





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 Kemaritiman dan Sumber Daya Alam Kemen PPN/Bappenas

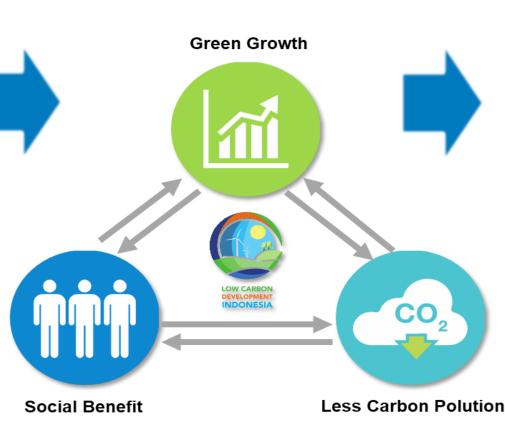
Jakarta, 26 Juli 2019



## Pembangunan Rendah Karbon

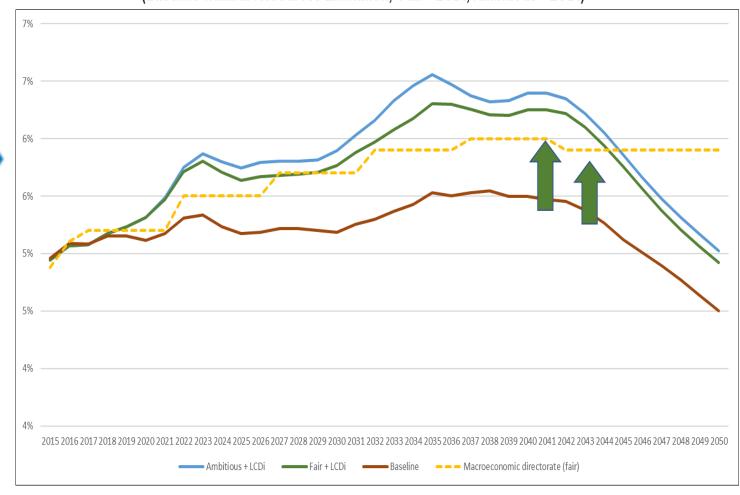
# 

#### Pendekatan PRK



# RPJMN 2020-2024 (Ekonomi Hijau & Rendah Karbon)

## Comparison Scenario of GDP Growth (Baseline Natural Resources Limitation, Fair+ LCDi, Ambitious +LCDi)



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



#### **ECONOMY**

- Green technology investment
- Reducing energy subsidies



#### **PLANTATION**

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



#### **ENERGY**

- Energy efficiency
- Development of renewable energy generation

**FISHERIES** 

Increased human resources

Floating storage technology

· Increased aquaculture &

seaweed productivity

Boat fuel efficiency

capacity

· Increased use of biofuels



#### **AGRICULTURE**

- Increasing productivity of agricultural land
- Implementation of sustainable agirculture



#### **WASTE**

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



#### **LAND**

- Peatland Restoration
- Reforestation
- 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



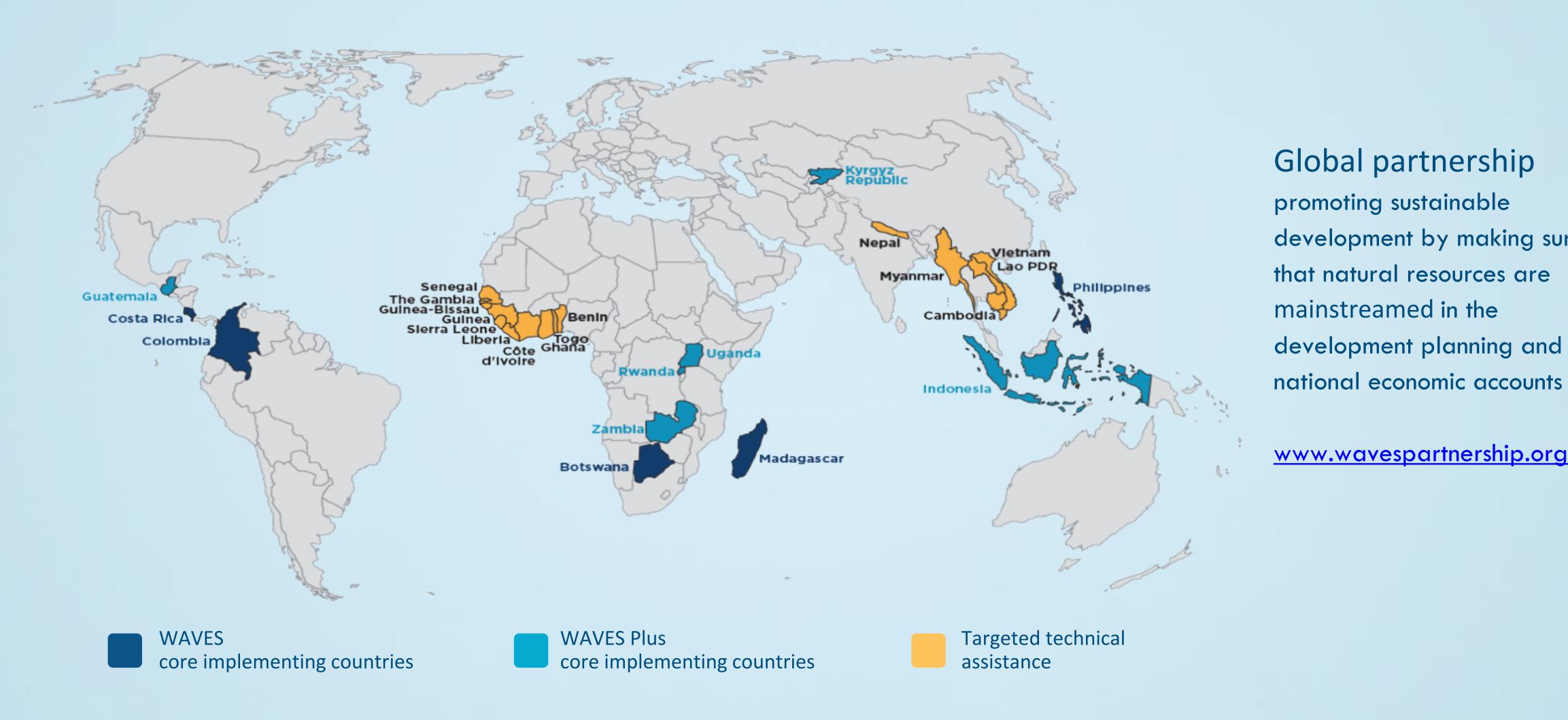
## Hasil yang diharapkan:

