



BMKG Climate Change Adaptation Programs and Activities

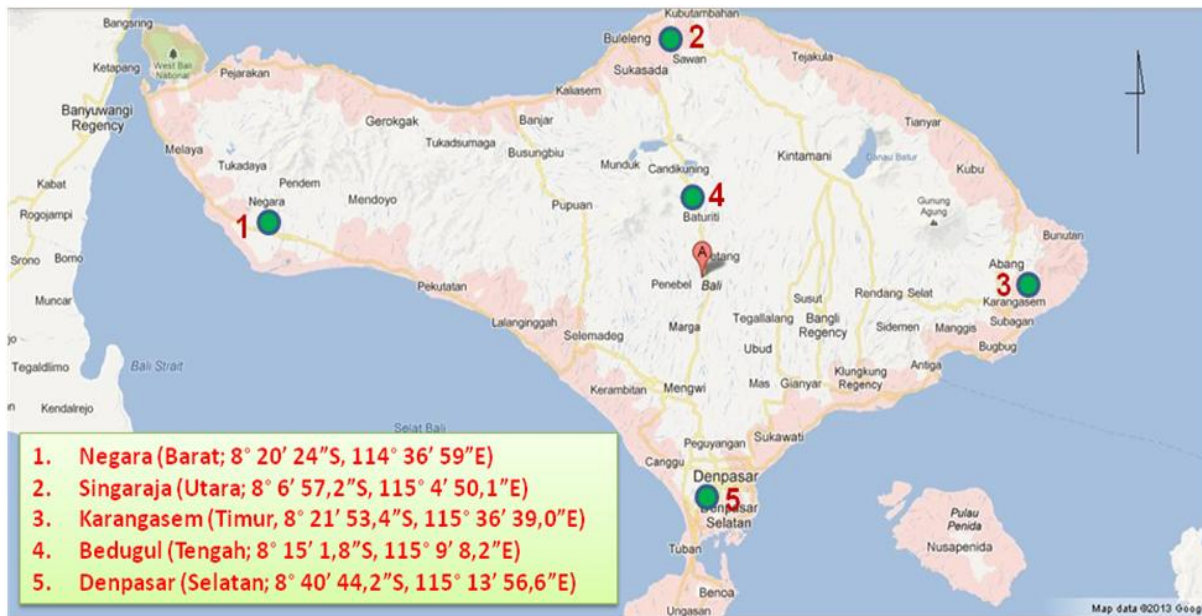
Prof. Dr. Edvin Aldrian

Director of Center for
Research and Development
BMKG
IPCC AR5 WG1 Lead Author

OUTLINE

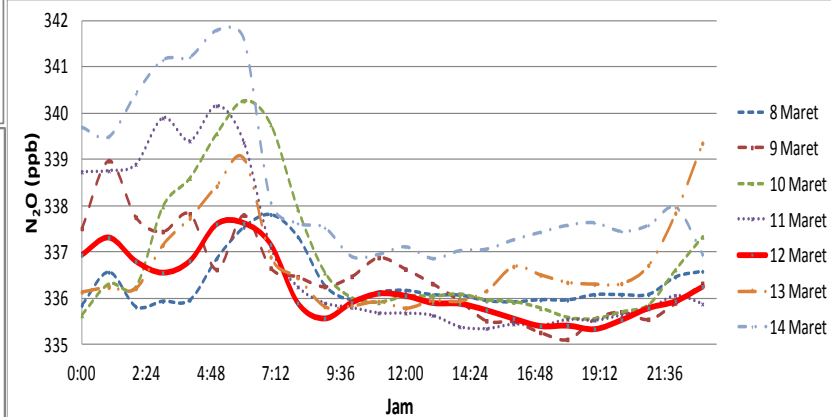
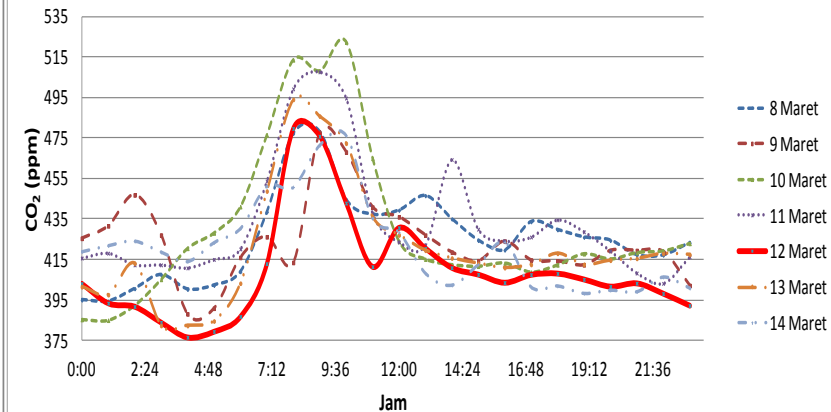
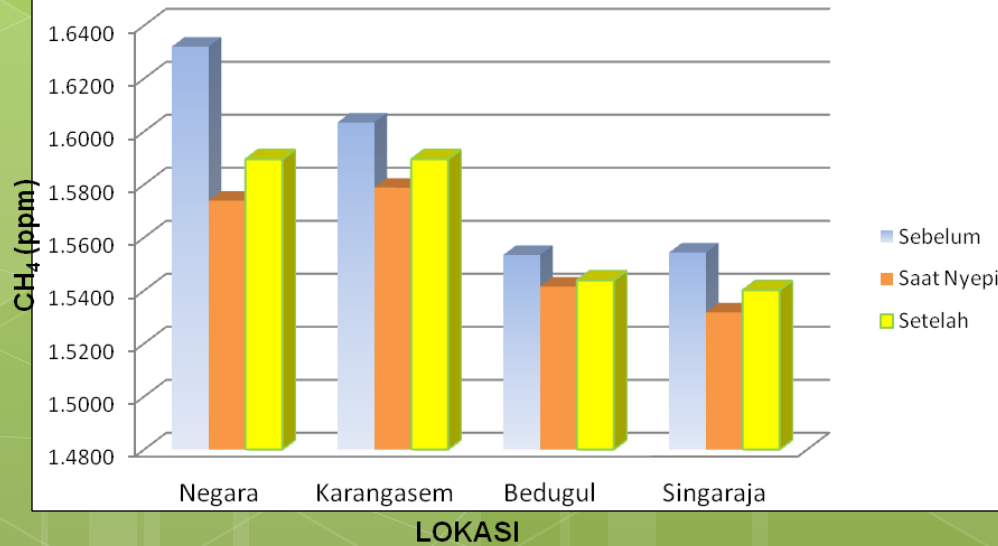
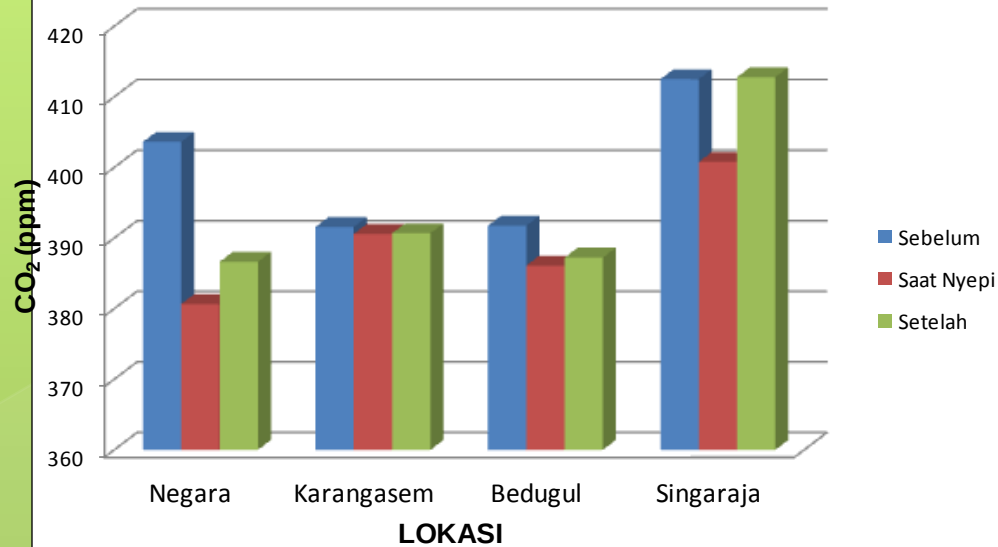
- Human activity and climate change
- Vulnerability map of paddy in Bali
- *Climate Field School*
- Sectoral impact assessment
- Public awareness
- *Conclusions*

