

National Support Mechanism on CCA Mainstreaming & Development

PUTRA DWITAMA

PRESENTED ON WORKSHOP OF CLIMATE CHANGE IMPACT
ASSESSMENTS AND ADAPTATION PLANNING IN THE ASIA-PACIFIC
REGION

MANILA, 31 JANUARY 2018

Outline

Indonesia Commitment to Address Climate Change Issues

Role of National Action Plan on CCA (RAN API) in Development Planning

Closing Remarks (Challenges)

Indonesia Commitment to Address Climate Change Issues

Indonesia should adapt

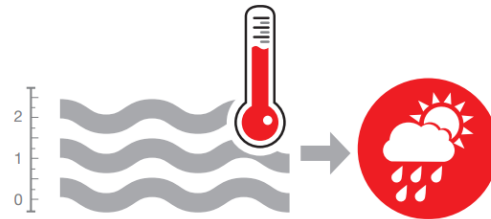


1.

As the largest archipelago nation in the world, Indonesia is one of the countries that are most vulnerable to the negative impacts of climate change.

2.

The largest threats of climate change in Indonesia are the increase of sea surface temperature, changes in the intensity and patterns of rainfalls, and the increase of the sea surface level. (RAN API 2014)



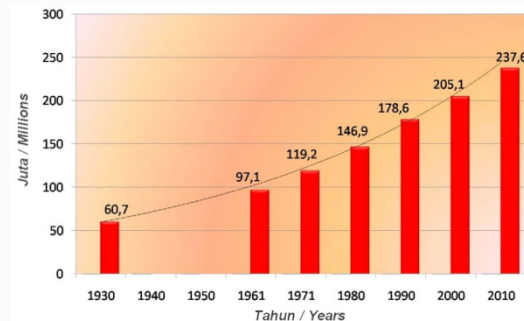
3.

The World Bank (2010) predicted that the economic losses from climate change could account for seven percent of Gross Domestic Revenue if not promptly controlled.



Indonesia's Geographic & Socio-economic characteristic

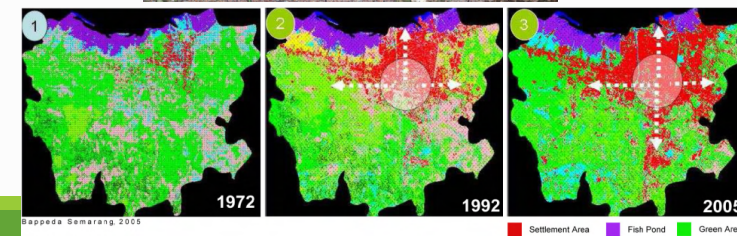
- ❑ Archipelagic country with mountainous profile and long coastline
- ❑ Monsoon that affecting annual rainfall trend
- ❑ Located in equatorial line and has a tropical climate



- ❑ High population number that concentrated in urban area
- ❑ Poverty level and local culture highly affecting the community's adaptive capacity



- ❑ Residential development pattern often move towards climate disaster-prone area
- ❑ Climate change context has not been integrated optimally into development plan
(Eg: spatial planning still disregarding climate change impact in an area)



Climate-related Disaster and Development



Climate change is predicted as will cause a **6.7% drop of GDP in 4 South East Asia countries in 2100 (ADB, 2013)**

In 2025, around **31% of global income** will be based in countries facing high or extreme risks from climate change impact; where Indonesia is amongst the high risk countries (*Maplecroft, 2013*).

In the past decade, **Majority** of disaster event in Indonesia is **hydrometeorological disaster**



Losses from Jakarta flooding in **2002 and 2007** reaches **1,5 trillion and 2 trillion IDR** consecutively (Bappenas, 2007)

Between 1981-1990, rice production experience **annual losses of around 100000 tonnes/regency**. It is predicted by 2050, there will be a **dry rice deficit** that reaches **60 million tonnes (Boer, 2003)**