- Pertumbuhan ekonomi terjaga
  - Emisi GRK menurun sesuai komitmen
- Deplesi SDA dan daya tampung lingkungan hidup dapat dikurangi



## Overview WAVES Program

Wealth Accounting and the Valuation of Ecosystem Services (WAVES)



Global partnership promoting sustainable development by making sure that natural resources are mainstreamed in the development planning and

www.wavespartnership.org

## Natural capital accounting helps GoI meet its targets









NCA laid the foundation to support the government in achieving SDGs targets



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



Grand Design
Prevention of
Forest Fires,
Gardens and Land



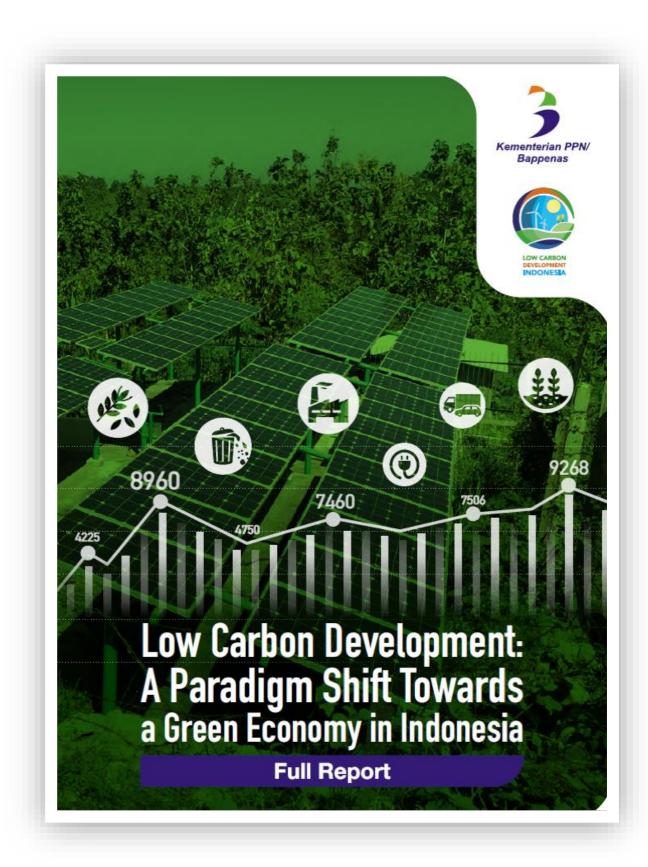
12.7 million
ha of land for social
forestry