Reduction of GHG concentration during Nyepi Hindu day



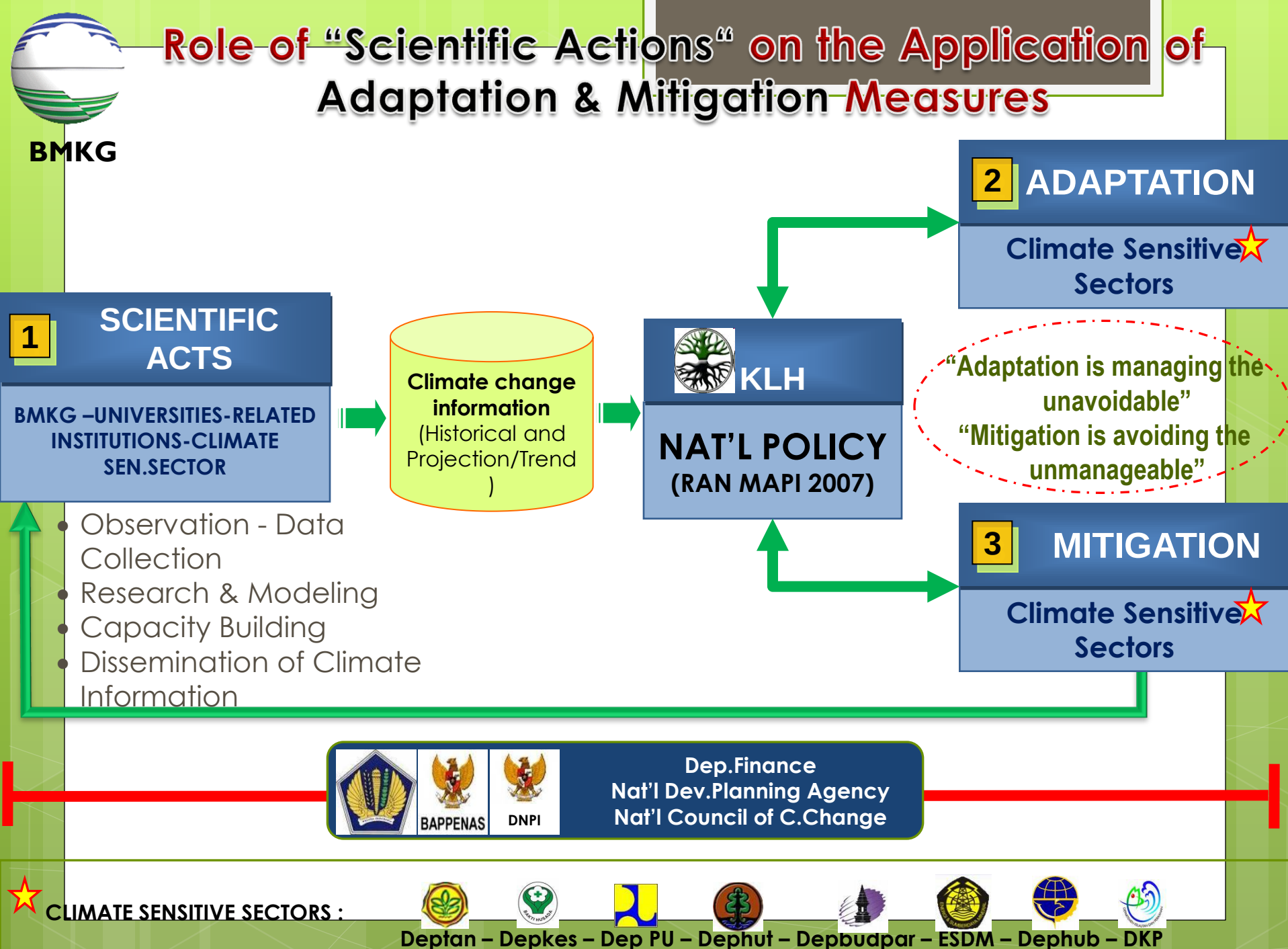
Nama Lokasi :	Negara	Singaraja	Karangasem	Bedugul	Denpasar
Koordinat	8° 20' 24"S, 114° 36' 59"E	8° 6' 57,2"S, 115° 4' 50,1"E	8° 21' 53,4"S, 115° 36' 39,0"E	8° 15' 1,8"S, 115° 9' 8,2"E	8° 40' 44,2"S, 115° 13' 56,6"E
Metode & Frekuensi Data	Indirect Measurement (Sampling); Daily Data (14.00 WITA)				Direct Measurement; Continuous Monitoring; (Data tiap 5 menit)
Alat	Flask Sampler	Flask Sampler	Flask Sampler	Flask Sampler	WolfPack® & IRIS 4600
Data GRK	CO₂, CH₄	CO₂, CH₄	CO₂, CH₄	CO₂, CH₄	CO₂, N₂O