**BNPB**

BENCANA TAHUN 2017

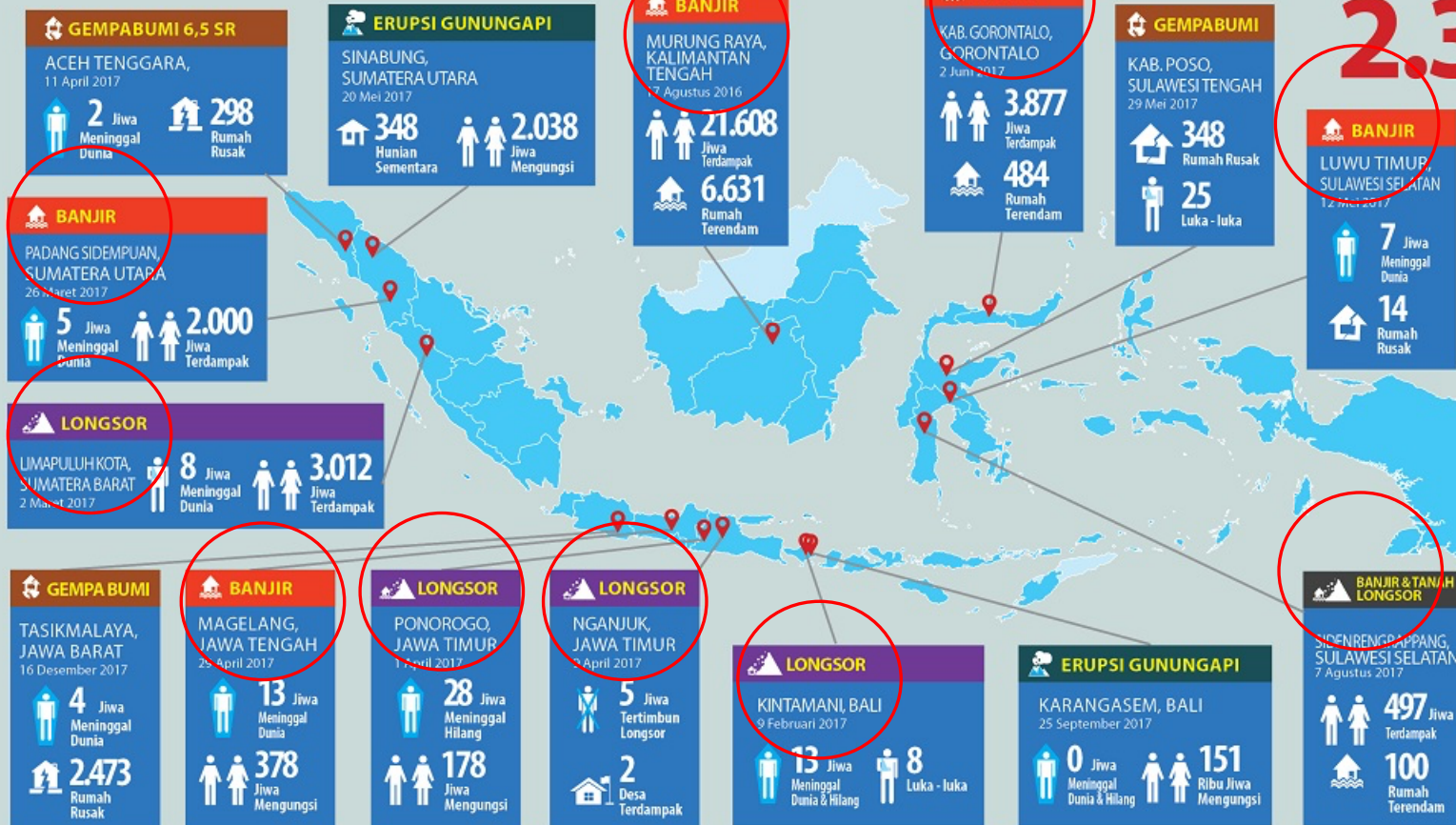
1 JANUARI 2017 - 31 DESEMBER 2017

Data bencana tahun 2017 dengan jumlah 2.341 kejadian bencana (31/12/2017). Bencana hidrometeorologi mendominasi kejadian bencana tahun 2016, banjir menempati urutan pertama diikuti Puting beliung & tanah longsor. Bencana tahun ini menyebabkan lebih dari 3,49 juta jiwa mengungsi dan merenggut 377 jiwa serta merusak lebih dari 47 ribu unit rumah.

