



**Report of the
Special ASEAN Technical Working Group on
Agricultural Research and Development
(ATWGARD)
Kick-off Workshop on the Promotion of
Climate Resilience in Rice and Other Crops
January 21-22 2014 | Pattaya, Thailand**

**REPORT OF THE
SPECIAL ASEAN TECHNICAL WORKING GROUP ON
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IN RICE AND OTHER CROPS**

21-22 January 2014| Pattaya, Thailand

INTRODUCTION

1. The Special ASEAN Technical Working Group on Agricultural Research and Development (ATWGARD) was held on 21-22 January 2014 in Pattaya, Thailand.

2. The Meeting was attended by the delegates from Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand, and Vietnam. Representatives from the ASEAN Secretariat, the Department of Agriculture (DOA) and the Rice Department under the Thailand Ministry of Agriculture and Cooperatives (MOAC), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) Indonesia, the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), Centre for Climate Risk and Opportunity Management in Southeast Asia Pacific (CCROM - SEAP), Climate Sense, and the International Rice Research Institute (IRRI) were also in attendance. The list of delegates appears as **ANNEX 1**.

AGENDA ITEM 1: OPENING SESSION

3. Mr. Arak Chantuma, representative of the Rubber Research Institute, Thailand DOA on behalf of Dr. Suwit Chaikiattiyos, Deputy Director General Thailand DOA, welcomed all the delegates from the ASEAN Member States and partner institutions to the kick-off workshop. The Opening Remarks appears as **ANNEX 2**.

4. He expressed the sincere appreciation of Thailand DOA to the Government of Germany, particularly to the ASEAN-German Programme on Response to Climate Change (GAP-CC) and GIZ, for their continuous assistance to the initiative in support of Thailand DOA's proposal. He likewise acknowledged the presence of the credible experts from partner institutions, who will guide for the effective and efficient implementation of the project.

5. He concluded his remarks by stating that Thailand DOA will be fully committed and involved to ensure that the project will meet its outcome, which is to provide options and adaptation measures to enhance the coping mechanisms to climate change of the ASEAN region.



1.1. Background on the Thai Proposal: Production System Approach for Sustainable Productivity and Enhanced Climate Resilience to Climate Change

6. Dr. Margaret Yoovatana, Thailand DOA Policy and Plan Specialist under the International Agricultural Affairs Group, Planning and Technical Division. She provided the delegates an overview of the background and objectives of Thailand DOA's proposal, "Production Systems Approach for Sustainable Productivity and Enhanced Climate Resilience to Climate Change", which was presented to the 8th ATWGARD Meeting in Singapore on 14-14 May 2013. The presentation appears as **ANNEX 3**. It is anchored on the ASEAN Policy Frameworks: ASEAN Integrated Food Security Framework (AIFS) and the ASEAN Multi-Sectoral Framework on climate Change (AFCC), which are supported by GAP-CC. The Thailand proposal aims to develop regional direction to address food security and climate change through:

- a. the identification of priority sectors or value chains and vulnerable regions;
- b. establishment and implementation of a climate proofing methodology for agriculture related activities and investment programs;
- c. establishment of a knowledge management platform towards the development of a community practice, as well as building and strengthening capacities for climate change resilience;
- d. Establishment of a platform sharing expertise, knowledge, experience and information to address climate change issues; and,
- e. R&D network on specific areas to enhance awareness and resilience to climate change.

1.2. ASEAN Food Security and Climate Change Frameworks

7. Ms. Amalia Sukma Agustina, representative from the ASEAN Secretariat presented the overview of ASEAN Policy Frameworks, namely AIFS and AFCC that address food security and climate change challenges within the Southeast Asian region. She briefly introduced the ASEAN Ministers of Agriculture & Forestry (AMAF) including its areas of priority for cooperation. Ms. Agustina likewise updated the delegates on the status and current developments of the said frameworks, and presented climate change challenges and ASEAN initiatives across sectors. The presentation appears as **ANNEX 4**.