Reduction of GHG concentration during Nyepi Hindu day



Average reduction 33%

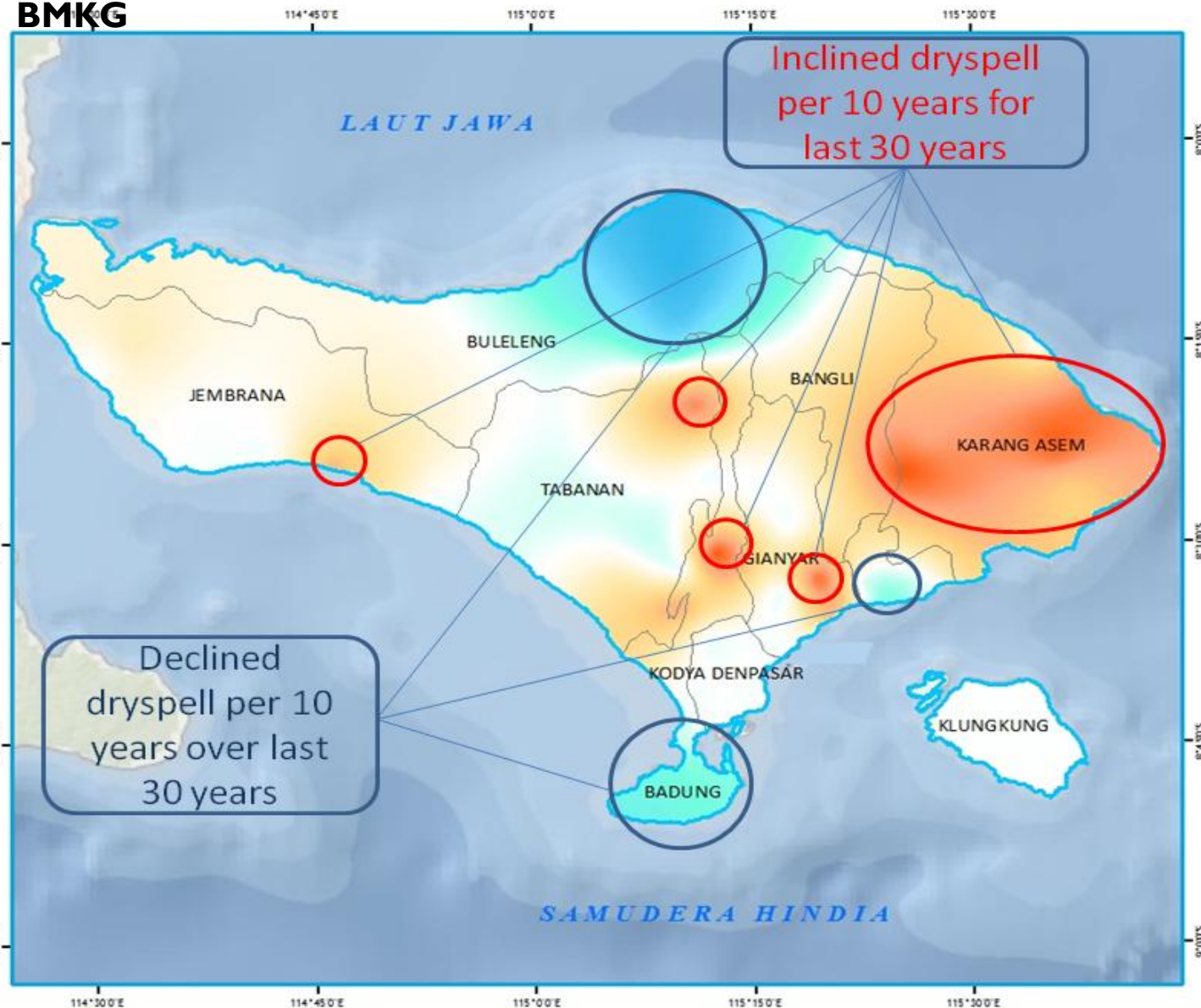
Role of “Scientific Actions” on the Application of Adaptation & Mitigation Measures





CLIMATE CHANGE VULNERABILITY MAP in BALI

BMKG



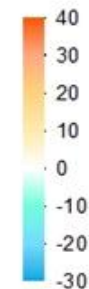
DRYSPELL
TREND



0 4 8 16 24 32 Km

LEGENDA :

(Hari/10 Tahun)