TOTAL BENCANA TAHUN 2017

1 Januari 2017 - 31 Desember 2017

2.341

**KERUSAKAN
AKIBAT
BENCANA
TAHUN 2017**

47.442

RUMAH RUSAK

1.272

**FASILITAS
PENDIDIKAN
RUSAK**

113

**FASILITAS
KESEHATAN
RUSAK**

698

**FASILITAS
PERIBADATAN
RUSAK****DAMPAK BENCANA TAHUN 2017:**

1 Januari 2017 - 31 Desember 2017

377

**JIWA MENINGGAL
DUNIA & HILANG**

3,49 Juta

**JIWA TERDAMPAK
& MENGUNSI**

RUMAH TERDAMPAK



3.200
Rusak Berat



3.098
Rusak Sedang



12.538
Rusak Ringan



18.836
Rumah
Rusak



237.308
Rumah
Terendam

KORBAN TERDAMPAK



208
Meninggal &
Hilang



381
Luka-luka



1.682.730
Mengungsi &
Terdampak

1.328 Kejadian
Bencana



99%

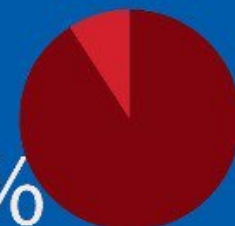
Bencana
Hidrometeorologi

DATA BENCANA INDONESIA 2017

Update : 19 Juni 2017

91%

Korban Meninggal &
Hilang Akibat Banjir,
Longsor, atau kombinasi



BENCANA MENCAKUP SELURUH WILAYAH INDONESIA

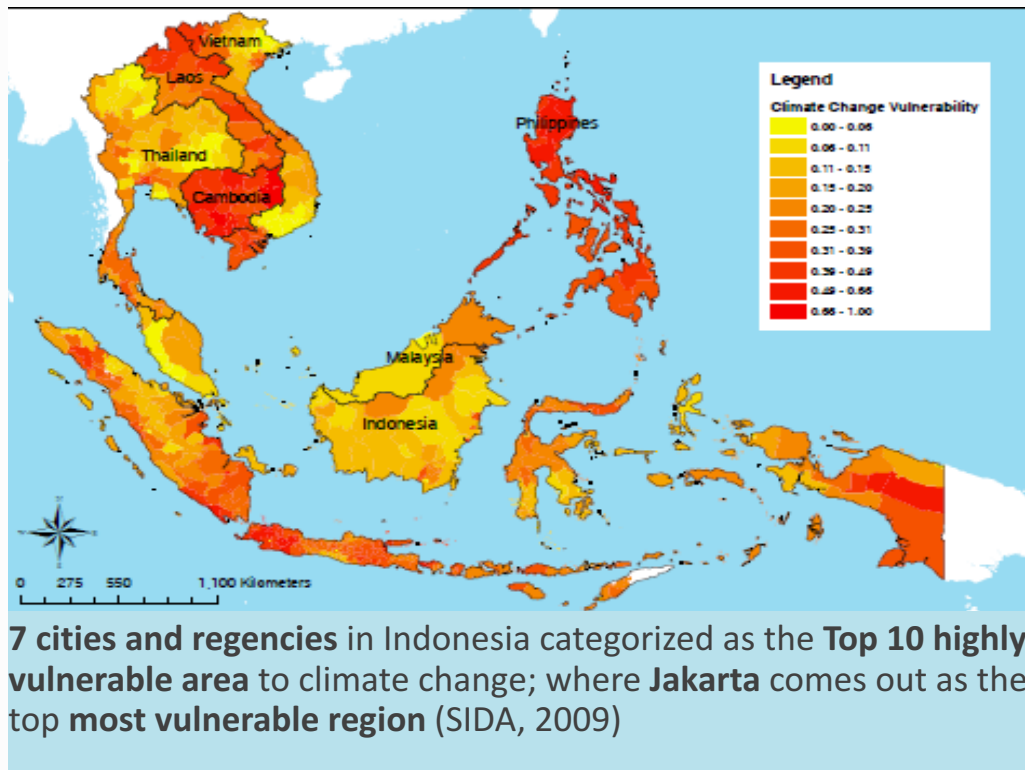


3 Provinsi dengan jumlah terbanyak adalah ■ Jawa Tengah (396), ■ Jawa Timur (256) dan ■ Jawa Barat (175)

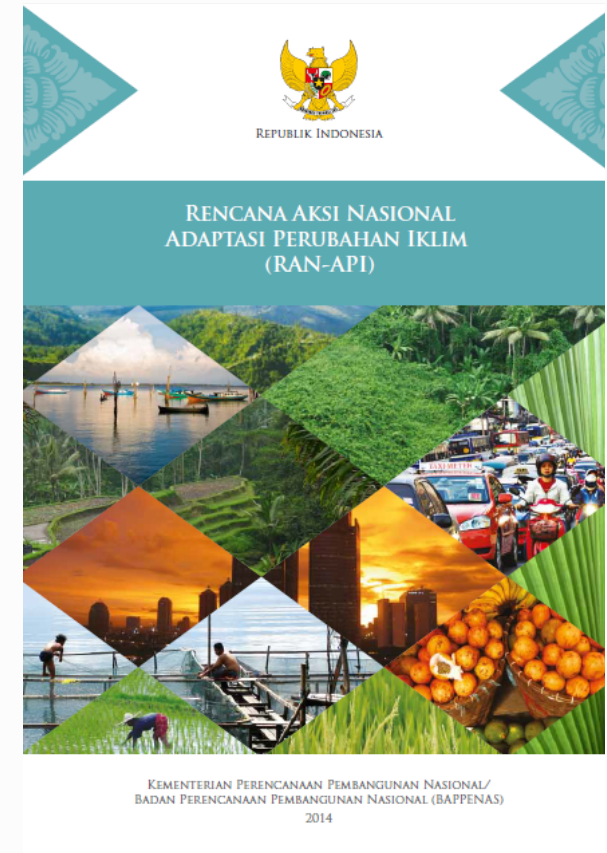
BERBAGAI KEJADIAN BENCANA TERJADI DI INDONESIA



Translating the vulnerability and risk into actions



Drives the
need to
develop



Role of RAN API in Development Planning

Role of Ministry of National Development Planning in Climate Change Action

1 Article 3.4 of UNFCCC:

'policies and measures to protect the climate system against human-induced ... should be integrated with national development program...'

2

Presidential Regulation No.61/2011 for RAN-GRK

3

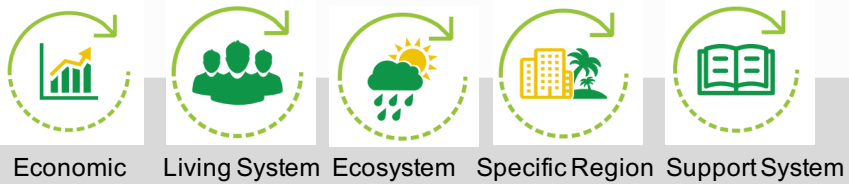
Presidential Regulation No. 65/2015 and Presidential Regulation No. 66/2015 for National Development Planning:

Policy Formulation, Coordination, Think Tank, and Development Planning Administration



**MAINSTREAMING CLIMATE CHANGE INTO
NATIONAL DEVELOPMENT PLANNING**

RAN API



The target of the RAN API is to establish an adaptive development system that includes 5 areas



Increase community resilience to climate change in 15 vulnerable areas



RAN API General Framework

Goal

**SUSTAINABLE DEVELOPMENT AND ADAPTIVE TO
CLIMATE CHANGE**

Target

**Ecosystem
Resilience**

**Special Areas
Resilience**

Economic Resilience

Support System

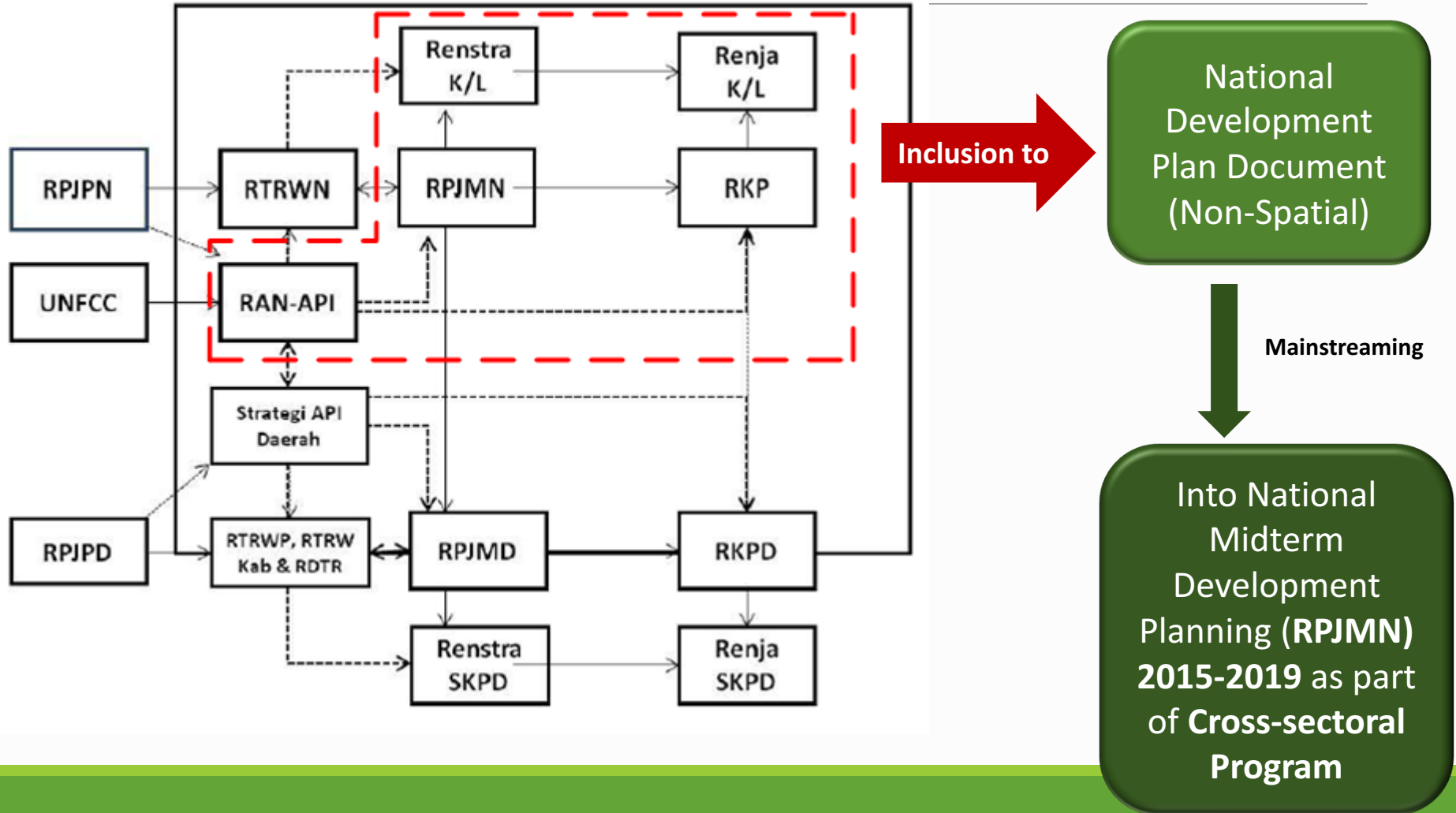
Livelihood Resilience

Knowledge Management, Planning and Budgeting, Capacity Building, Monitoring and Evaluation