1.3. Background and Introduction to Climate Resilience Initiative

8. Ms. Myriam Fernando, in her presentation, briefly discussed the state of food security within the ASEAN region in relation to community building and external relationships with neighboring countries. She listed some issues and challenges that put pressure in food security, which include among others, population growth, changes in dietary requirements, food prices and food hikes. She also discussed the impacts of climate change and its effects in food security, which prompted the ASEAN Member States (AMS) to enhance regional collaboration. This resulted to the development of the following ASEAN Policy Frameworks and Initiatives to address food security and climate change:

- a. **ASEAN Climate Change Initiative (ACCI)**: an ASEAN comprehensive and cross-sectoral platform for coordination and cooperation
- b. **AIFS**: a regional umbrella for food security related initiatives, including emerging threats of climate change
- c. **AFCC**: a platform for the cross-sectoral discussion (agriculture, fisheries, livestock, and forestry) in addressing climate change.



9. Within these frameworks, the Thailand Department of Agriculture (DOA) submitted a proposal to ASEAN on the *Production System Approach for Sustainable Productivity and Enhanced Resilience to Climate Change*, which is supported by the GAP-CC project in close coordination with the ATWGARD. Key actors of the project were also discussed, to wit:

Lead ASEAN Body:	ATWGARD
Lead Country:	Thailand Department of Agriculture
Funding and Steering:	ASEAN-German Programme on Response to Climate Change (GAP-CC)
Lead Coordinator:	Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA)
Additional Resource Institutions:	Center for Climate Risk and Opportunity Management in Southeast Asia and the Pacific (CCROM-SEAP), and Climate Sense

10. Towards this end, GAP-CC developed the initiative, Promotion of Climate Resilience in Rice and Other Crops that aims to: a) promote a common understanding and facilitate exchange of experiences on climate change and agriculture focusing on rice, maize, and cassava; b) identify successful practices and policies at AMS level for tackling climate changed related threats that can be promoted and up-scaled; and, c) identify common concerns and capacity needs, and propose regional support strategies and instruments to address issues.

11. She also discussed the regional and national platform to enhance cross-sectoral know-how and exchange and cooperation amongst relevant institutions, where the timeline and milestones were also discussed. The platform of the network is found on the presentation that appears as **ANNEX 5**.

12. After the opening session, the delegates and partner institutions posed for a group photo and proceeded for a coffee break.

AGENDA ITEM 2: FOOD SECURITY IN ASEAN CLIMATE CHANGE: AN ASSESSMENT OF VULNERABILITIES OF STAPLE CROPS IN ASEAN MEMBER STATES/INTRODUCTION TO IRRI ASEAN INITIATIVE

13. Dr. Rizaldi Boer Executive Director of CCROM-SEAP, and Mr. Douglas Black Climate Sense Director discussed some preliminary studies relating to risks and vulnerabilities of staple food crops (rice, maize, and cassava) with regard to the impacts and effects of climate change in crop production.

14. In his presentation, Dr. Boer shared a study that CCROM has conducted in 2013 with the ASEAN Secretariat on the staple food crop (rice, maize, and cassava) of the AMS, which aimed to: 1) assess the vulnerability of each AMS and identify the factors contributing to vulnerability; and 2) provide recommendation on possible areas of intervention for ASEAN at both regional and national levels to effectively prioritize adaptation programs and policies. He stressed the roles of ASEAN to play the lead role and coordinate support strategies in addressing key areas on climate change in food security. The project utilized consumption index, production index, and vulnerability index as methods for vulnerability assessment. He showed the results of the study with regard to the impacts of climate change on the staple crop's yield, area planted, and crop production. Some of the recommendations derived from the study for ASEAN include: increasing production and food diversification; increasing adaptive capacity, identifying drivers for monitoring vulnerability, and updating climate impacts using new scenarios. The presentation appears as **ANNEX 6**.



15. Mr. Douglas Black discussed in his presentation on a project conducted in 2013 focusing on organizational and human capacity. It utilized technical information to influence better decisions and make changes in relation to climate change issues. It involved multiple experts and institutions on agriculture and climate change regarding their capacity to respond in the ASEAN region. The results of the study state that only few institutions adopt climate change impacts in their national strategies on climate change adaptation due to capacity gaps. He also stressed the importance of ASEAN's role in adaptive capacity by promoting good practices, supporting the AMS in its developments, and encouraging regional collaboration among countries. The recommendations of his study include: establishing strong frameworks that create conditions for adaptation options; capacity development through sharing best practices and cross-country learning; and develop climate models and geographical hotspot maps to address information gaps. The presentation appears as **ANNEX 7**.