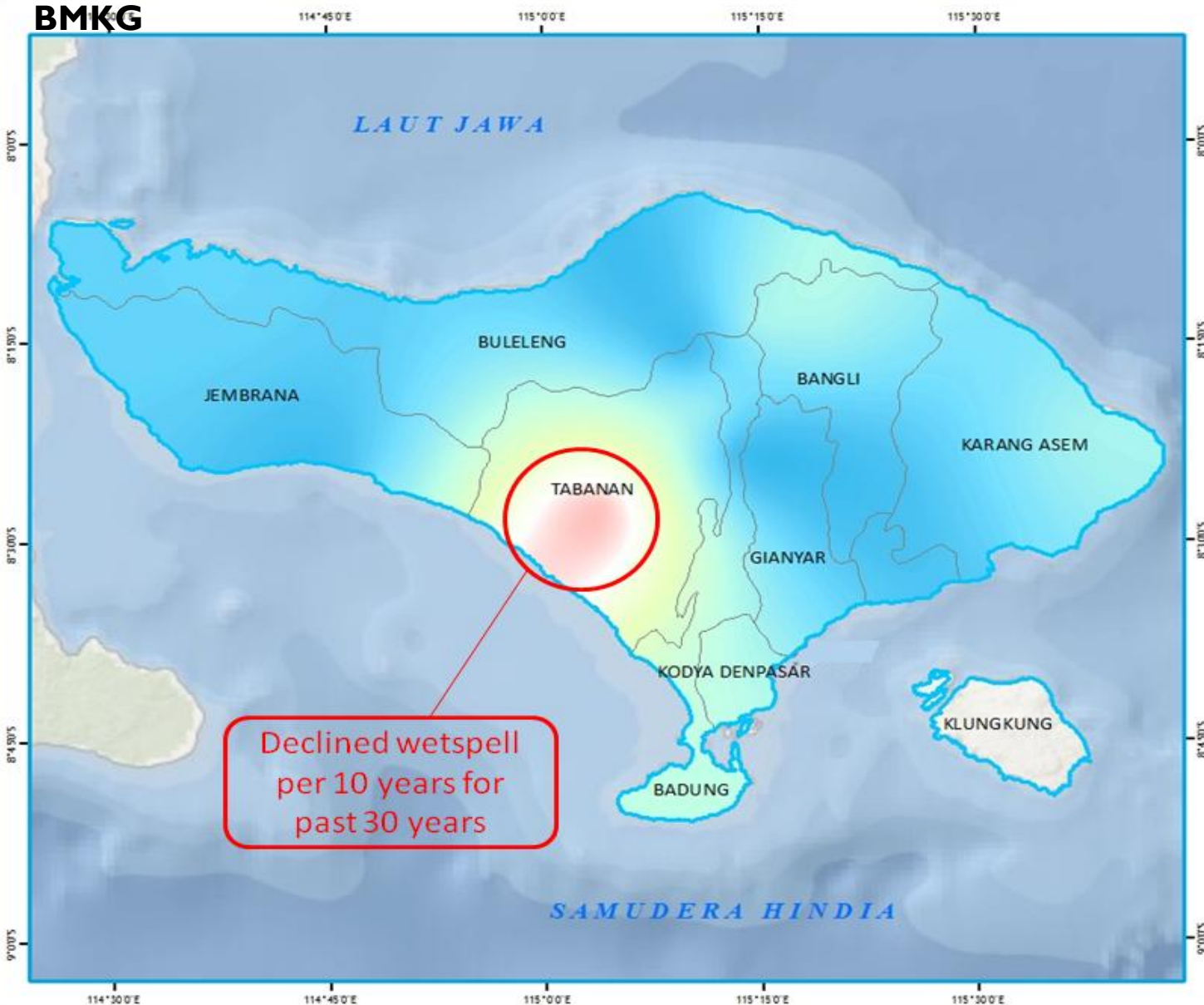


BMKG



CLIMATE CHANGE VULNERABILITY MAP in BALI

BMKG



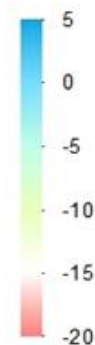
WETSPELL
TREND



0 4 8 16 24 32 Km

LEGENDA :

(Hari/10 Tahun)

