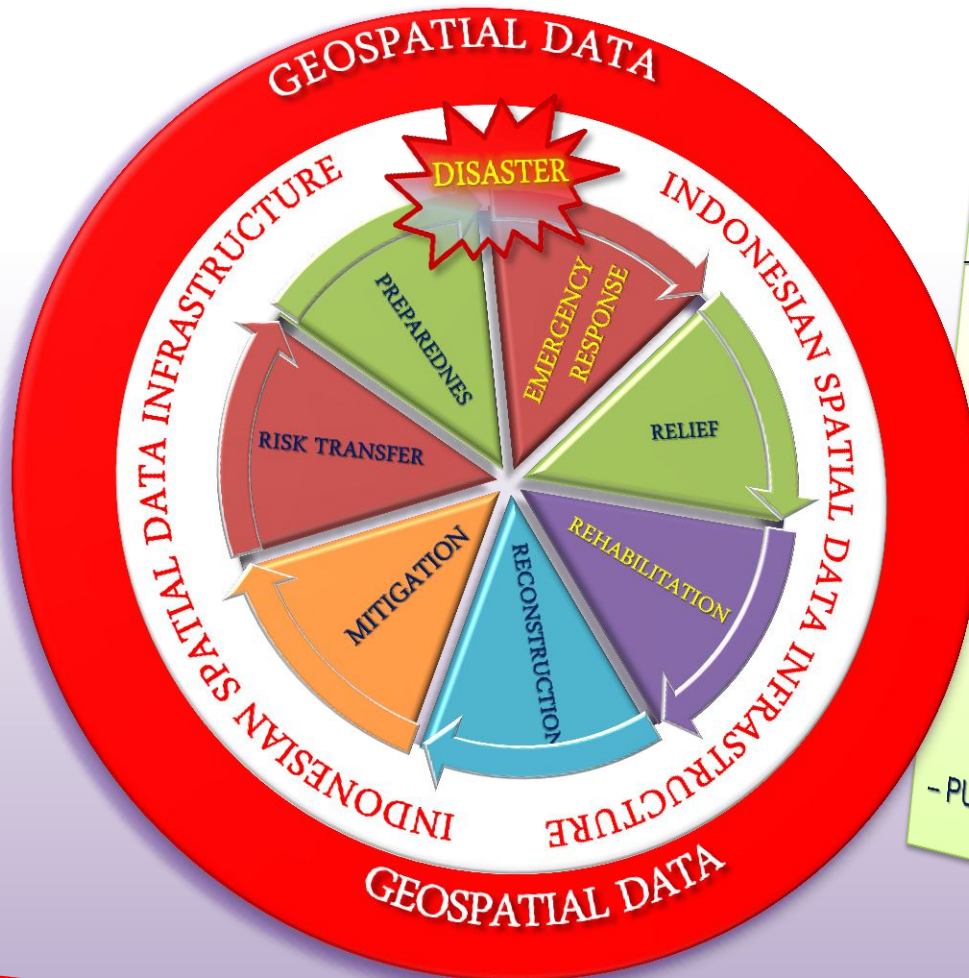


<http://geoservices.ina-sdi.or.id>:

Environment

# ONE NATION, ONE GATEWAY, ONE MAP POLICY

PROVIDING GEOSPATIAL INFORMATION IN ALL PHASE OF DISASTER MANAGEMENT



- **EXTRA-TERRESTRIAL:**
  - ASTEROID IMPACT
- **INTERNAL GEO-DYNAMIC PROCESSES:**
  - EARTHQUAKE, TSUNAMI, VOLCANIC ERUPTION
- **EXTERNAL GEO-DYNAMIC PROCESSES:**
  - LANDSLIDE, SOIL EROSION, LAND DEGRADATION
- **HYDRO-METEOROLOGICAL:**
  - FLOODS, TROPICAL STORMS, DROUGHT
- **ECOLOGICAL / ENVIRONMENTAL:**
  - POLLUTION, CROP DISEASE,
- **EPIDEMICS:**
  - SARS, HIV / AIDS, AVIAN FLU
- **TECHNOLOGICAL:**
  - INDUSTRIAL ACCIDENTS
- **CONFLICTS:**
  - PUBLIC DISORDERS, POLITICAL, TERRORISM

# ONE NATION, ONE GATEWAY, ONE MAP POLICY

PROVIDING GEOSPATIAL INFORMATION IN ALL PHASE OF DISASTER MANAGEMENT



# ONE NATION, ONE GATEWAY, ONE MAP POLICY

PROVIDING GEOSPATIAL INFORMATION IN ALL PHASE OF DISASTER MANAGEMENT



**EMPOWER ALL LEVEL OF  
DECISION MAKINGS TO BE  
ABLE TO COLLABORATE  
DISASTER RESPONSES FROM  
ACCURATE AND ACCOUNTABLE  
GEOSPATIAL INFORMATION**