16. Dr. Reiner Wassman, IRRI Climate Change Specialist presented on Introduction to a new IRRI Initiative Targeting ASEAN and its Member Countries. He started his presentation by showing statistics on rice exports and imports and its links to climate change, and showed some areas on mitigation that IRRI is working on such as the Alternate-Wetting-and-Drying (AWD) adoption scenarios, and the Site-Specific Nutrient Management (SSNM) and its mobile application i.e. Nutrient Manager. For areas on adaptation, Dr. Wassman discussed stress tolerant varieties such as *Sub1* and *Saltol*. He also gave an overview of the Research Program on Climate Change, Agriculture and Food Security (CCAFS), its themes, and one of its flagship project titled, Policy Information and Response Platform on Climate change and Rice in ASEAN and its Member (PIRCCA). The flagship project ultimately aims to enable policy makers to make informed decisions on the rice sector related to climate change through ensuring food security, enhancing adaptive capacity, mitigation planning, agricultural policies and institutions, and gender and social differentiation. The presentation appears as **ANNEX 8**.

AGENDA ITEM 3: MEMBER STATE PRESENTATION ON CURRENT INITIATIVES, POLICIES, AND STRATEGIES OF CLIMATE RESILIENCE IN SELECTED SECTORS

17. The eight (8) focal points of the GAP-CC project on the ATWGARD provided an overview of member state policies and initiatives in climate change and agriculture that are currently underway in their respective countries. Dr. Somchai Boonpradub, representative from the Office of the Senior Expert, Thailand DOA chaired the session.

Brunei Darussalam

18. Mrs. Hajah Suria Zannudin, Senior Agriculture Officer, Department of Agriculture and Agrifood Brunei started her presentation on the importance of having a strategic plan and a national agriculture policy to ensure national food security, which appears as **ANNEX 9**.

19. The highlights of the presentation of Brunei Darussalam are as follows:

- Enabling Policies/Strategies: "Towards Self-sufficiency in national Rice Production" launched in April 2009 that aims to raise the level of food security
- Activities on crop and livestock production
- Expectations and contributions to regional initiative: sharing information on climate change, strengthen capacity building, conduct of collaborative research activities and overseas training programs, discover potential uses of cassava for economic benefits, and exchange of genetic material for commercialization.



Cambodia

20. Dr. Ouk Makara, Director of Cambodian Agricultural Research and Development Institute presented the policies and initiatives currently being implemented nationally. The presentation, which appears as **ANNEX 10**, are highlighted as follows:

- Enabling Policies/Strategies: Rectangular Strategy Phase III: for Growth, Employment, Equity and Efficiency, particularly Promotion of Agricultural Sector – Improved Productivity, Diversification and Commercialization. It aims to improve productivity of rice and other crops, promote research and development for productivity improvement and adaptation to climate change.
- Ministry of Agriculture Forestry and Fisheries (MAFF) Climate Change Strategic Plan 2014-2018 (Draft) to contribute to minimize risk and adverse effects of climate change through enhancing adaptation and mitigation measures.
- Data on agriculture crops and fruits – rainfed lowland rice as the major crop with 73.2% of total crop and fruit production.
- Data on rainfed lowland production systems constraints: flood, drought, and pest. Unofficial 2013 records: 300,000 hectares affected, 114,000 hectares of which are completely damaged by flood.
- Expectations and contributions to regional initiative: improving soil water crop management, improving mechanization for crop establishment and postharvest; collaborative research; and sharing of publications of available technology.

Indonesia

21. Dr. Hasil Sembiring, Director for Indonesian Center for Food Crop Research and Development (ICFORD), started his presentation by stating the global issues being brought about by the uncertainty of climate change, and the importance of the innovative-adaptive agricultural technology for a sustainable environment and food production. The presentation appears as **ANNEX 11**.

22. The highlights of the presentation of Indonesia are as follows:

- Strategy to develop innovative-adaptive technology: stress tolerant varieties; optimizing land and water resources; optimization of zero-waste farming.
- Climate Smart Agriculture (CSA) – environmentally friendly
- Agricultural practices: Integrated Crop Management (ICM), farmer field school; carbon Efficient Farming for Rice and Palm Oil; Integrated Agriculture for Dryland, Food Mart Village; and Planting Calendar for Irrigated Rice based on National Climate Data

Lao PDR

23. Mr. Pasalath Khounsy, Deputy Research Management Sector, National Agriculture and Forestry Research Institute presented an overview of Lao policies and initiatives on climate change, which appears as **ANNEX 12**.