12.7 million ha of land for social forestry

## .....and support implementation of plans

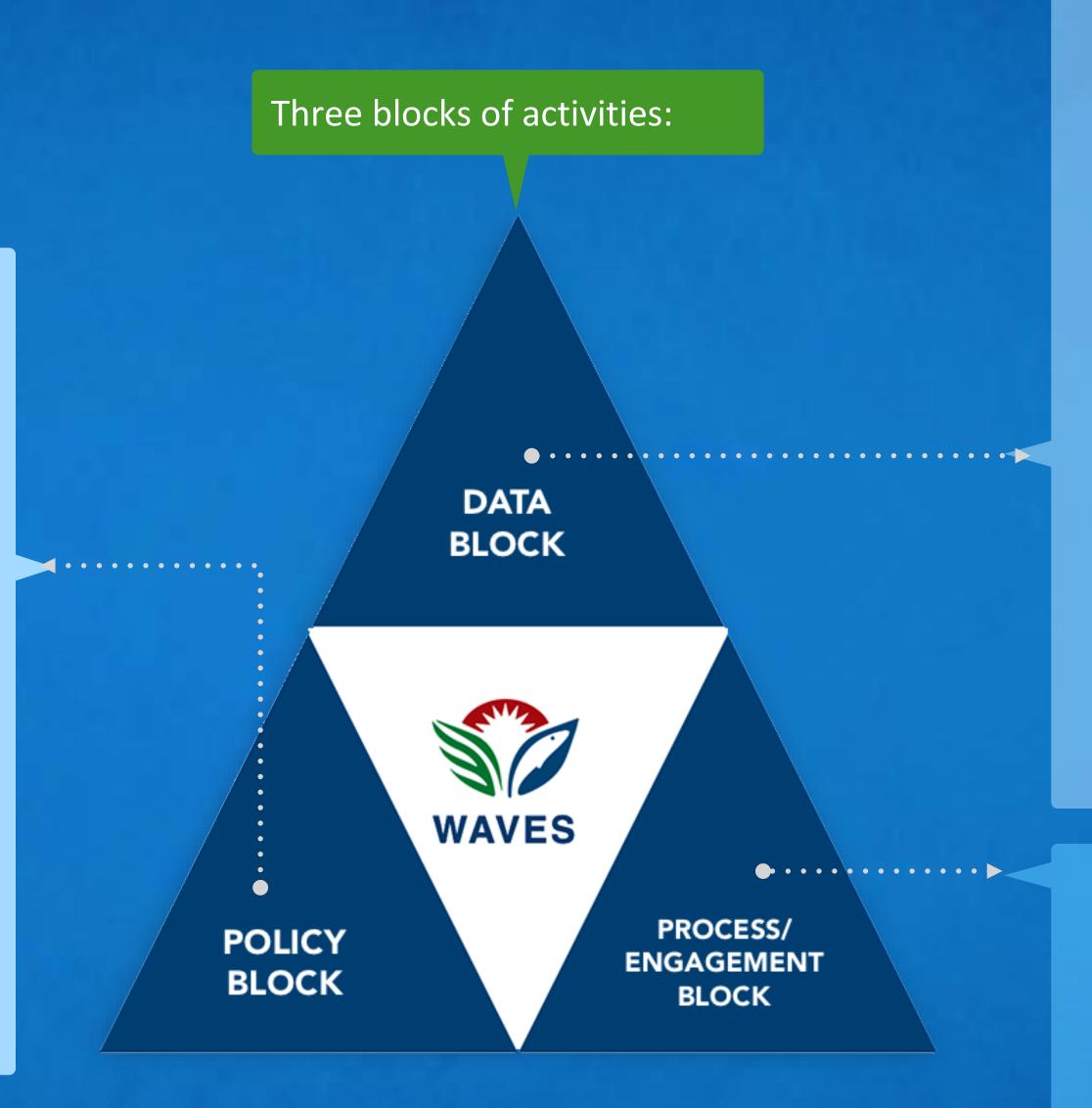




## WAVES Program In Indonesia

# 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



# To provide support on data management and account compilation.

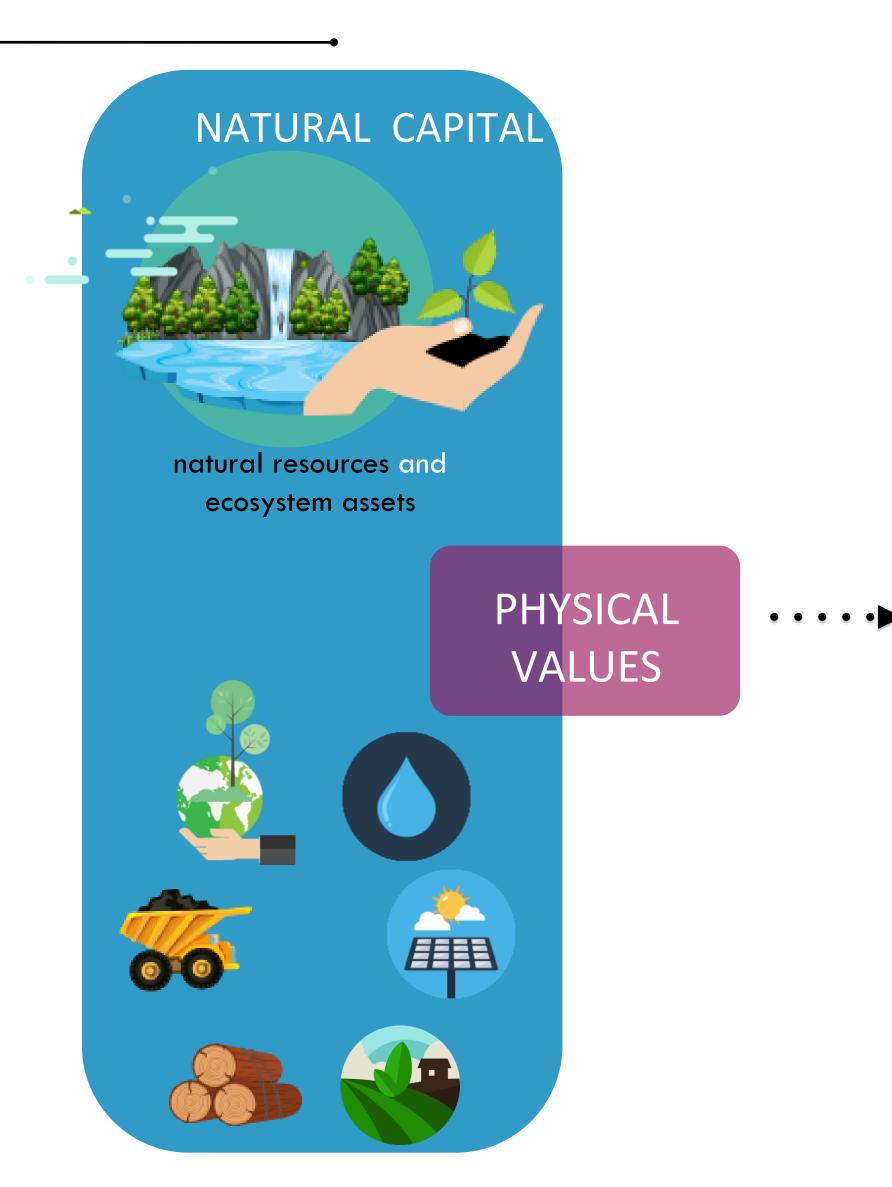
- Macro environmental-economic indicators
- Measure and patterns of land cover and land use
- Introduction of water in the macroeconomic context at watershed level
- Relevance of measuring ecosystem services and assets in peatlands