CCA's Sector Priority

Sector	Sub Sector
Economic Resilience	• Food Security • Energy Independence
Living System Resilience	• Health • Housing • Infrastructure
Ecosystem Resilience	• Ecosystem and Biodiversity
Specific Region Resilience	• City • Coastal Areas and Small Islands
Supporting System	• Data and Information • Capacity Building • Research and Development

Future of CCA and RAN API in relation to National Development Planning System



How the Line Ministries could adopt RAN API in their Strategic Plan

	Activity	Location	Programs/Activities in RKP
Living System Sector			
Health Sub-Sector			
Cluster 1. Identification and control of factors of vulnerability and risk to public health posed by climate change	Updates the risk assessment and adaptation to climate change in the health regencies / city level	2015-2019 High-risk areas in 33 provinces	- Research and Development of Applied Clinical and Clinical Epidemiology - Health Information and Data Processing (Kemenkes, Bappenas, BIG, BMKG, KemenLH dan DNPI)
Housing Sub-Sector			
Cluster 2. Development and Management of Settlement	Adjustment settlements infrastructure in disaster-prone areas of climate change	2015-2019 Flood and landslide prone areas	Infrastructure adjustment settlements in disaster prone areas (KemenPU, Kemenpera, dan KKP)
Infrastructure Sub-Sector			
Cluster 1. Research and Development Infrastructure Security Concept	Implementation of research and development on improving the resilience of adaptive infrastructure to climate change	National	Implementation of spatial planning program: (KemenPU dan KKP)