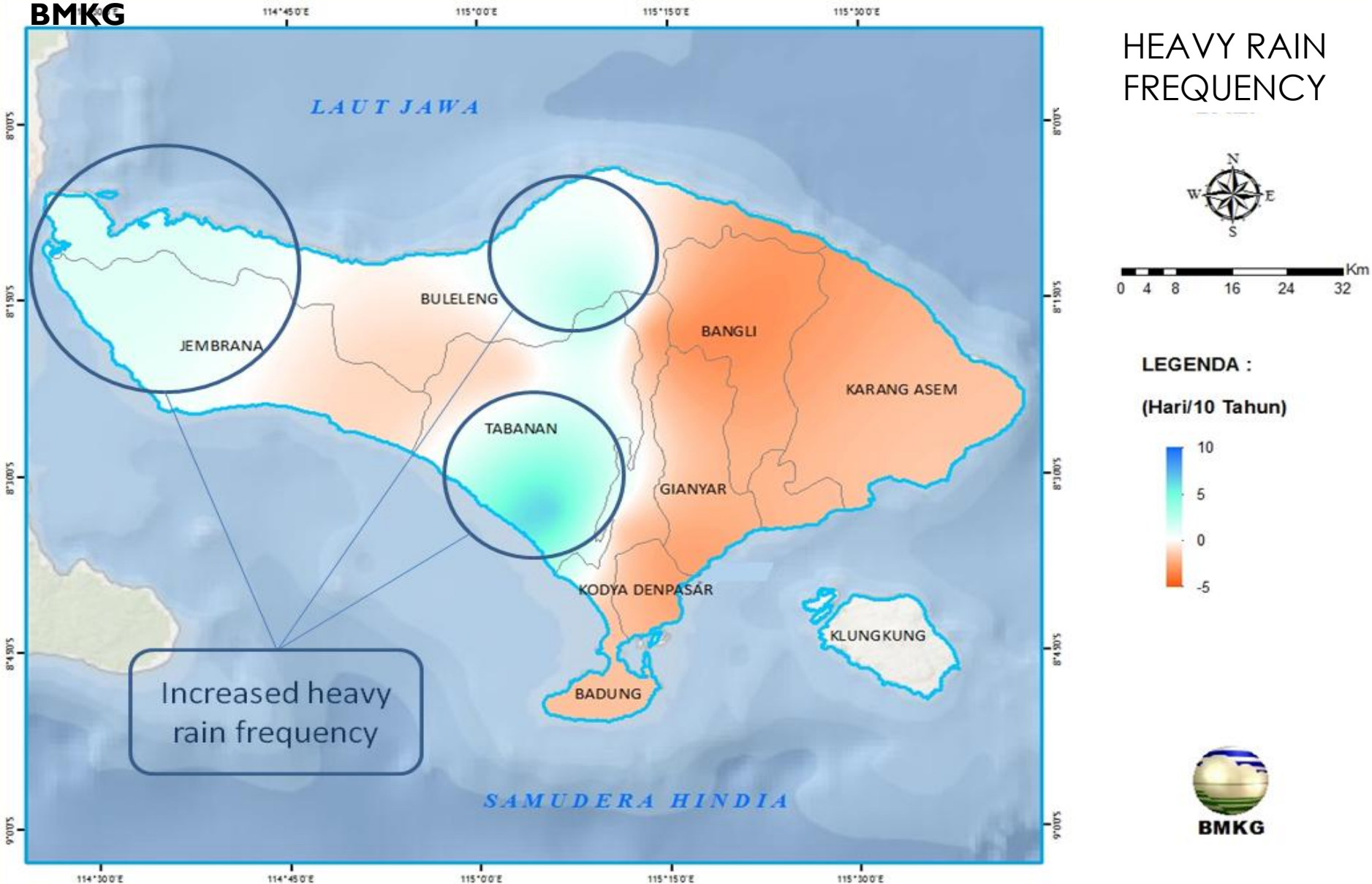


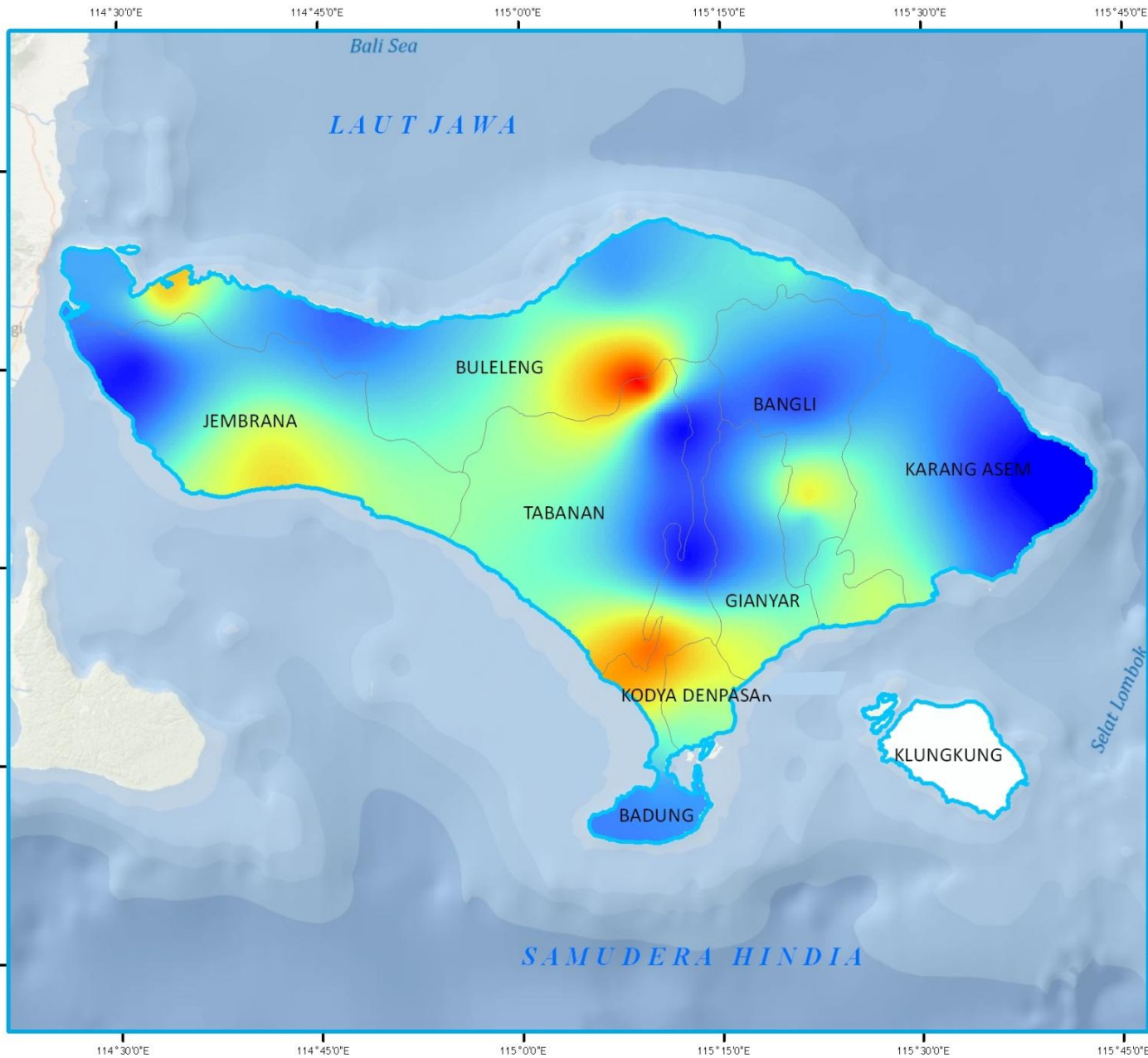
BMKG



CLIMATE CHANGE VULNERABILITY MAP in BALI

BMKG



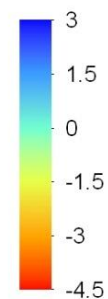


Climate Exposure Index



LEGENDA :

(Nilai Index)



BMKG

CLIMATE FIELD SCHOOL in INDONESIA

Objectives :

CFS activity encompasses three purposes as follows

- Improving farmers knowledge on climate and their ability to anticipate extreme climate events in their farming activities;
- assisting farmers in observing climatic parameters and their use for applications in their farming activities and strategy; and
- assisting farmers to translate and understand the climate (forecast) information for supporting farming activities, especially for planting decision and cropping strategy



Climate Field Schools for Farmers: Methodology



Stage I: Training of trainers

Participant :

- Local Agricultural Service, trained by NMHS staffs



Stage II: Training of trainers with simulation in classroom

Participant :

- Agriculture extension worker, trained by Local Agr'l Service & NMHS at the provinces (supervised by NMHS)



