UPDATES ON DEVELOPMENT OF NATIONWIDE GEOSPATIAL DATA MANAGEMENT

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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
BAKOSURTANAL
- The National Body of Trustee in the Field of Surveys, Mapping and SDI

BADAN INFORMASI 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, REGULATIONS, AND POLICIES IN 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 INFRASTRUCTURE AND MONITORING SYSTEM

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 EARiNi WARNING SYSTEM, AS WELL AS SERViNG RTK CORRECTION AND GEODETiC POST PROCESSiNG.
GEOSPATIAL DATA FOR SUSTAINABLE DEVELOPMENT

FUNDAMENTAL DATASET
- TOPONYM
- HYDROGRAPHY
- BUILDING AND PUBLIC FACILITY
- TRANSPORTATION
- LAND COVER
- HYPSOGRAPHIC
- ADMIN BOUNDARY
- COAST LINE
- GEOSPATIAL REFERENCE

THEMATICAL DATASET
- GEOLOGY
- DEMOGRAPHY
- VEGETATION
- SOIL
- BIODIVERSITY
- METEOROLOGY
- DISASTER
- SPATIAL PLANNING
- etc.

± 90% of Government Activities has Geospatial Element

± 65% of Government Activities use Geospatial Element as Primary Identifier

11 PRIORITIES OF NATIONAL DEVELOPMENT

SDGs
POST 2015

MDGs
2000-2015

2009-2014

NATIONAL REFERENCE DATASET FOR SUSTAINABLE DEVELOPMENTS
GEOSPATIAL DATA FOR SUSTAINABLE DEVELOPMENT
HOW GDI SUPPORT ENVIRONMENT, SOCIAL AND ECONOMIC DEVELOPMENTS

3 PILLARS OF SUSTAINABLE DEVELOPMENT

- Environment
- Social
- Economic

LOCATION AND FACT-BASED POLICY MAKING

THE MANAGEMENT OF NATIONAL GEOSPATIAL INFORMATION

5 PILLARS OF GEOSPATIAL INFORMATION INFRASTRUCTURE (GDI)

- Institutional Arrangement
- Standards
- Human Resource
- Science and Technology
- Policy and Regulation
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

2009

2014

2025

Protection Forest
Production Forest
Agriculture
Mining
Pond and Embankment
Water bodys
Rice Field and Farm
Other Agriculture
Settlement
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](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!
Geospatial 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

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 10,000 MW 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

CONSTRUCTIVE COLLABORATION TO ENRICH DATA FOR SUSTAINABLE DEVELOPMENT
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, CoORDINATION, 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.