CLIMATE CHANGE ADAPTATION

WRAP UP OF THE SESSION

Role of Scientific Community in Supporting Climate Resilience Agriculture Development in Indonesia

- As the Agriculture Sector is still the main contributor to Indonesia's GDP and also the main source of livelihood for rural communities in Indonesia, it is important to implement CCA in the Agricultural Sectors.
- Drought and Flood are the main climatic problem that are facing agricultural sectors Indonesia.
- Initiatives that have been adopted by the MoA, as a contribution of Scientific Community Supporting Climate Resilience Agriculture Development in Indonesia, including:

  (1) Integrate climate resilient agriculture program into national policies

  (2) Developing Agricultural vulnerability and risk map → to guide the adaptation and prioritise the actions

  (3) Efficient Water Use Movement, since 1990s

Role of Scientific Community in Supporting Climate Resilience Agriculture Development in Indonesia (cont'd)

(4) Climate field School. MoA has implemented more than 300 unit CFS since 2002-2008 **Nation wide**

(5) Integrated cropping calendar (website). Provide guidance / tools to prepare farming activities based on soil map, climate variability and water availability. **Online Website**

(6) Improvement of Water Resource and Irrigation Management → Food smart village / *Kampung iklim*

(7) Development of crop tolerance varieties to environment stresses, i.e. Drought tolerant, early maturing, flood tolerant, salinity tolerant, brown plant hopper resistant,

(8) MoA developed Sustainable Food-reserved Garden (SFRG). Horticulture for daily household needs. Utilize household waste for fertilizer and house lawn. Implemented in 32 provinces and 230.000 HH involved.

Local Technologies for Developing Climate Resilience Farming in Coastal Areas

Technologies that have been developed:

(1) Floating Paddy Field. Media: Straws and Coconut peel. Challenge: Straws (waste) from harvest usually is burnt by farmers. Strategies: make a gap in between the platform. Following the height of the flood.

(2) Climate Field School and action reseacrh. Learn from farmers experience.

(3) vegetable cultivation system stage

(4) Nursery free from flood, around the house. One hole one seed → Using a lot less seed that the conventional one.

(5) Planting Earlied before True Rain Come. Prepare earlier, 1 month.

Local Technologies for Developing Climate Resilience Farming in Coastal Areas

(6) Dry Season: Changes With Comodities That Need Less Water. Use the waste from HH, local microorganism → fertilizers.

(7) Pest and Diseases Control. Tomatoes and Takokak.

(8) Water Harvesting, less that 10 mill RP / 8000 USD for the wind mill.

(9) Green manure: Sesbania Rostrata and Azolla sp (fast grow, only 3 weeks) with FIXATIN NITOGREN AIR 70—90%. Ducks eggs productivity 100 ducks form 60-70 to 75-85 eggs / day

(10) Mangrove and Alternative Livelihood. Batik ink from mangrove.

(11) Lobby and Advocy to Government for Disemination. Farmers must be strong and understand what they have in the field (challenge and opportunity).

Challenges in the Implementation of Climate Index Insurance for Enhancing Community Capacity in Managing Climate Risk

Insurance payment based on index, instead of damage / indemnity based.

The Goal of Weather Index Insurance:

- Protect farmer's investment cost and/or production during the 'bad' years.
- Encourage farmers to invest on their farm (i.e. using better agri-inputs and/or agriculture technologies) to increase their production.
- Securing local-regional-national food production.

Challenges in the Implementation of Climate Index Insurance for Enhancing Community Capacity in Managing Climate Risk

New ideas for old issues → Weather Index Insurance

Bundled sloution approach, though MFI institution, it consist of:

- Loan in the form of:
  - High quality agriculture inputs.
  - Cash.

- Agriculture extension service to guide farmers to maximize yield. E.g. what kind of seeds/fertilizers/persticide to use, and when to aplly the fertilizers and pesticides.

- Weather index insurance.

Challenges in the Implementation of Climate Index Insurance for Enhancing Community Capacity in Managing Climate Risk

- Micro finance role is very important in the implementation process.
- WII integrated with Technology for Better Crop Investment and Financial Access
- Pilot menjadi lesson learnt bagi implementasi yang akan dilakukan kedepannya.

Loss and Damage Issues in Southeast Asia

- Characterizing Loss and Damage due to Climate Change → can be used as the basis for the implementation of CCA
- Local people suffer more but they dont quatify the loss.
- L&D issues have been declared in the UNFCCC framework, but the methods for the quatifications is not included yet.
- Incorporate the quatification technics in measuring L&D that exist in the different subjects into Climate Policy Framework is necessary.

Recommendation for Future Meeting

There is a need to discuss more about how the International scientific community can provide an analysis on how to “Connect the condition in the local-current level, with larger scale and future situation”