24. The highlights of the presentation of Lao PDR are as follows:

- Enabling Policies/Strategies: 7th National Socio-Economic Development Plan (NSEDP); National Strategy on Climate Change (NSCC), National Adaptation Plan of Action (NAPA), 1st and 2nd National Communication, Decree on Social



and Environmental Impacts Assessment, Clean Development Mechanism Regulation

- Priority sectors/areas: agriculture, forestry, water resources, health
- Climate adaptation projects focusing on: improving climate resilience of agriculture to climate change; building adaptive capacity; vulnerability assessments and climate change adaptation options.
- Expectations and contributions to regional initiative: maximizing the use and promotion of agrometeorological knowledge and technology; capacity development in research and extension; collaborative research and development; and knowledge sharing.

Malaysia

25. Dr. Mohamad Zabawi bin Abdul Ghani, Deputy Director for Malaysia Agriculture Research and Development Institute (MARDI) presented the national policies and initiatives currently being implemented. The presentation, which appears as **ANNEX 13**, are highlighted as follows:

- Enabling Policies/Strategies: a) National Policy on Climate Change (November 2009) focusing on mainstreaming and integration of climate change in government plans and programs, and capacity building; b) National Agrofood Policy (2011-2020) focusing on food availability, accessibility, and safety
- Current initiatives and activities: a) Food Security Plan – transform the agriculture sector and ensure sufficient food, particularly rice production; b) Climate Smart Agriculture for adaptation strategies; c) Early Warning System (EWS) focusing on pests and diseases in staple crops; d) Aerobic Rice – high yielding rice varieties with high yields
- Expectations and contributions to regional initiative: foster greater regional climate change policy and action cooperation

Philippines

26. Dr. Teodoro Solsoloy, Deputy Director of the Bureau of Agriculture – Department of Agriculture (DA-BAR) presented the Philippines' national policies and current activities in response to climate change. The presentation appears as **ANNEX 14**.

27. The highlights of the presentation of the Philippines are as follows:

- Enabling Policies: a) Adaptation and Mitigation Initiative in Agriculture (AMIA) to the centerpiece of the Philippines Department of Agriculture's (DA) program on climate change to ensure food security and resilient agriculture livelihoods; b) Presidential Executive Order 43 to promote climate change adaptation and mitigation strategies and measures among national government agencies and local government units, among others; c) DA memorandum on Mainstreaming Climate Change in DA Programs, Plans, and Budget – development of Aerobic Rice technology; d) Field Monitoring Systems (FMS); and e) Climate Change Research, Development and Extension Agenda and Program (RDEAP) for Agriculture and Fisheries – long-term adaptation and mitigation strategies
- Current initiatives and activities: a list of climate change projects funded by DA-BAR with various state universities and colleges, as well as research institutions.
- Expectations and contributions to regional initiative: knowledge sharing of research outputs for information utilization, adaptation and network.



Thailand

28. On behalf of Dr. Suwit Chaikiattiyos, Dr. Praphan Prasertsak, Senior Agriculture Officer of the Field and Renewable Energy Crops Research Institute, Thailand DOA, started his presentation by listing some facts regarding the agricultural sector of Thailand, one of which is being one of the world's major producers of rice, cassava, sugarcane, maize and other fruit crops. The presentation appears as **ANNEX 15**.
29. The highlights of the presentation of Thailand are as follows:
- Enabling Policies: Guiding principle in development – “Sufficiency Economy”; seven (7) flagship projects for Thailand Agricultural Evolution (2013-2018)
 - Current initiatives and strategies on climate resilience: a) adaptation and reduction of vulnerabilities; b) mitigation of greenhouse emissions; c) research and development; d) information dissemination for active public participation; e) capacity building; and f) strong international cooperation.
 - Adaptation initiatives for better management and conservation of the environment: a) Royal Initiative Projects; b) projects implemented by the Ministry of Natural Resources and Environment; c) research and development for breeding; d) capacity building; and e) establishment of centers of excellence.
 - Expectations and contributions to regional initiative: value chain and hotspot analyses, identification and sharing of best practices, project sustainability.