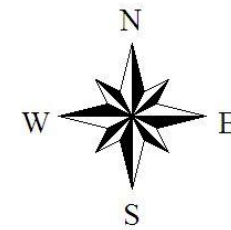
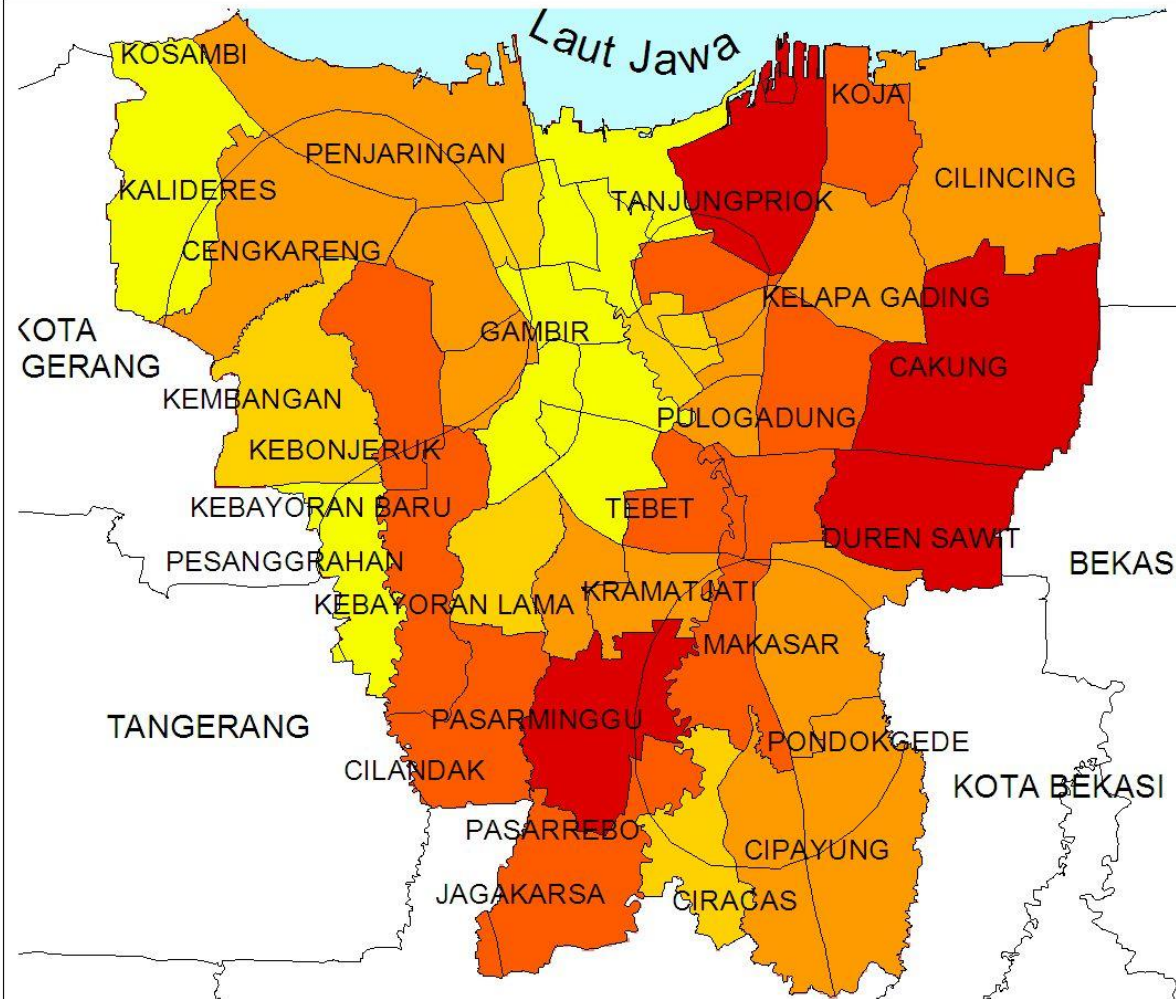
Stage III: Training for farmers

- Groups of farmers, trained by agriculture extension workers (supervised by NMHS)

The Benefits of Climate Field School

- Farmers get a better understanding of climate information and use the climate information for their farming activities
- Perform strong groups of farmers who have high motivation to run their farming activities which climate information is used as an input for their strategy and decision making.

CLIMATE CHANGE IMPACT TO DENGUE



POTENSI KERENTANAN DBD :



