



Climate Resilient Network

ASEAN Technical Working Group on Agricultural Research and Development (ATWGARD)

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Background and Rationale

- ❖ **Southeast Asia (SEA) is one of the most vulnerable regions of the world to climate change**
- ❖ **Climate hazards : temperature increase, erratic rainfall patterns (delayed onset of rain), more intense extreme climatic events (strong typhoons resulting to floods), severe droughts, sea level rise, pest and diseases outbreak.**
- ❖ **Climate change adverse impacts on ecosystems, livelihoods and many aspects of human societies.**
- ❖ **Climate change threatens food production and indirectly food security, ecological stability, and sustainable development.**



ASEAN Policy Frameworks / Initiatives

- Food, Agriculture and Forestry Vision 2016 – 2020

the ASEAN FAF Sector Roadmap and sectoral roadmaps in agriculture and forestry for post 2015

A competitive, inclusive, resilient and sustainable FAF sector integrated with the global economy, based on a single market and production base contributing to food and nutrition security and prosperity in the ASEAN Community

- ASEAN Integrated Food Security (AIFS) Framework

a regional umbrella for food security related initiatives, including emerging threats of climate change

- **ASEAN Multi-Sectoral Framework on Climate Change: Agriculture, Fisheries and Forestry towards Food Security (AFCC)**

Thai Proposal: Production System Approach for Sustainable Productivity and Enhanced Resilience to Climate Change



Promotion of Climate Resilience in Rice and Other Crops

Objectives:

- To promote a common understanding on and facilitate exchange experiences of climate change and the agriculture sector focussed on selected crops (rice, maize and cassava);
- To identify successful practices and policies at AMS level for tackling these climate change related threats that can be promoted and up-scaled; and
- To identify common concerns and capacity needs, and propose regional support strategies and instruments to address these in a coherent manner

ASEAN Multisectoral Framework on Climate Change and Food Security (AMAF-CC)

SOM-AMAF

Propose regional support strategies & tools for adaptation

ASEAN Regional Network

Regional Forum I: KICKOFF

- Definition of final working methodology
- Learning of tools
- Technical input and exchange (e.g. Vulnerability Assessment)

Regional Forum II: INITIAL RESULTS

- Identification and exchange of national best practices
- Identification of regional areas of collaboration
- Technical input and exchange

Regional Forum III: FINAL RESULTS

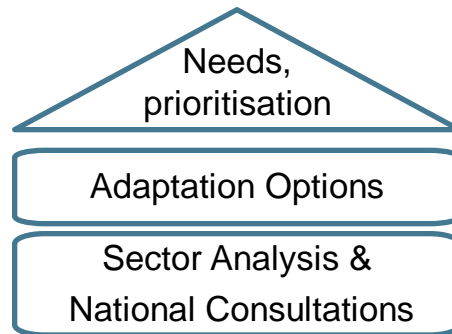
- Proposal of regional tools and strategies to strengthen adaptation
- Multilateral knowledge exchange

Knowledge exchange on best practices

Support AMS in strengthening climate resilience for selected agricultural sectors

ASEAN Member States

ASEAN Member States – Sectors (Rice & Maize / Cassava)



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CRN Approach and Case Studies

CRN project involves the conduct of coordinated regional studies in each of the collaborating countries (Cambodia, Indonesia, Lao PDR, Myanmar, Philippines, Thailand and Vietnam) plus two participating countries Brunei Darussalam and Malaysia)

Table 1 Summary of priority crops selected by ASEAN Member Countries

Participating Countries		Priority Crops
Indonesia Myanmar Thailand	Lao PDR Philippines Vietnam	Rice and Corn
Cambodia Malaysia		Rice and Cassava