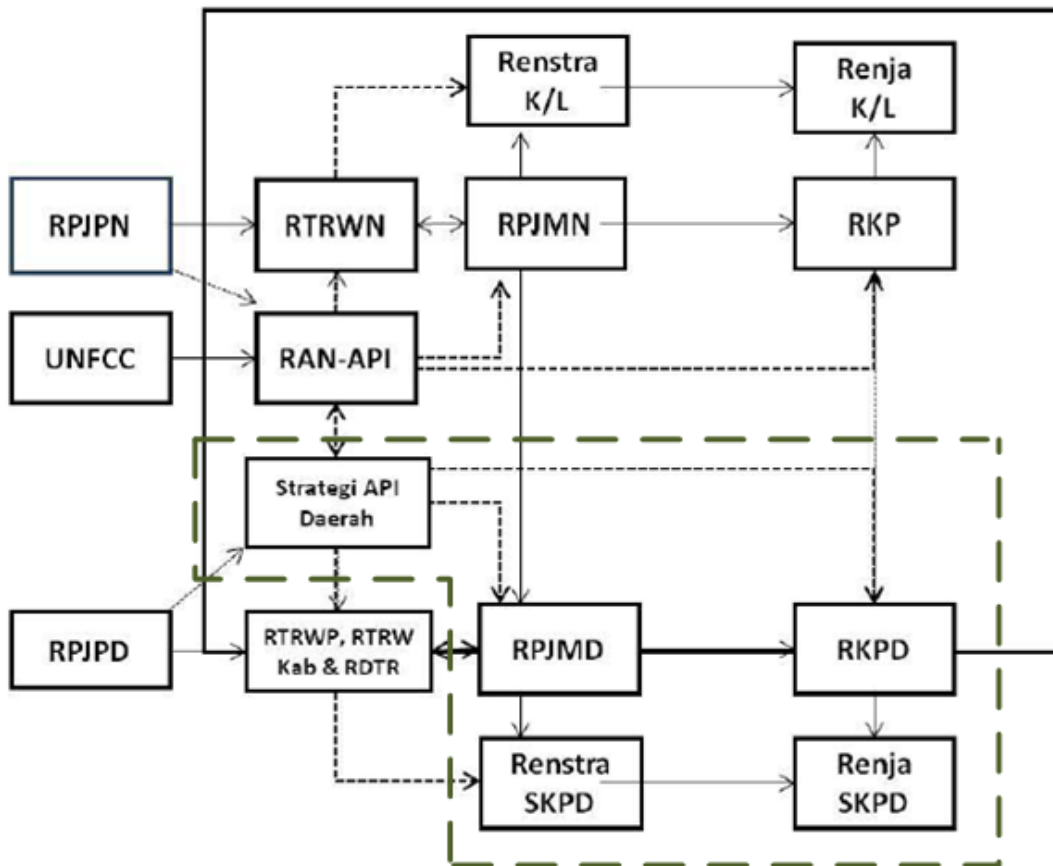


Kementerian PPN/
Bappenas



SEKRETARIAT
RAN API

RAN API relation to Local Development Planning System



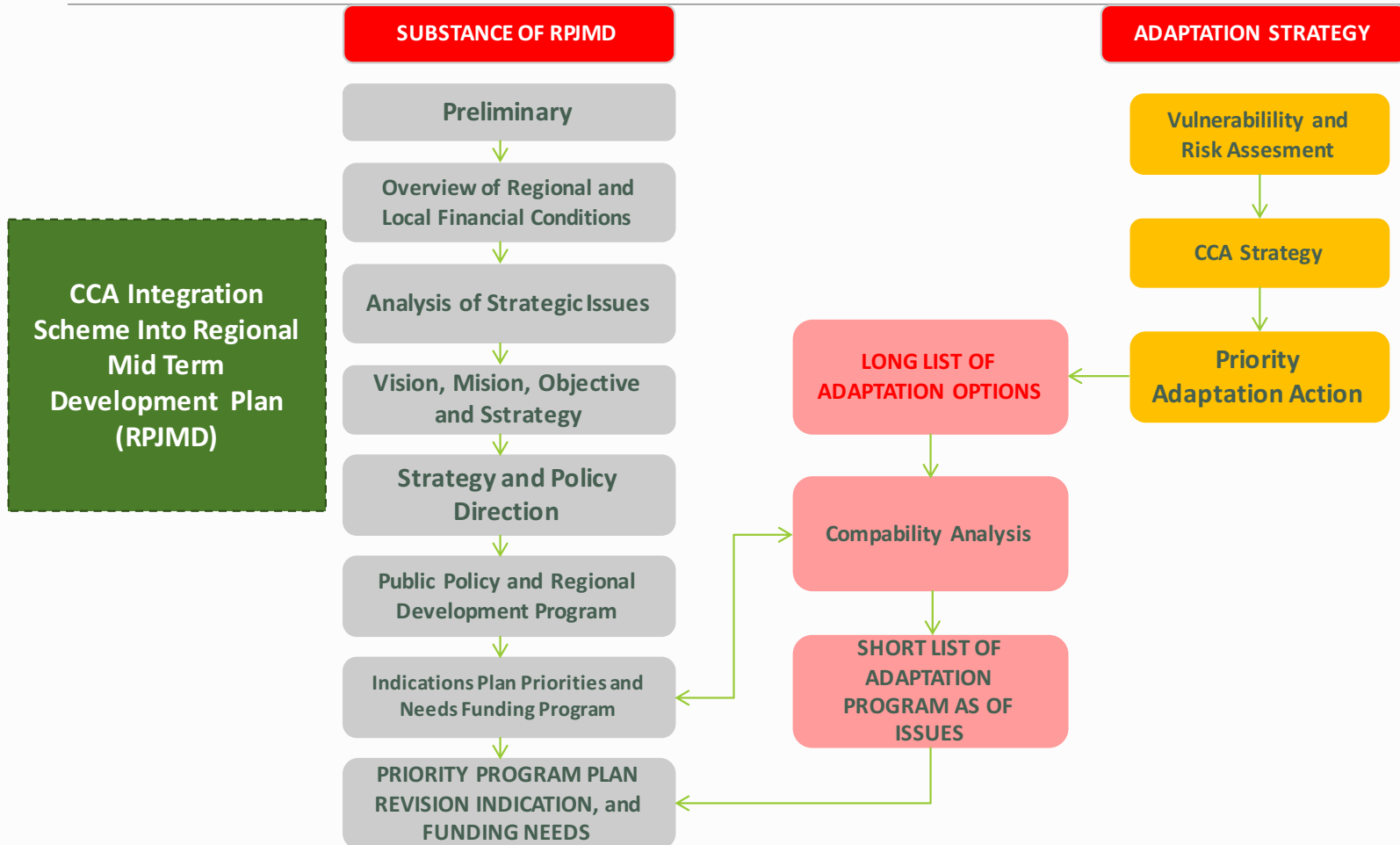
Inclusion to

Local
Development
Plan Document
(Non-spatial)

Pilot Site

Other
Regions

How the LGs could adopt RAN API



**North
Sumatera**

- Agriculture
- Water
- Urban
- Coastal

**South
Sumatera**

- Agriculture
- Coastal
- Health

**Pekalongan
City**

- Settlement
- Public work

**Tarakan
Regency**

- Health

**Bandar
Lampung City**

- Infrastructure
(Water, Drainage,
Waste, Settlement)
- Coastal, Fishery
- Health
- Education

East Java

- Agriculture
- Water

Bali

- Agriculture

West Java

- Agriculture

Semarang City

- Infrastructure
- Economy
- Settlement

Blitar City

- Agriculture
- Water
- Health

**Malang
Regency**

- Agriculture
- Water
- Health
- Land
subsidence

Batu City

- Agriculture

Malang Raya

- Health
- Water
- Land
subsidence

**Lombok Island &
West Nusa
Tenggara**

- Agriculture
- Plantation
- Forestry
- Fishery
- Coastal
- Health
- Water

**SECTOR
VULNERABILITY**

MAP



Kementerian PPN/
Bappenas



SEKRETARIAT
RAN API

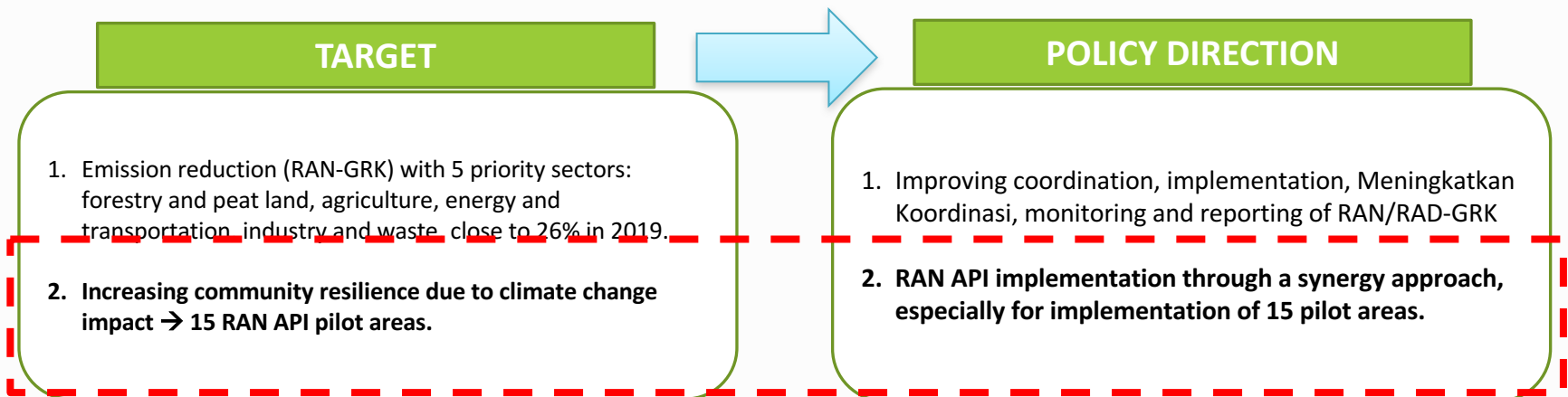
Climate Change Adaptation on RPJMN 2015-2019

Policy and Strategy Direction to achieve climate change targets:
(RPJMN 2015-2019 Book I, Ch 6 National Development Agenda):

