Wealth Accounting and the Valuation of Ecosystem Services (WAVES) 3rd FORUM ON NATURAL CAPITAL ACCOUNTING FOR BETTER POLICY

Peluncuran Produk Hasil Kegiatan WAVES 2019

Deputi Menteri Bidang Kemasritman dan Sumber Daya Alam
Kemen PPN/Bappenas

Jakarta, 26 Juli 2019
Pembangunan Rendah Karbon

Konsep dan kebijakan PRK akan diintegrasikan ke dalam RPJMN 2020-2024

**ECONOMY**
- Green technology investment
- Reducing energy subsidies

**ENERGY**
- Energy efficiency
- Development of renewable energy generation
- Increased use of biofuels

**AGRICULTURE**
- Increasing productivity of agricultural land
- Implementation of sustainable agriculture

**LAND**
- Peatland Restoration
- Retorestation
- Restrain the rate of conversion of primary to secondary forests
- Restrain the rate of conversion of secondary to plantation forest
- Restrain deforestation from forests to non-forests
- Prevent peat fires
- Implementation of Reduced Impact Logging (RIL)
- Moratorium of peatland, primary forest and implementation of spatial planning

**PLANTATION**
- Increasing the productivity of oil palm land through ISPO and RSPO land certification

**FISHERIES**
- Increased human resources capacity
- Boat fuel efficiency
- Floating storage technology
- Increased aquaculture & seaweed productivity

**WASTE**
- Handling domestic waste
- Management of industrial waste
- Management and Industrial efficiency

Pendekatan PRK

Hasil yang diharapkan:
- Pertumbuhan ekonomi terjaga
- Emisi GRK menurun sesuai komitmen
- Deplesi SDA dan daya tampung lingkungan hidup dapat dikurangi
Global partnership promoting sustainable development by making sure that natural resources are mainstreamed in the development planning and national economic accounts.

www.wavespartnership.org
Natural capital accounting helps GoI meet its targets

- **CO₂**
  - To reduce greenhouse gas (GHG) emissions by 29% by 2030 relative to business as usual, and to a higher target of up to 41%

- 70% ISPO certified from the production target of 42 million tons in 2020

- 30% mixture of biodiesel (palm oil) for vehicle fuel by 2025

- 12.7 million ha of land for social forestry

- 12.7 million ha of land for social forestry
and support implementation of plans
WAVES Program In Indonesia

Three blocks of activities:

To provide support on data management and account compilation:
- Macro environmental-economic indicators
- Measure and patterns of land cover and land use
- Introduction of water in the macroeconomic context at watershed level
- Relevance of measuring ecosystem services and assets in peatlands

Further enhancement and expansion of the existing natural capital accounts built under the SISNERLING umbrella:
- SISNERLING assessment and recommendations for integration of standard approaches
- Long term roadmap for SISNERLING implementation

To guarantee proper insertion of natural capital concepts in the policy dialogue of the country:
- Informing natural capital conceptual approach in the System Dynamics models, specifically in the IV2045 mode, BAPPENAS Environmental Directorate
- Developing data protocol to govern official data exchange mechanism among data custodian and key agencies to support SEEA based policy analysis
- Integration of macroeconomic indicators in policy frameworks

This block serves as a catalyst for the whole WAVES program. The aim will be to implement a strong communication and engagement strategy.
Concept of Natural Capital Accounting

Natural resources and ecosystem assets

Physical Values

Monetary Values

Valuing the Invisible
SEEA: International standard for NCA

How is this different?

- **Resources**
  - Stocks only

- **ASSET**
  - Stocks and flows
  - Comprehensive
  - International standard

Source: BPS, UNSD, Eigenraam et al (2012)
One step closer to science based policy making
Production of policy relevant high quality data and accounts

**Land Cover Accounts**
- Drafts published by BPS
- Time trend 1990-2015 per 5 years
- Forests, scrubs, plantations, shrubs, swamps – 22 classes
- All of Indonesia

**Land Extent Accounts**
- Snapshot 2017, 2015
- Beyond land cover maps extent in Ha (spatially explicit) of – perennial crops – acacia, oil palm, rubber, coffee, banana, eucalyptus, forests, water
- Sumatra and Kalimantan

**Water account**
- 2014, 2016 SEEA standard using SWAT model
- Water supply and Water use
- Citarum Watershed

**Wealth account**
- 1995-2014
- Links to macroeconomic framework
- Natural capital – cropland, energy, forests and protected areas, metals, pasture land
- Feeds into wealth (human+produced+natural) capital
- All of Indonesia

**Peat Accounts**
- Time period cover: 1990-2015
- Cover, extent and Ecosystem Services monetized for– Forest products – timber and biomass, biodiversity, carbon sequestration, commodities – plantation and paddy
- Sumatra and Kalimantan
Helps deliver some powerful messages: mismatch between reported and actual land use.

Exhibit A: Land conversion not fully reflected in official data, as Oil Palm cover underestimated by ~43% in Sumatra.
Improved access and availability of high quality data to policy makers

Data Flow – Data Exchange Process based on Ranperpres One Data
The Deputy Minister of Maritime and Natural Resource of Bappenas Decree Number KEP.53/DEP.3/10/2017 on the establishment of the Coordinating Team for the Development of the System for Integrated Environmental and Economic Accounting

1. Law No. 32/2009 on Environmental Protection and Management (UUPLH 32/2009)
2. Law No. 26/2006 on Spatial Planning (UUPR 26/2007)
3. PP46/2017
Inspiring knowledge exchanges, successful batch of trained specialists, first natural capital knowledge and policy database published

7th WAVES Annual Meeting in Rwanda

Discussion on Fiscal Potential Report

Indonesia Country Report

WAVES Indonesia Brief (in English and Bahasa)

Articles on Website
www.wavespartnership.org

Natural Capital Policy Forum 26-27 November 2018
Way Forward:

Systematic development of NCA has helped strengthen institutional foundations and processes to deliver across national and regional initiatives and mandates.

Several regional government regulations that require data to feed into natural accounting exercises for assessing carrying capacity, cost benefit analysis, spatial planning and environmental management. Example:
- Bandung’s regulation PERDA 23/2013
- Gorontalo’s regulation 4/2016
- Padang’s regional regulation 8/2015
- West Kalimantan’s provincial regulation 3/2014
- West Java’s regulation.
Terima Kasih