

# LOCAL TECHNOLOGIES FOR DEVELOPING CLIMATE RESILIENCE FARMING IN COASTAL AREAS

PRESENTED BY:

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ONLOCARNET ANUAL MEETING

BANDUNG OCTOBER 25-26,2016

#### MAIN HAZARD IN PANGADARAN AND CILACAP



Extreme rain (the change of rain pattern, flood, increasing deseas and pest, top soil erosion, increasing soil acidity).

Increasing temperature related with dry (dry field, pest increasing, water conflict, the harden field and the dead of roots, fields become difficult to be managed, infertile and nutrient decrease).

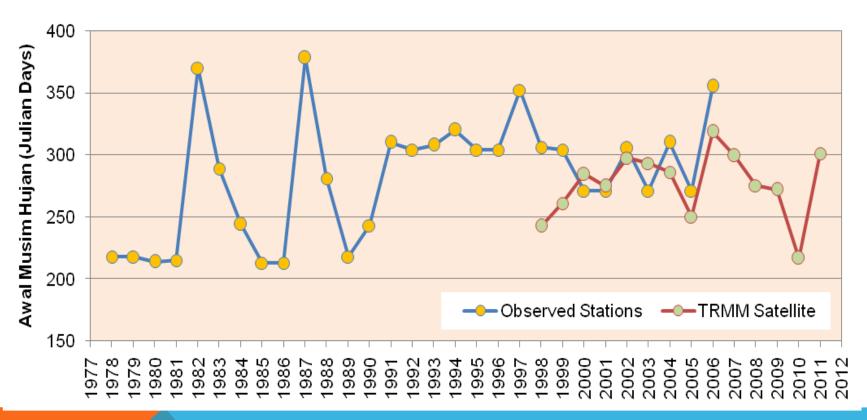
The increasing of sea water level (salty water flood in ricefields, shore abration, decreasing productive fields).

Strong Wind caused damage on plantation, pest spreading and faster deaseas.

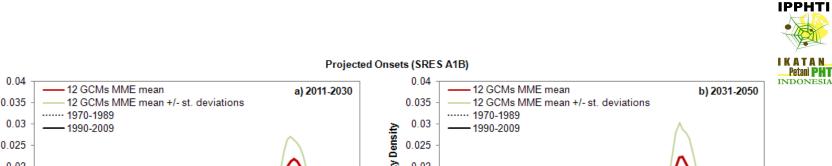
Map of District
Pangandaran West Java and
Cilacap Central Java

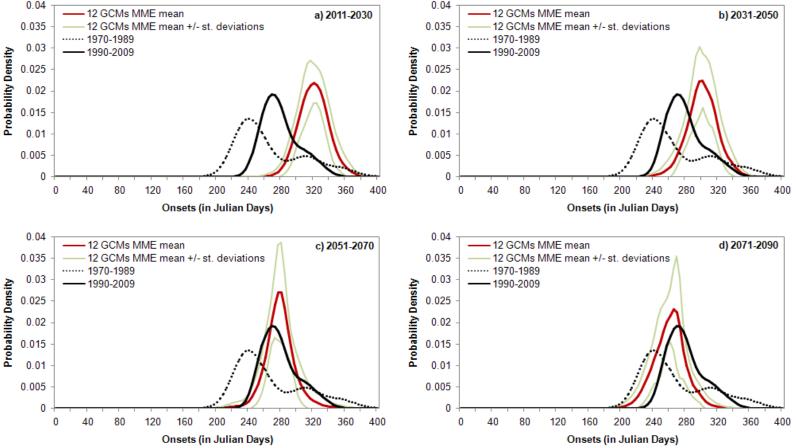




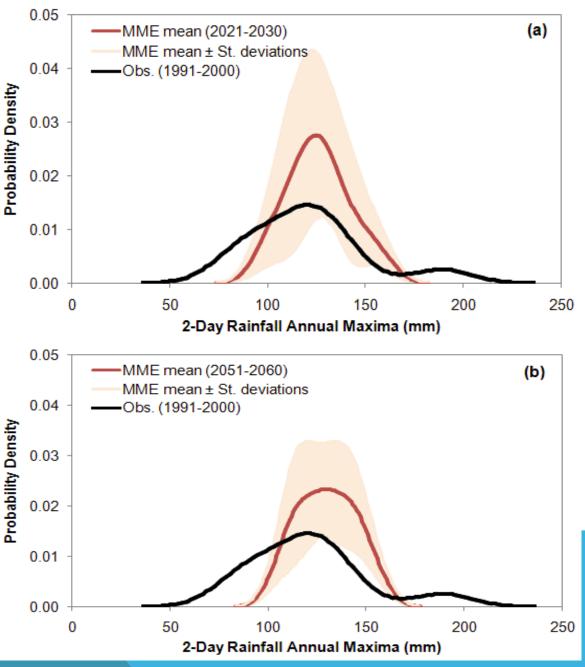


The average initial area in the rainy season Ciamis-Cilacap district (In Julian Day) CCROM 2013