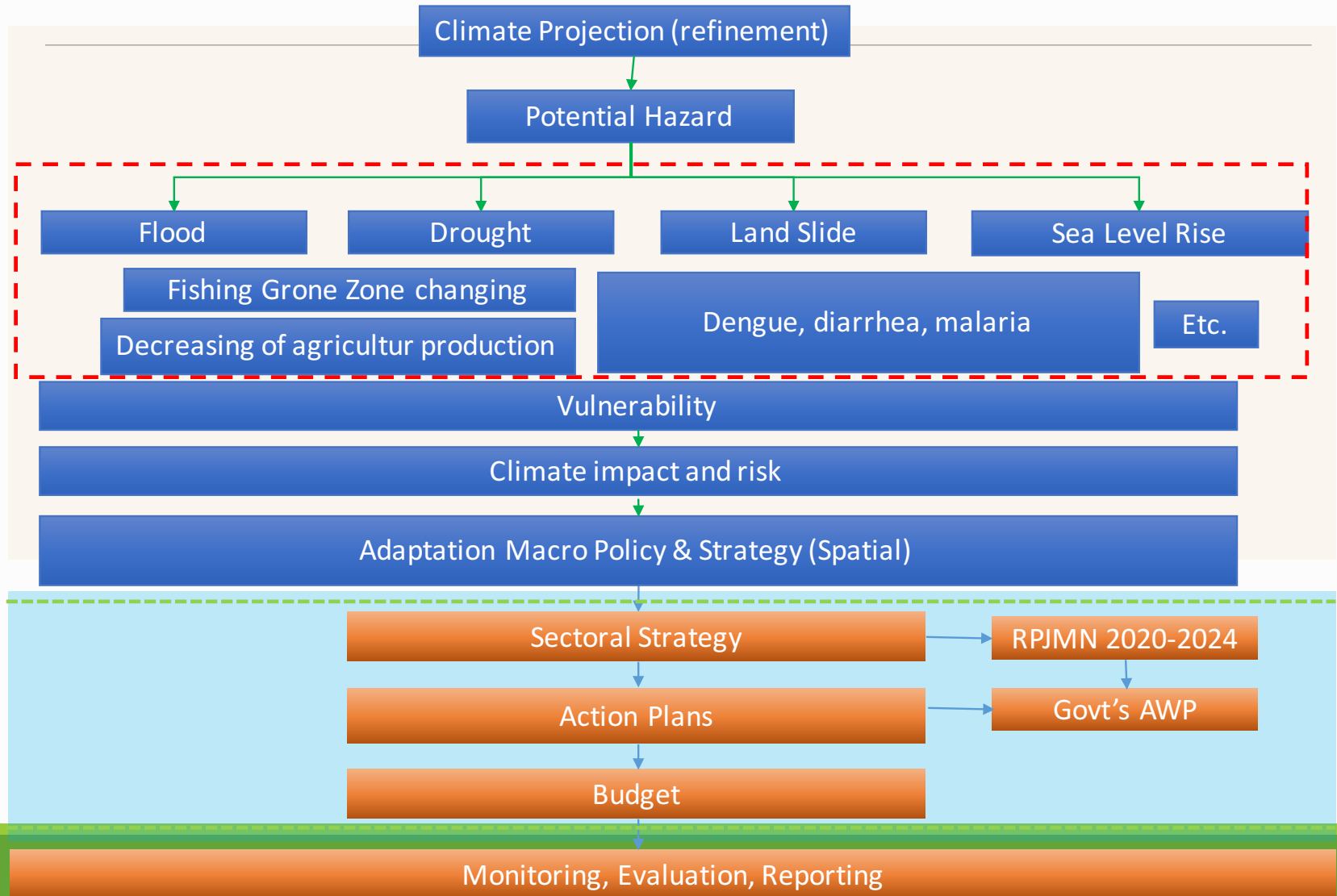
1. Encourage local governments on developing climate change adaptation strategy/actions based on RAN API and climate risk assessment;
2. To implement the action plans, particularly in 15 RAN API pilot areas;
3. Increasing community's knowledge and capacity related to climate change.

Climate Change as Cross-Cutting Program (Book II Ch I RPJMN 2015-2019)

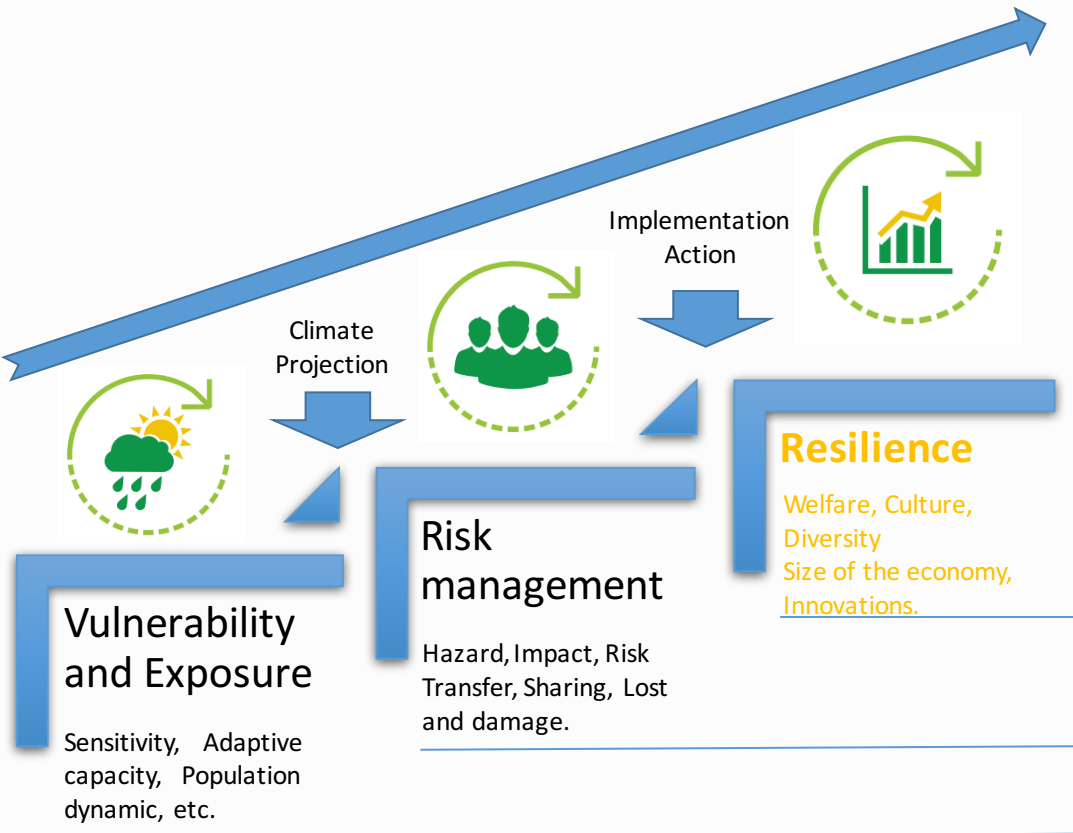
- I. SUSTAINABLE DEVELOPMENT GOALS MAINSTREAMING
- II. CLIMATE CHANGE PROGRAM (CROSS CUTTING)