Consolidated Findings

A. Rice

Country	Priority List of Identified GPs for Rice
Brunei	<ol style="list-style-type: none">1. Cropping Calendar2. Alternate Wetting and Drying (AWD)3. Stress-tolerant varieties
Cambodia	<ol style="list-style-type: none">1. Stress-tolerant varieties2. Crop diversification/model farming3. Best crop management practices (new)
Indonesia	<ol style="list-style-type: none">1. Dynamic cropping calendar published by the MOA2. Research on improving administrative procedure for taking up new varieties (new)3. Implementation of crop insurance based on weather climate index
Laos	<ol style="list-style-type: none">1. Crop diversification2. Postharvest technologies and institutional challenges/requirement3. Thai small holder seed production
Malaysia (new)	<ol style="list-style-type: none">1. Crop Calendar2. Drought tolerant3. Water use efficiency



Consolidated Findings

A. Rice (cont.)

Country	Priority List of Identified GPs for Rice
Myanmar	<ol style="list-style-type: none">1. Production of climate resilient varieties2. Best crop management practices (AWD, SSNM)3. Proper post harvest technology
Philippines	<ol style="list-style-type: none">1. Climate-ready varieties2. Crop diversification3. Cropping calendar
Thailand	<ol style="list-style-type: none">1. Cropping calendar2. Stress-tolerant varieties3. RIICE technologies
Vietnam	<ol style="list-style-type: none">1. Rice shrimp farming (new)2. Crop Insurance3. Alternative Wetting and Drying (AWD) (new)



Consolidated Findings

B. Corn

Country	Priority List of Identified GPs for Rice
Brunei	<ol style="list-style-type: none">1. Corn (special type, for consumption)
Indonesia	<ol style="list-style-type: none">1. Dynamic cropping calendar by the MOA (new)2. Research on improving administrative procedure for taking up new varieties (new)3. Implementation of crop Insurance based on weather climate index (new)
Laos	<ol style="list-style-type: none">1. Crop diversification2. Postharvest technologies and institutional challenges/requirement3. Marketing issues
Myanmar	<ol style="list-style-type: none">1. Site Specific Nutrient Management (SSNM)2. Sustainable Corn Production in Sloping Areas (SCOPSA) (new)3. Quality Protein Maize (QPM)
Philippines	<ol style="list-style-type: none">1. Stress tolerant varieties2. Site-specific nutrient management (SSNM)3. Sustainable corn production in sloping areas (SCOPSA)



Consolidated Findings

B. Corn (Cont.)

Country	Priority List of Identified GPs for Rice
Thailand	1. Breeding and production of stress tolerant varieties
Vietnam	1. Stress tolerant and high quality varieties 2. Optimal row spacing and density (new) 3. Site-specific Nutrient Management (SSNM) (new)



Consolidated Findings

C. Cassava

Country	Priority List of Identified GPs for Rice
Cambodia	<ol style="list-style-type: none">1. Healthy planting materials2. Contour intercropping
Malaysia	<ol style="list-style-type: none">1. Planting materials2. Good agricultural practice (GAP)3. Post-harvest



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Institutional Challenges

Institutional challenges identified during the Second Special Meeting of the ATWGARD held on 17 June 2014 in Bangkok, Thailand

- 1. Inadequate mechanism for CCA technology or knowledge transfer through agricultural extension programs. – Training of Trainers for agricultural officers and technicians, farmer leaders, farmers etc.**
- 2. Opportunity should be provided for field demonstrations and piloting of CCA options in selected areas in collaboration with local government units (LGUs), state colleges and universities (SCUs), non-governmental organizations (NGOs) and people's organizations (Pos) working with local farmers.**
- 3. Sharing and dissemination of CCA-related data and information, and technology transfer within and among AMS. This involves provision of knowledge management platform such as that of SEARCA, APAN, etc.**



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Institutional Challenges

4. **Implementation of effective regional networking and collaboration for research and development activities and projects, e.g. APAN on CCA, CGIAR CCAFS, SEARCA networks, IRRI Rainfed Lowland Rice Consortium; etc.**
5. **Availability of effective and efficient as well as accessible and affordable climate risk management measures such as risk sharing/transfer via agri-insurance, e.g. use of weather index-based insurance (WIBI) products in Indonesia and the Philippines.**
6. **Sustainability of financing mechanism for CCA measures. CCA activities should be considered as investment which requires that CCA action plan and business plan are integrated in agricultural farm production.**