# Further enhancement and expansion of the existing natural capital accounts built under the SISNERLING umbrella.

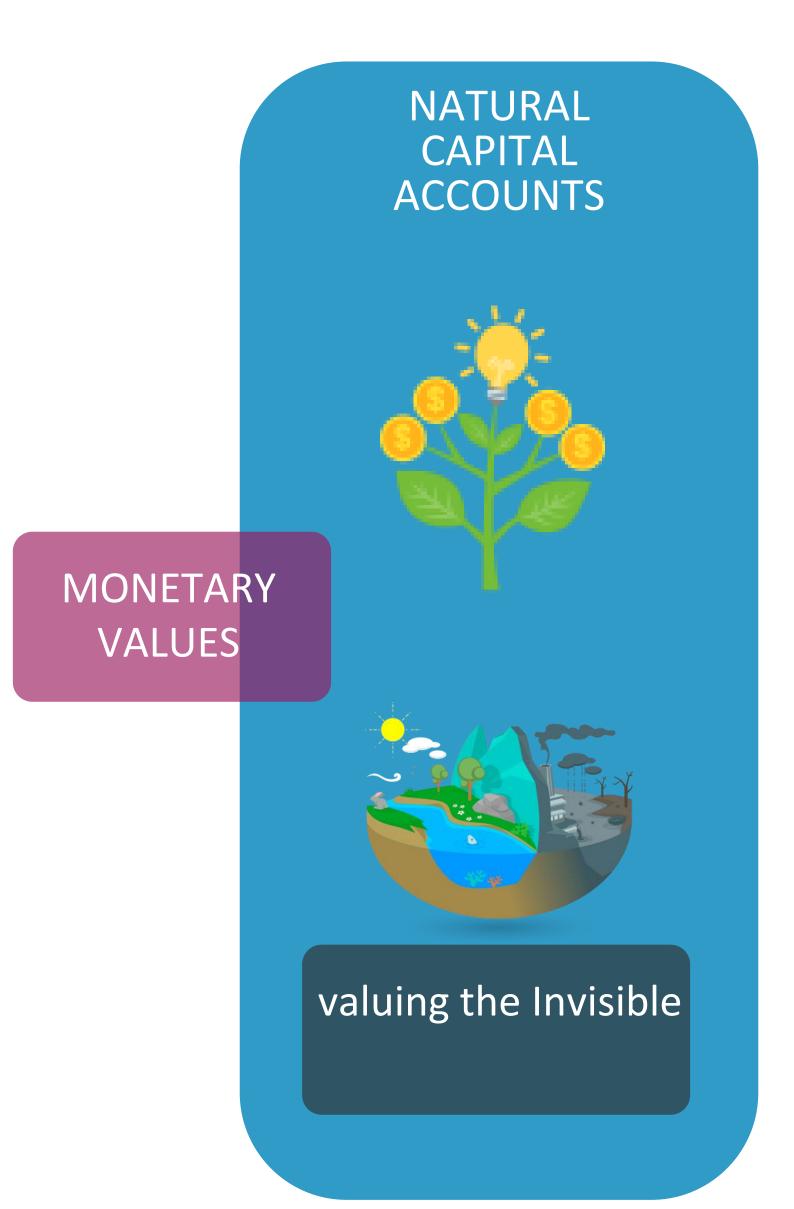
- SISNERLING assessment and recommendations for integration of standard approaches
- Long term roadmap for SISNERLING implementation

This block serves as a catalyzer for the whole WAVES program. The aim will be to implement a strong communication and engagement strategy.