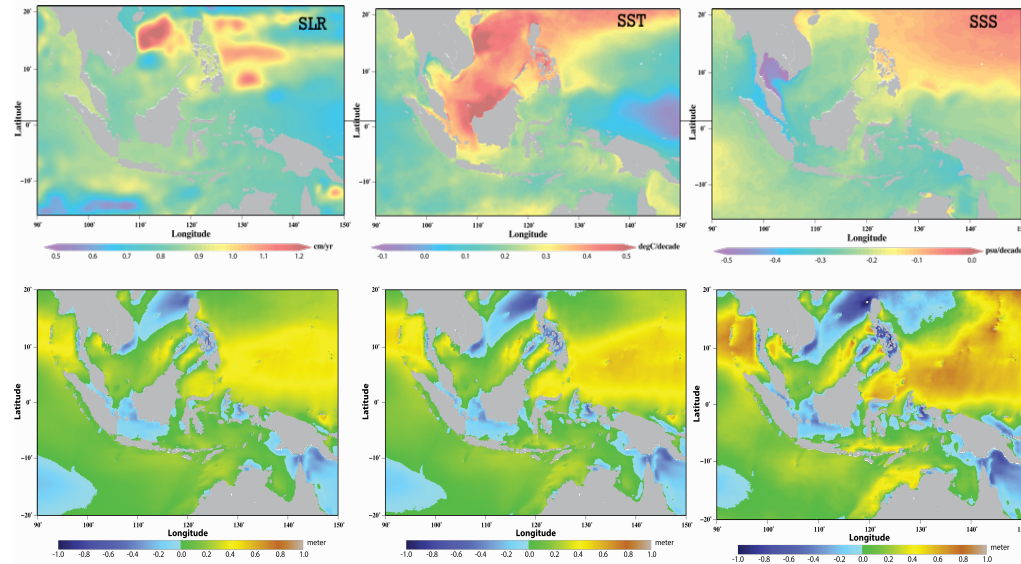
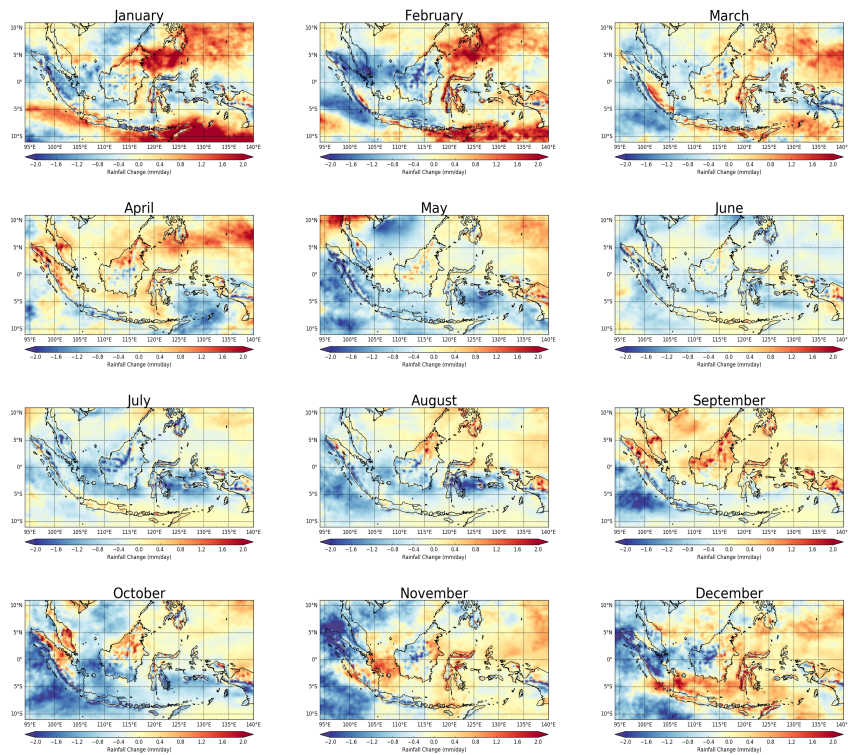


RAN API Review

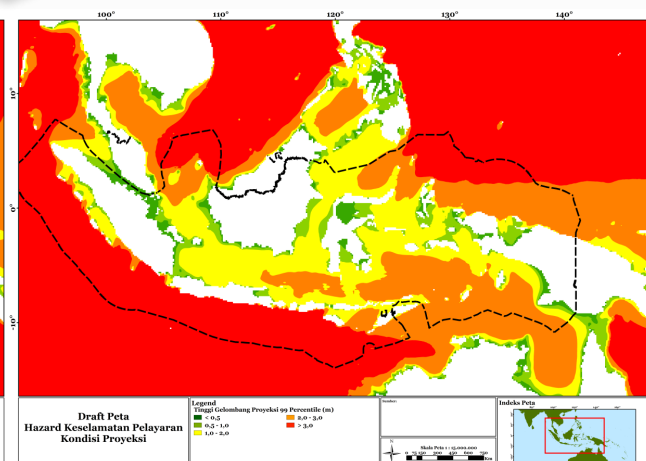
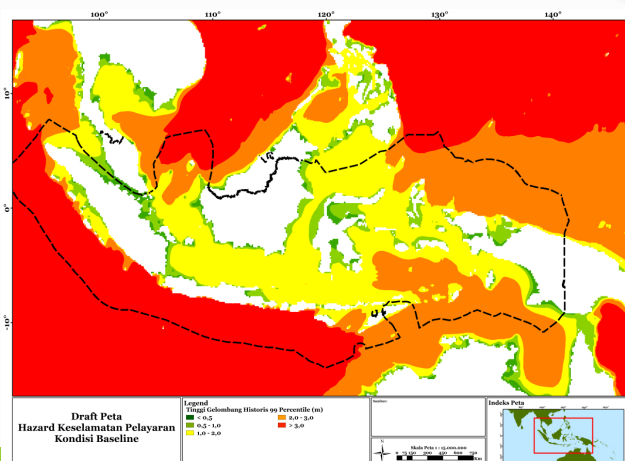
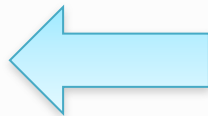