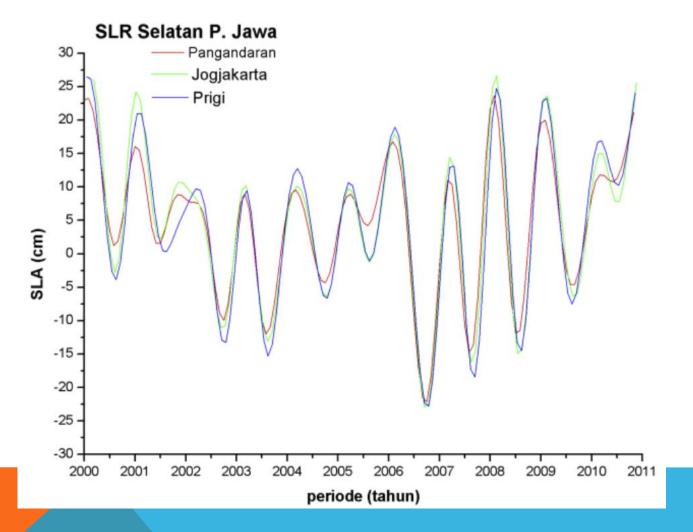
Projected changes in initial inclination of the rainy season (CCROM 2013)



Yearly Proyekti on of extrim rain maximum for 2-daily rainfal (CCROM 2013)





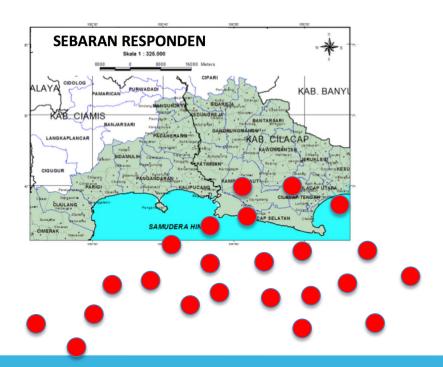


Sea Level Rise in South Coastal of Java Island (Average 0.97 mm/year) ~ Pangandaran 0.71 mm/year – Wuriatmo et al. 2012

### SEA LEVEL RISE MAP OF PANGANDARAN AND CILACAP DISTRICT

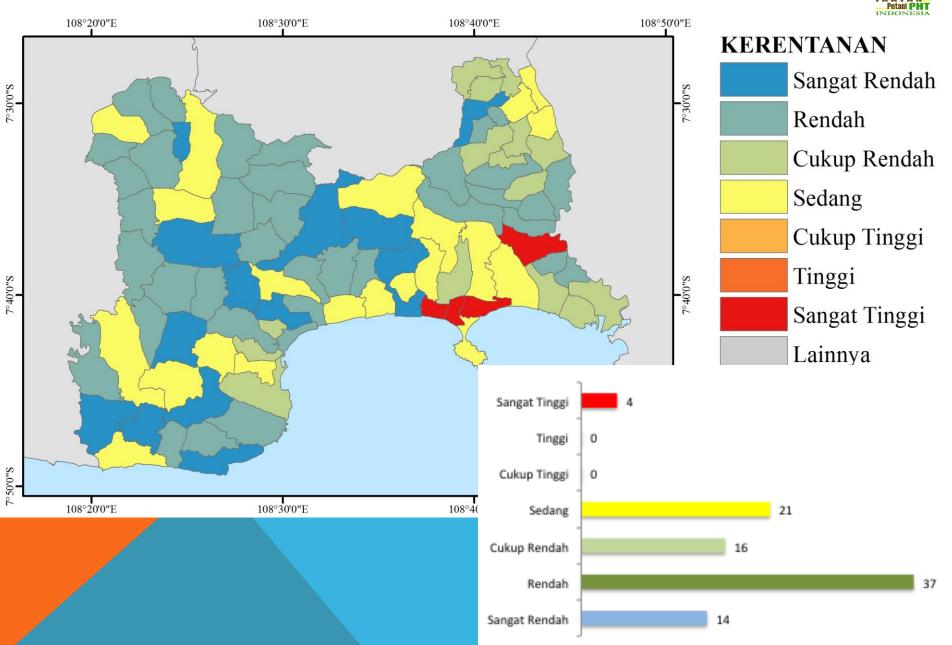






#### **Vulnerable Map of Pangandaran District (CCROM 2013)**





#### **STRONG WIND IN OCTOBER 2016**











#### **FLOOD**









#### **SALINE WATER**







#### 1. FLOATING PADDY FIELD









#### 2. CLIMATE FIELD SCHOOL AND ACTION RESEARCH

LEARNING FROM THE NATURE











#### 3. VEGETABLE CULTIVATION SYSTEM STAGE







#### 4. NURSERY FREE FROM FLOOD

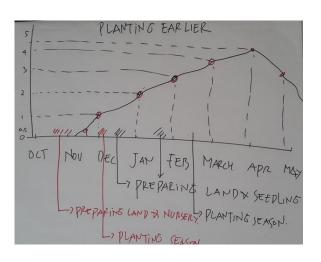






## 5. PLANTING EARLIER BEFORE TRUE RAIN COME











#### 6. DRY SEASON: CHANGES WITH COMODITIES THAT NEED LESS WATER LIKATAN NEED LESS WATER









#### 7. PEST AND DISEASES CONTROL



LAMP TRAP AND GRAFTING







#### 8. WATER HARVESTING











# 9. GREEN MANURE (SESBANIA ROSTRATA AND AZOLLA SP) FIXATIN NITOGREN AIR 70—90%









#### 10. MANGROVE AND ALTERNATIVE LIVELIHOOD















### 11. LOBBY AND ADVOCAY TO GOVERNMENT FOR DISEMINATION











#### **TERIMAKASIH**



WE DO:

**Farmer Impowerment** 

**Ecological Farming** 

**Learning by Doing** 

**Action Research** 

Training Farmer to Farmers

**Farmers Rights**