## Concept of Natural Capital Accounting



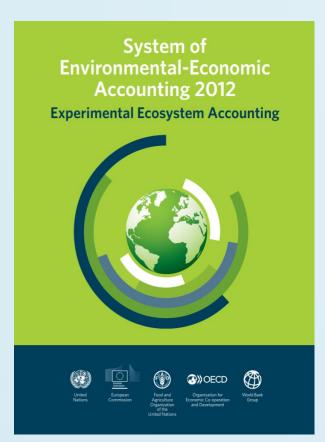




## SEEA: International standard for NCA



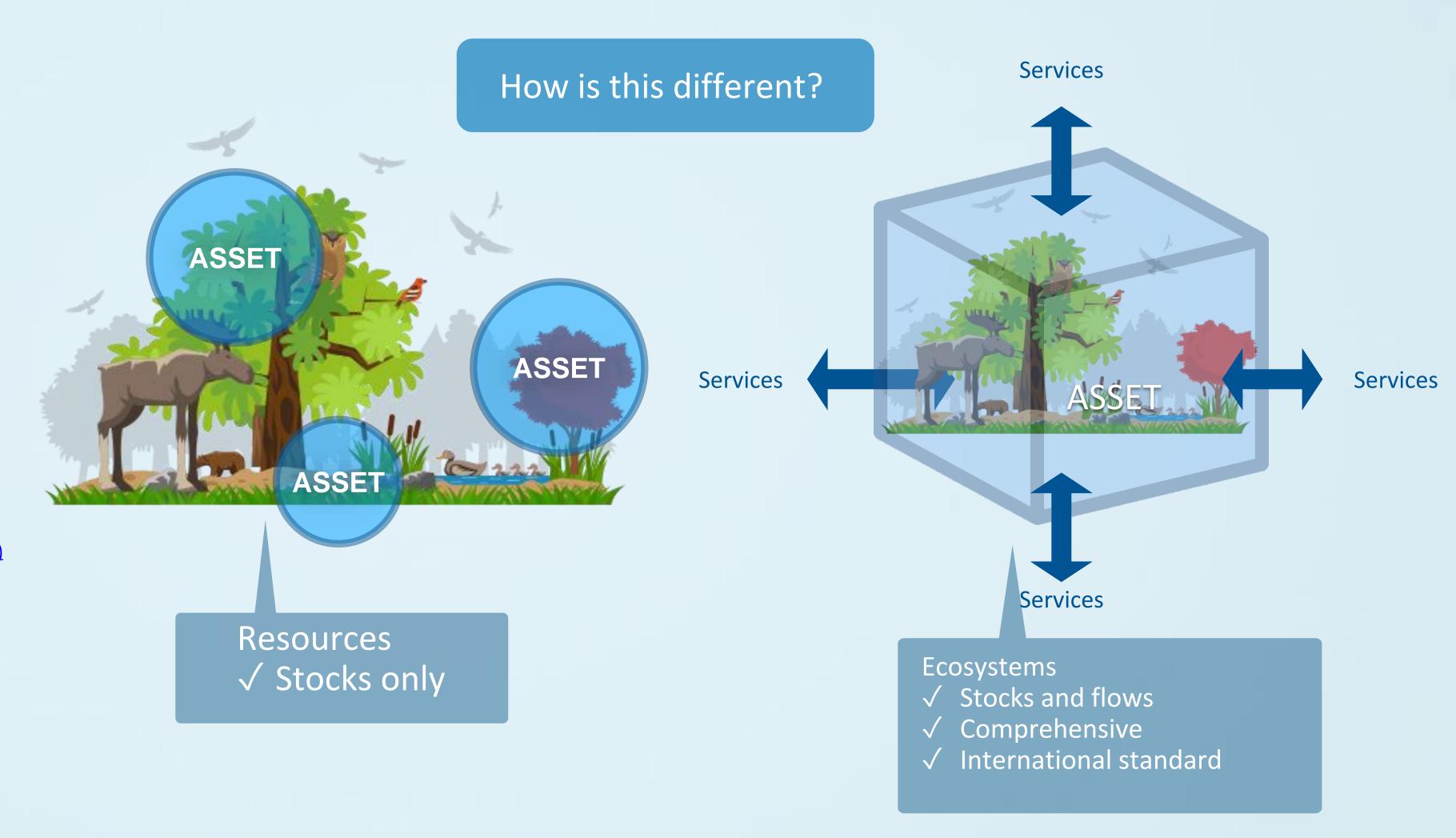
## SISNERLING Source: BPS

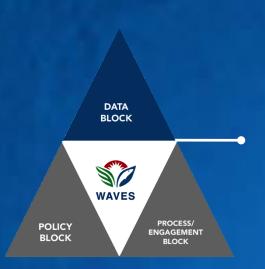


SEEA

Source: <u>UNSD</u>,

<u>Eigenraam et al (2012)</u>





## 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



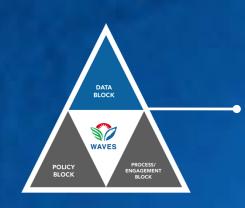