Resilience Index

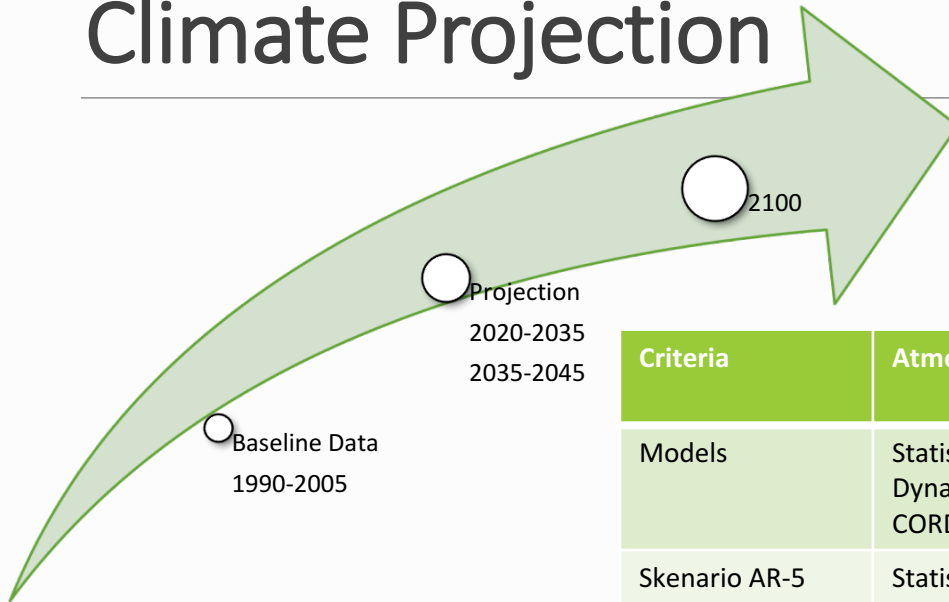




Hazard,
Vulnerability,
Risk, and
Impact Analysis



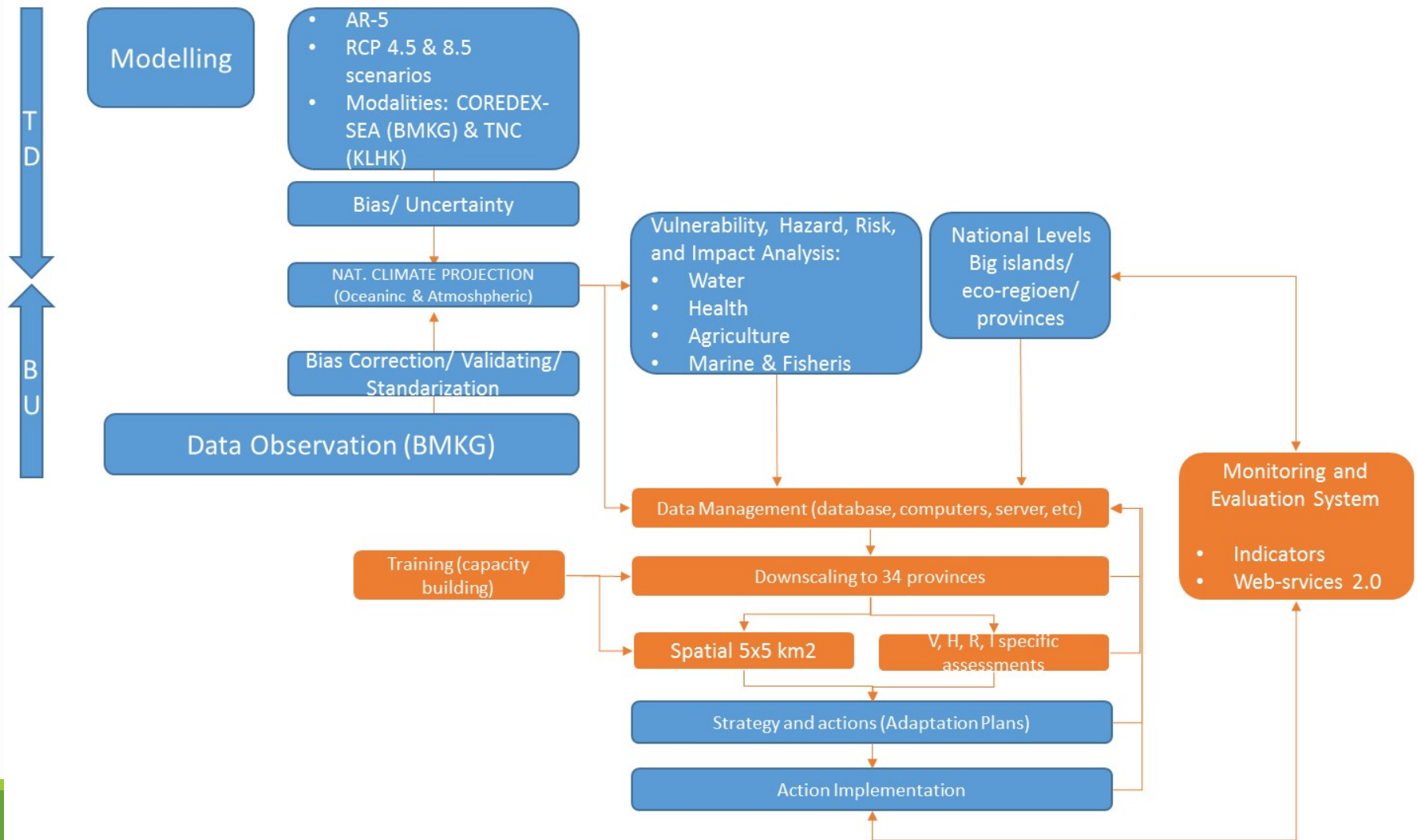
Climate Projection



Criteria	Atmospheric	Oceanic
Models	Statistic: 24 model GCM Dynamic: TNC (1 model) dan CORDEX-SEA (6 model)	MIROC5
Skenario AR-5	Statistic: RCP 2.6, 4.5, 6.0, dan 8.5 Dynamic: RCP 4.5 & 8.5	RCP 4.5 & 8.5
Resolution	25 KM and 5 KM	25 KM & 5 KM
Spatial Cover	National and 7 islands (Sumatera, Jawa Bali Madura, Nusa Tenggara, Kalimantan, Sulawesi, Maluku and Papua)	National and 7 islands (Sumatera, Jawa Bali Madura, Nusa Tenggara, Kalimantan, Sulawesi, Maluku dan Papua)
Sektor (Potensi Hazard)	Pertanian, Kesehatan, Air	Kelautan dan Perikanan (serta pesisir dan pulau-pulau kecil)

Challenge: National into regional assessment

lack of availability and data sharing



THANK YOU

Sekretariat RAN API
Wisma Bakrie 2 Building Floor 6th
Jl. HR. Rasuna Said Kav. B2 Jakarta Selatan

Telp: +6221-57906250

Email : putra@sekretariat-ranapi.org
Putra_Dwitama@dai.com
admin@sekretariat-ranapi.org