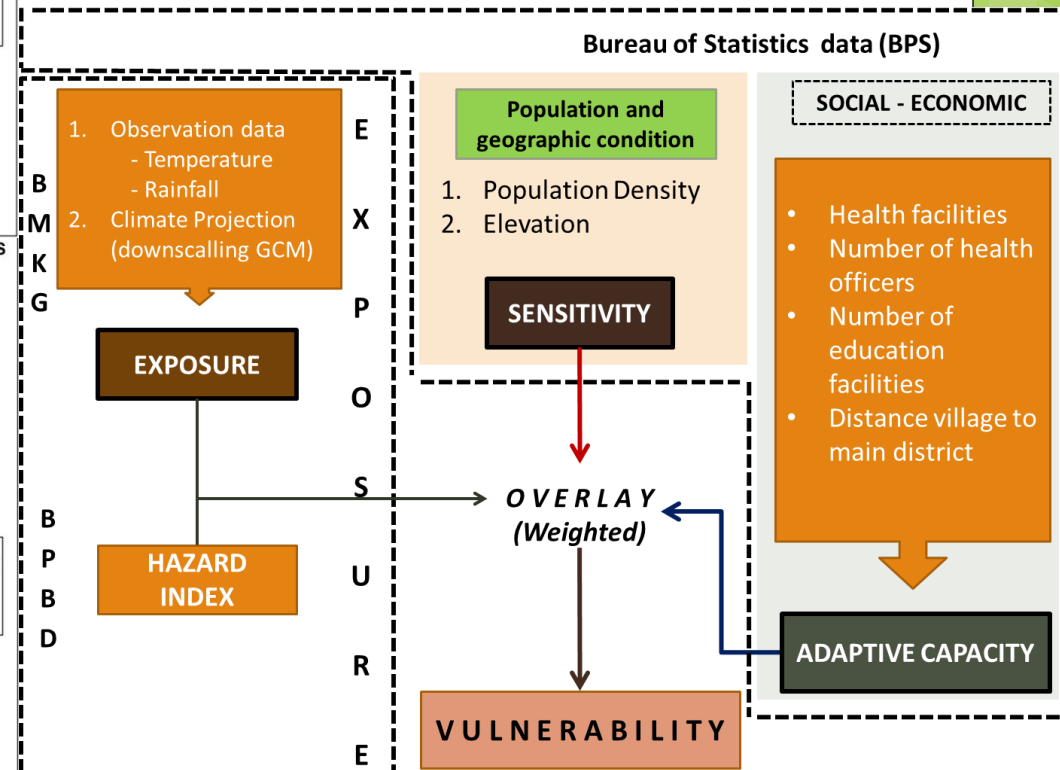
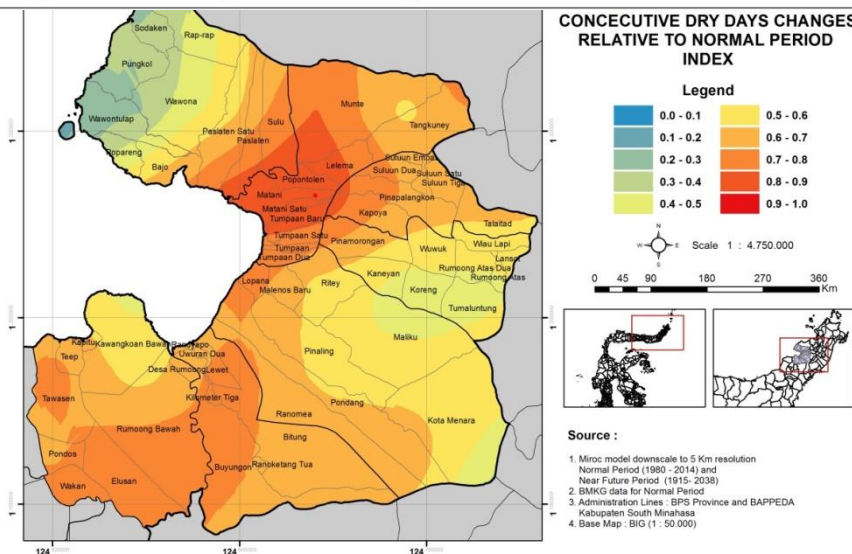
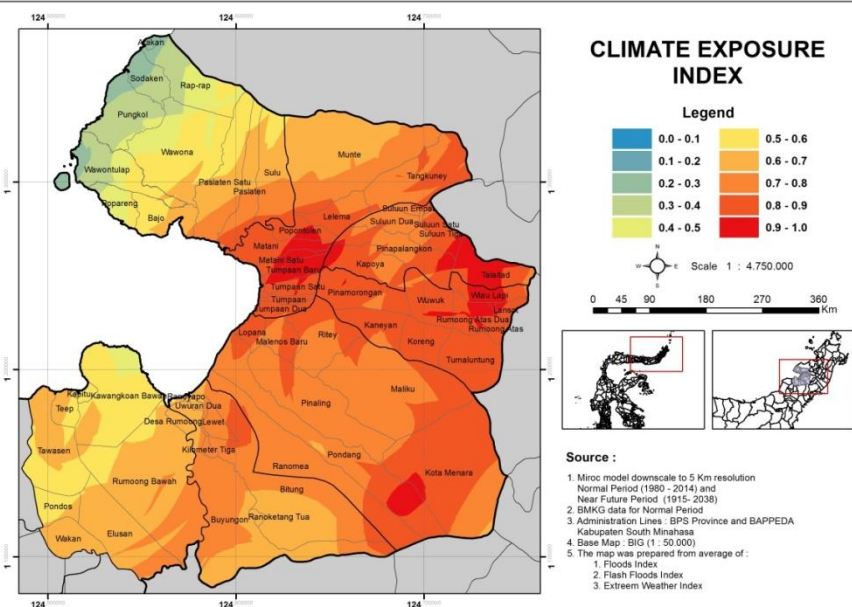
SUMBER DATA :

Peta Potensi Kerentanan ini disusun berdasarkan parameter-parameter fungsi Kerentanan yang dimodelkan dengan ordinal regresi logistik



BADAN METEOROLOGI KLIMATOLOGI & GEOFISIKA

COASTAL AND MARINE RESOURCES MANAGEMENT IN THE CORAL TRIANGLE: SOUTHEAST ASIA (RETA 7813)



JENIS INFORMASI	
Sea Level Rise	- Info tren - Informa
Curah Hujan	- Peta da - hujan e - Dry & w
Gelombang Laut	- Informa - Detail ti (maksim - minimu - Peta informas - gelomb
Kelembaban Udara	- Peta, tre - kelemb - maksim - harian,
Evaporasi	- Peta da - pengu - dasaria - Tabel d
Kimia Air Hujan	- Informa - Prediksi

KONSEP IMPLEMENTASI ADAPTASI SEKTORAL PERUBAHAN IKLIM



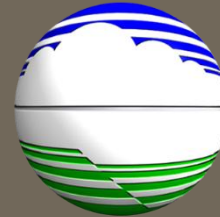
BADAN METEOROLOGI, KLIMATOLOGI, DAN GEOFISIKA

DEPUTI BIDANG KLIMATOLOGI

PUSAT PERUBAHAN IKLIM DAN KUALITAS UDARA

2014

	LOKASI
an	Kawasan pesisir Indonesia
an	Seluruh Indonesia
	Kawasan pesisir Indonesia
	Kawasan pesisir Indonesia
	Kawasan pesisir Indonesia
n	Seluruh Indonesia