# COLLABORATION WITH PARTICIPATORY MAPPING (PM)

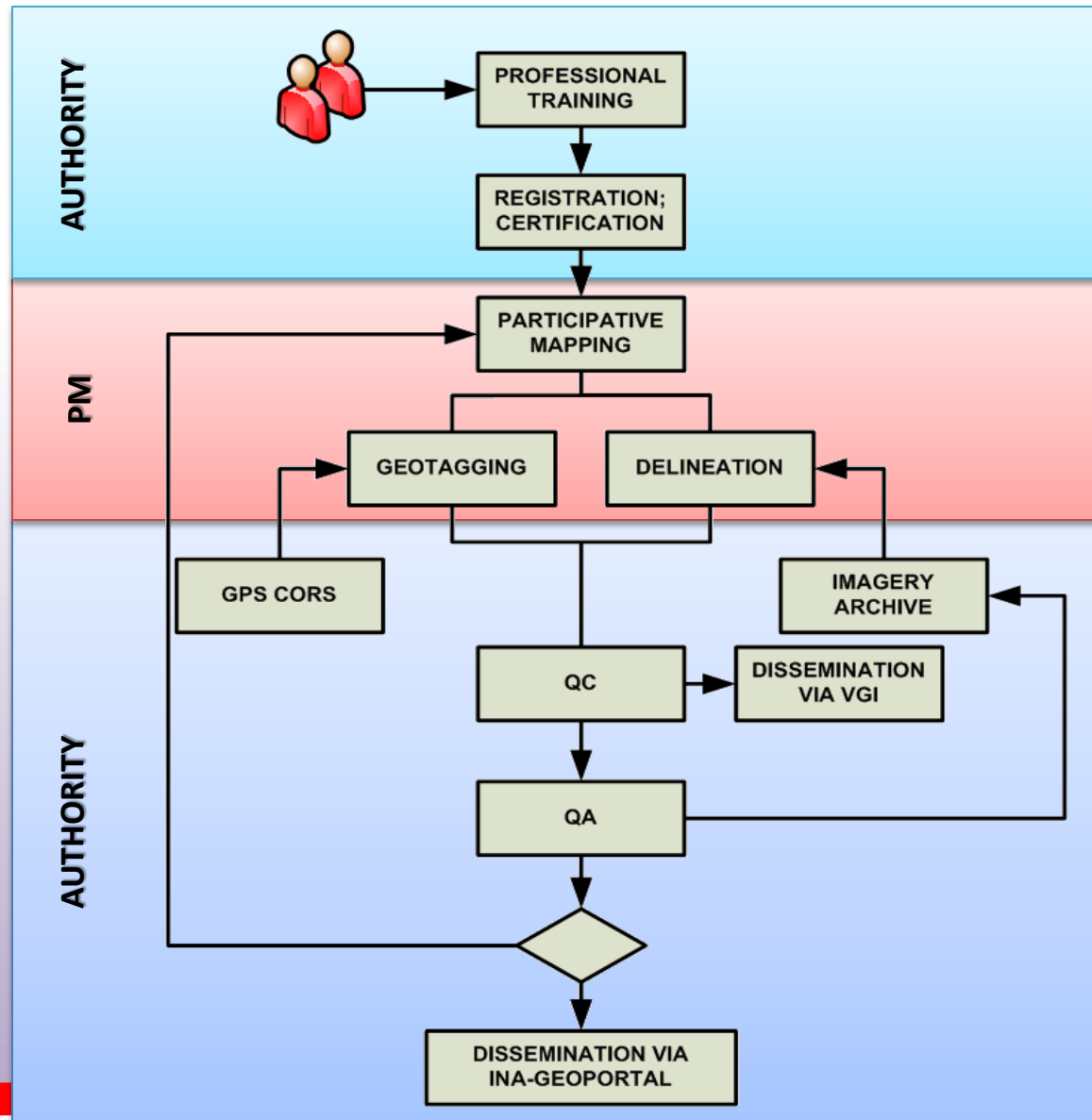
CONSTRUCTIVE COLLABORATION TO ENRICH DATA FOR SUSTAINABLE DEVELOPMENT

## COLLABORATION:

- ❖ QUALITY CONTROL
- ❖ PROFESSIONAL TRAINING
- ❖ INCENTIVES
- ❖ CONTINUOUS PARTNERSHIP

## PARTNERS:

- ❖ OPENSTREETMAP INDONESIA
- ❖ NETWORK FOR PARTICIPATORY MAPPER (JKPP)
- ❖ INDONESIAN DISASTER COMMUNITY (MBI)
- ❖ NAVIGASI.NET



# SUMMARY

1. IMPROVEMENTS IN QUALITY AND QUANTITY, AS WELL AS IN GEOSPATIAL INFORMATION MANAGEMENT WILL BENEFIT INDONESIA TO IMPLEMENT SUSTAINABLE DEVELOPMENT.
2. INA-SDI ABLE TO BE FUNCTIONED AS “COMMON MEDIA” FOR ALL LEVEL OF GOVERNMENTS, PRIVATE SECTORS, AND CITIZENS TO ACHIEVE SUSTAINABLE DEVELOPMENT GOAL EFFECTIVELY, THROUGH COOPERATION, CORDINATION, INTEGRATION AND SYNCHRONIZATION; AND.
3. UN-GGIM COULD PROMOTE GLOBAL SPATIAL DATA INFRASTRUCTURE PROGRAMS TO INITIATE SYNCHRONIZED EFFORT TO MOVE THE SUSTAINABLE DEVELOPMENT AGENDA FORWARD, THROUGH THE ACHIEVEMENT OF THE INTERNATIONALLY AGREED DEVELOPMENT GOALS, SO WE WILL LIVE IN THE FUTURE WE WANTED.