## Wealth account

- √ 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

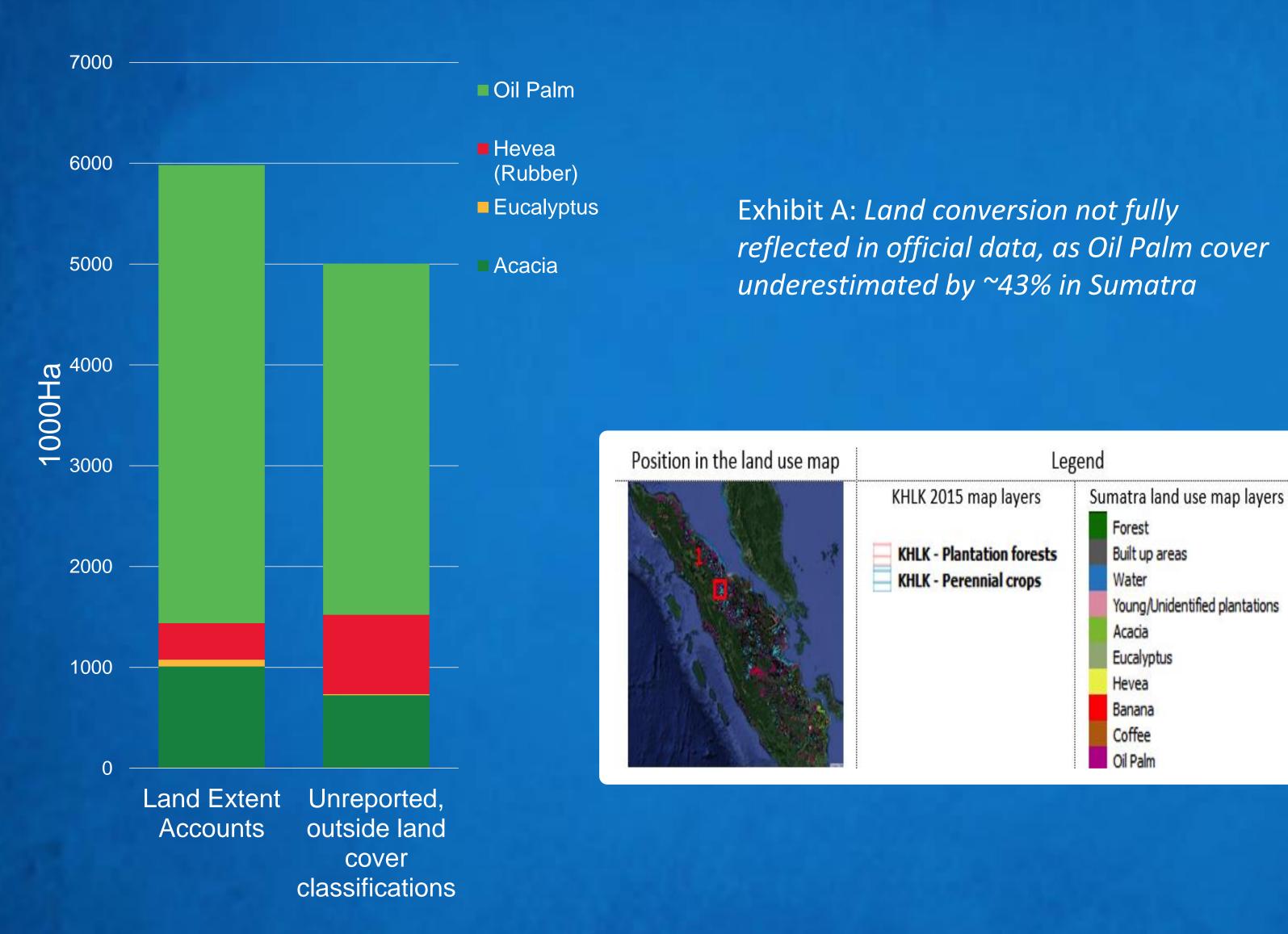


## **Peat Accounts**

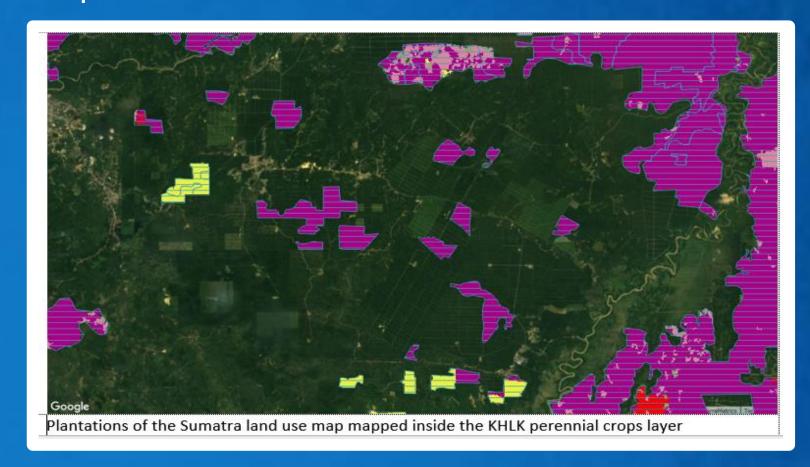
- ✓ Time period cover: 1990-2015
- ✓ Cover, extent and Ecosystem Services monetized for— Forest products — timber and biomass, biodiversity, carbon sequestration, commodities plantation and paddy
- √ Sumatra and Kalimantan