BMKG



ICCTF - BAPPENAS

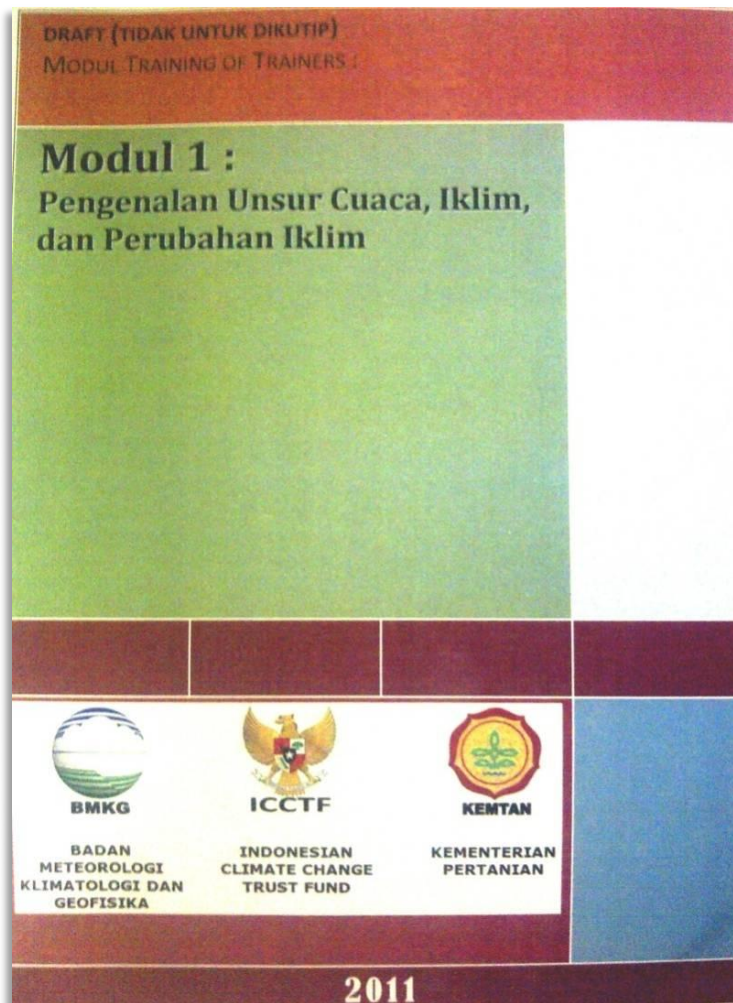
PUBLIC AWARENESS



Information for Climate Change Public Awareness

- Modul for Agriculture
- Modul for Fisheries
- Climate Change Animation
- TV and Radio Program
- Books and Comics

MODUL of ToT AGRICULTURE and ToT FISHERIES





BMKG

TV & RADIO PROGRAM



- Dokumentery Film 2 roles
- Serial Kid Television (Teropong Si Bolang)
- TVRI Talkshow (IptekTalk Programme, 3 serial)
- Radio Public Advertaising

RADIO Community



Tim LIPI

Sosialisasi di 5 wilayah 5 bulan
Program on dan off air temu wicara



Books



Pocket Book



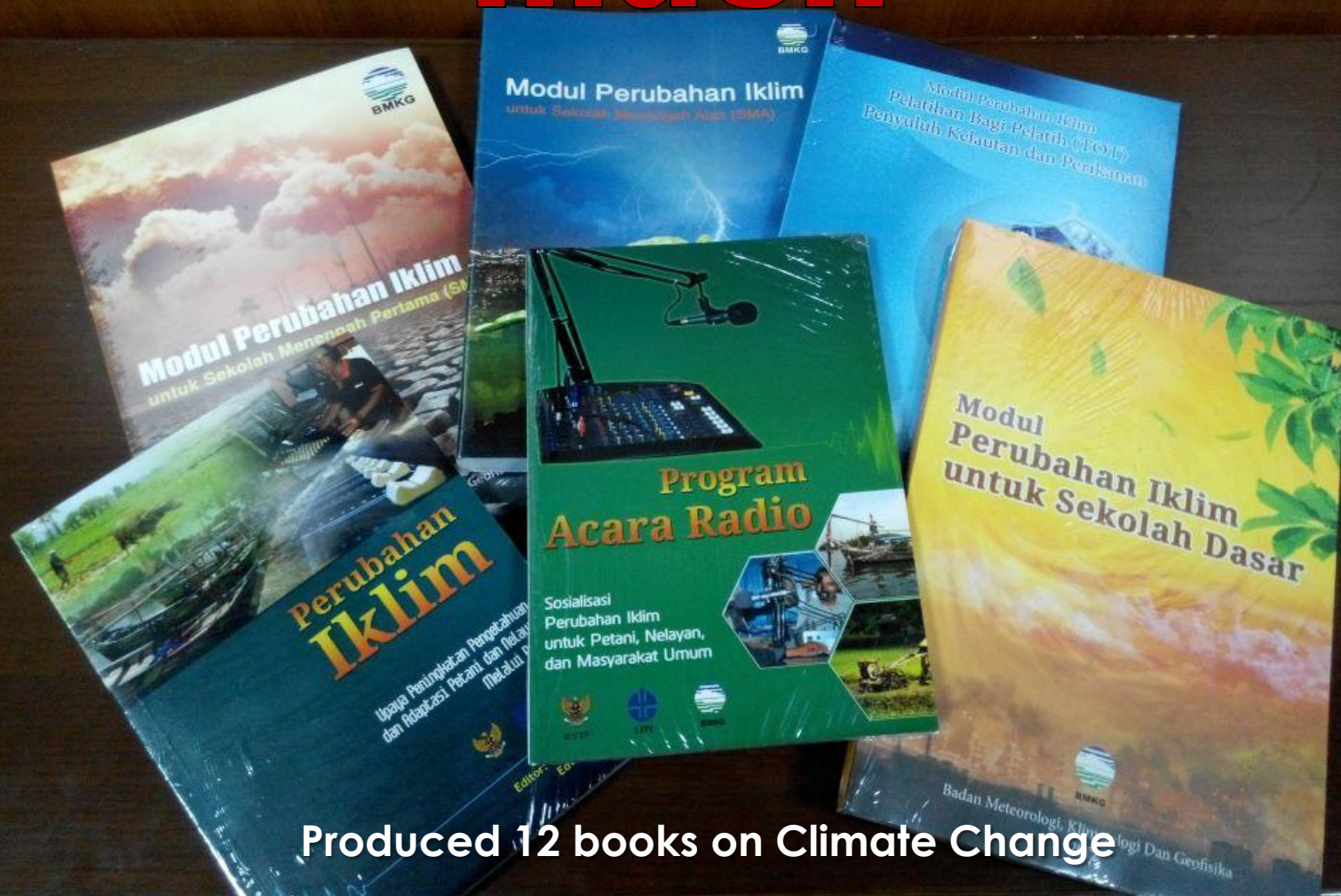
Komik Perubahan Iklim

Produced 12 books on Climate Change

Conclusions

- Human impact on climate change is very clear
- BMKG supply climate exposure data and information for vulnerability assessment
- BMKG feed the upstream data and information
- BMKG produces books of sectoral adaptation as guidance for climate information needs and gaps

Thank You very much



Produced 12 books on Climate Change