Implementation Challenges

- 1. Urgent need for setting-up and facilitating regional collaboration among AMS in the sharing of data and information on these GPs, and technology transfer through existing networks, and programs of regional institutions. - CRN to tap existing networks e.g. SEARCA, CCAFS, APAN, etc. to fast track exchange of information, expertise and experiences on CCA.**
- 2. Partnership and collaboration of R and D institutions in the agricultural sector with local groups (e.g. LGUs, NGOs, POs, SUCs) are essential to facilitate capacity building and to enhance climate resilience of local communities and the crop production systems.**
- 3. Sustainability of CCA interventions should be considered to safeguard from climate hazards. Joint venture projects and related activities on CCA interventions should be explored vis-à-vis commitment, funding, links with existing programs, etc.**



Recommended Policy Guidelines

- 1. Promote CCA information sharing and technology transfer within and among AMS. These include downscaled climate scenarios, information on seasonal climate forecasts, knowledge management, planting calendar, etc.**
- 2. Facilitate climate-proofing of other production systems related to crops such as CCA integrated with farm production activities in livestock, aquaculture, agroforestry etc.**
- 3. Implement capacity building programs at different levels. This may include implementing executive for a for planners; training of trainers; key local stakeholders, etc.**
- 4. Implement action R&D on CCA with technical assistance from experts from SEA region, provision of technical inputs on CCA options, procedures and protocols, as well as crop production inputs (e.g. improved and climate stress-tolerant varieties).**



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Recommended Policy Guidelines

5. Establishment of a monitoring and evaluation (M&E) system for assessing climate resilience of local stakeholders, crop production system and ecosystems. This will involve specifications and measurement of key indicators for monitoring resilience.
6. Pursue the formulation of the ASEAN Protocols and Guidelines on Promotion of Climate Resilience to include the following : policy briefs on GPs for CCA; prioritization of R&D activities, e.g. Climate Field Schools; mobilization and allocation of funding; expert dispatch and technical assistance; sustainable financing of CCA for climate resilience



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ATWGARD CRN Next Steps

1. **ATWGARD envisions that the ASEAN Member States (AMS) increase their financial and technical capacity to scale up climate smart value chain investments in their respective countries. – GAP CC will continue to support ASEAN as “knowledge broker” regarding international and national climate finance opportunities for agriculture/forestry. CRN as a dialogue platform in ASEAN for the exchange of experiences on climate smart practices and finance.**
2. **The CRN should identify entry points for Climate Smart Agriculture (CSA) and forestry practices and investment opportunities along selected agricultural/forestry value chains. – linking with potential partners i.e. GIZ, ATWGARD (CRN), ASWGC, AWG CC, and relevant agricultural/forestry ministries in AMS. Also with regional networks e.g. IRRI Rainfed Lowland Rice Consortium, SEARCA’s network, CGIAR CCAFS, APAN, ANGOC, etc. operating in the SEA region, Local Government Units (LGUs), private sectors, e.g. crop insurance companies, trading and marketing entities, etc. in collaborative activities that will promote climate resilience.**



ATWGARD CRN Next Steps

3. **Third Special Meeting of the ATWGARD on November 10, 2014 in Manila Philippines, aims to inform the participants from the AMS on the technical requirements, institutional issues, and implementation challenges of the GPs in the regions. International experts will be invited to talk about technical aspects and requirements of each of the GPs, as well as on the considerations on the up scaling of each measure to other areas.**



Concluding Remarks

It should be pointed out that initiating a network is easy, but sustaining it will be challenging. Nevertheless, this will be a journey where everybody will benefit, and a common goal will be within reach if and when everybody will support and work for it.



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Terima Kasih

Khohp Khun

Aw Khun

Khohp Jai

Jeesuutin baadae

Thank You

Salamat po

Gam Uhn