## Helps deliver some powerful messages: mismatch between reported and actual land use

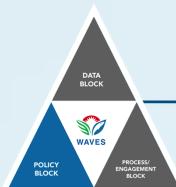


## Reported KLHK Concession Area

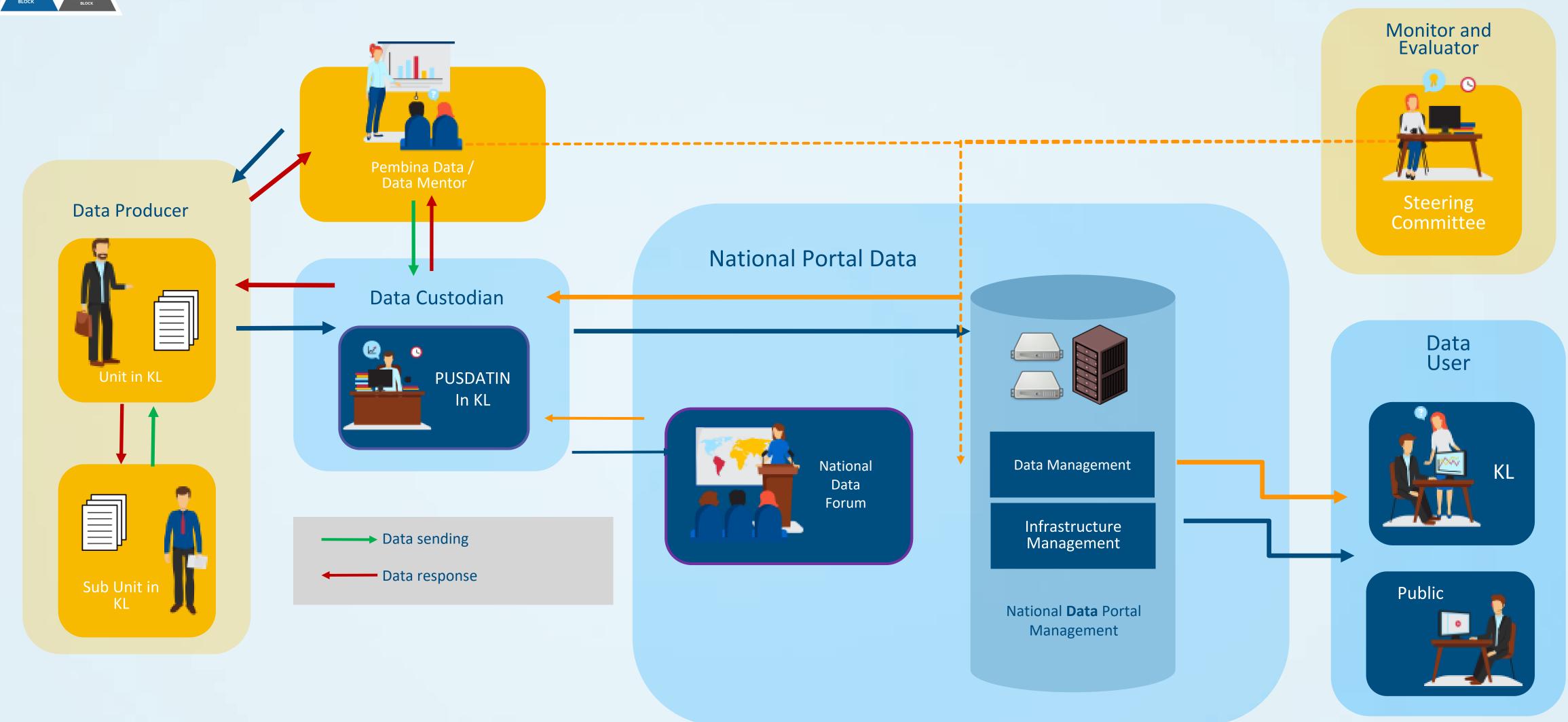


### Geospatially Verified Ecosystem Accounts





Improved access and availability of high quality data to policy makers



## WAVES engagement



REPUBLIK INDONESIA KEMENTERIAN PERENCANAAN PEMBANGUNAN NASIONAL/ BADAN PERENCANAAN PEMBANGUNAN NASIONAL

KEPUTUSAN DEPUTI BIDANG KEMARITIMAN DAN SUMBER DAYA ALAM NOMOR KEP. 53 |/D.3/06/2017

PEMBENTUKAN TIM KOORDINASI PENGEMBANGAN SISTEM TERINTEGRASI NERACA LINGKUNGAN DAN EKONOMI

#### DEPUTI BIDANG KEMARITIMAN DAN SUMBER DAYA ALAM,

Menimbang : a. bahwa dalam rangka mengarus-utamakan prinsip ekonomi hijau dan pembangunan berkelanjutan ke dalam Rencana Pembangunan Jangka Menengah Nasional 2015-2019 serta menguatkan proses pengambilan kebijakan berdasarkan suatu sistem neraca lingkungan yang terintegrasi dengan neraca ekonomi, akan dilakukan pengembangan Sistem Neraca Terintegrasi Lingkungan dan Ekonomi (Sisnerling):

The Deputy Minister of Maritime and Natural Resource of Bappenas Decree Number KEP.53/DEP.3/10/2017 on on the establishment of the Coordinating Team for the Development of the System for Integrated Environmental and Economic Accounting





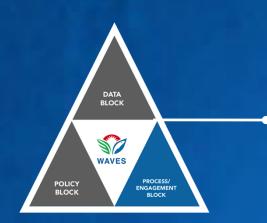
Steering Committee



Technical Committee



- Law No. 32/2009 on Environmental Protection and Management (UUPPLH 32/2009)
- 2. Law No. 26/2006 onSpatial Planning (UUPR 26/2007)
- 3. PP46/2017



Inspiring knowledge exchanges, successful batch of trained specialists, first natural capital knowledge and policy database published

7tth WAVES Annual Meeting in Rwanda

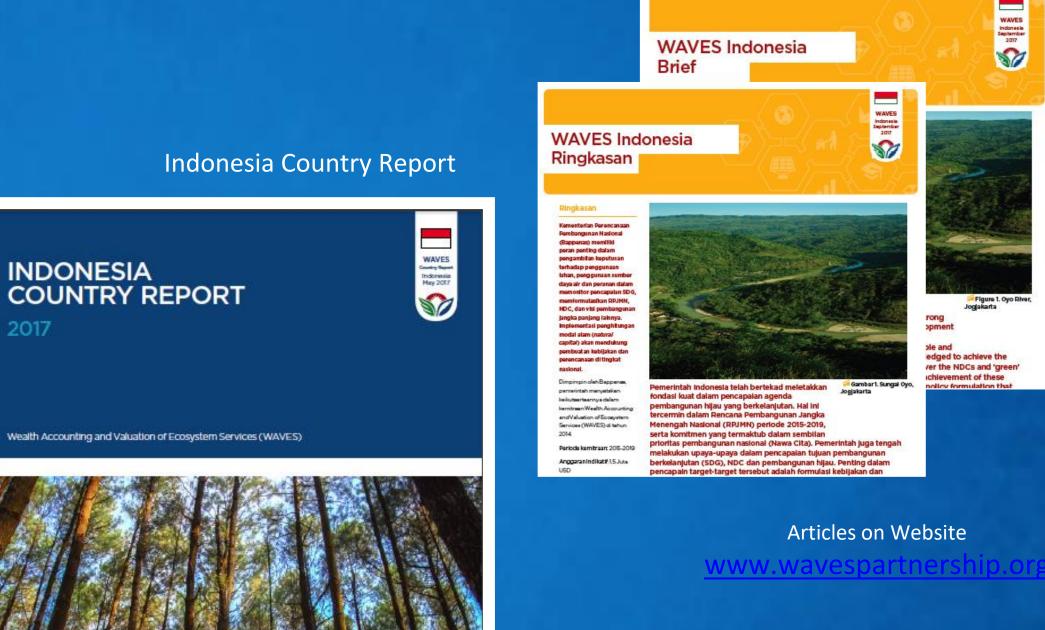


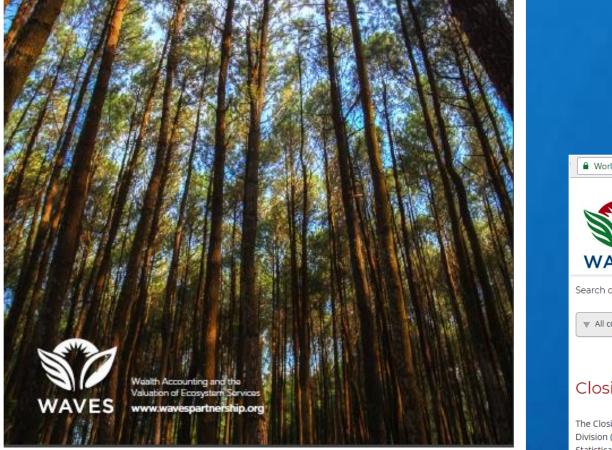




Discussion on Fiscal Potential Report

## WAVES Indonesia Brief (in English and Bahasa)







## Way Forward:

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



Law No. 25/2004 on National Development Planning System



Law No. 26/2006 on Spatial Planning



Law No. 32/2009 on

**Environmental Protection and** 

Management Management



Government Regulation No. 46/2017 on

Environmental Economic Instruments for Environmental Management .



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