Vietnam

30. Dr. Nguyen Kim Chien, Deputy Head for General Affairs Division, Department of Science, Technology and Environment, Ministry of Agriculture and Rural Development (MARD) presented Vietnam's climate change policies and initiatives implemented on the national level, which appears as **ANNEX 16**.

31. The highlights of the presentation of Vietnam are as follows:

- Enabling Policies: in 2007 – National Target Program to respond to Climate Change (NTP-RCC) to mainstream climate change actions and formulate strategies on greenhouse gas mitigation and climate change adaptation; in 2011-2020 – national socio-economic development program to emphasize the importance of environmental protection
- MARD policies and strategies: Action Plan Framework for Adaptation to Climate Change in the Agricultural Research Sector; Master plan for Climate Change adaptation
- Climate change impacts on agriculture: climate change hazards – calamities, storms, floods, droughts, among others; forecast of climate change impacts on agriculture – comparison of Gross Domestic Product (GDP) with and without adaptation measures.
- Current initiatives on crop production, livestock production, and forestry.
- Expectations and contributions to regional initiative: development of new varieties that better adapt to climate change focusing on rice and maize; sharing practices and experience to mitigate climate change impacts

32. After the presentation of the ATWGARD focal points, Dr. Felino Lansigan, SEARCA Regional Agricultural Value Chain/Climate Resilience Expert briefly presented a wrap-up discussion of the workshop points highlighted on the first day. Some of the common ideas highlighted by the AMS in terms of expectations to the initiative include: a) strategies for



addressing current and future climate change impacts, b) regional cooperation and networking, and c) open sharing of information on climate change best adaptation practices.

AGENDA 4: FINALIZATION OF OBJECTIVES, METHODOLOGY AND SCOPE OF WORK

33. Mr. Arak Chantuma, representative of the Rubber Research Institute, Thailand DOA, chaired the second day of the workshop.

34. Mr. Douglas Black, Climate Sense Director, presented the proposed Methodology to facilitate a process of regional agreement among AMS in terms of improving adaptive capacity of crops and intensifying regional collaboration. Specifically, it aims to:

- Identify where there are climate change vulnerable elements in the supply of rice, maize & cassava in the region;
- Identify 'good practice' case studies for climate adaptation of these crops; and,
- Use the learning from these examples to stimulate and spread meaningful adaptation responses across the region.

35. The seven AMS funded by GIZ (Cambodia, Indonesia, Lao PDR, Myanmar, Philippines, Thailand, and Vietnam) are expected produce value chain maps focusing on two (2) crops – either rice or maize, or rice or cassava – with a maximum of five (5) case studies. Mr. Black reminded the participants that it is important to consider the Primary focus is mainly on the “production” phase but “post-production” is also encouraged if it provides better learning. He reminded the participants that the process will not utilize primary research but existing knowledge and experiences. Brunei, Malaysia, and Singapore may wish to conduct the study but will not receive funding from GIZ though will receive technical support and input. The Methodology appears as **ANNEX 17**.

36. The highlights of the discussion and agreements on the methodology among the AMS are as follows:

- Criteria for selection: economic importance of the crop on national food security, vulnerability ratings
- In the context of the project, value chain mapping is used as a tool to have a clear visualization of the steps, process and the relationships of key stakeholders on crop production systems and how these are affected by climate change.
- Value chain mapping of respective sectors per AMS to contribute to the regional analyses on how the ASEAN countries are impacted by climate change.
- On identifying good practice, selection should be based from available knowledge – existing literature and interview with experts.
- Studies to be conducted in close coordination with the ATWGARD focal points and Departments/Ministries of Agriculture, strengthened by the conduct of national consultative meetings.
- The studies should be endorsed and approved by the Departments/Ministries of Agriculture of each of the AMS (proposed Step 6 of the Methodology)
- Share results of the studies on the regional level in terms of common findings on the overall picture of crop production, best practices, and climate change issues, as well as policies to address these, which could serve as endorsement and policy recommendation for adoption of the AMS.
- Regional resource team to synthesize the results of the studies



AGENDA 5: IMPLEMENTATION ISSUES AND CHALLENGES/SECTOR SELECTION IN MEMBER STATES

37. Dr. Felino Lansigan, Regional Agricultural Value Chain/Climate Resilience Expert, discussed with the ATWGARD focal points for GAP-CC together with the national resource persons the proposed sector selection, scope of analyses, and selection criteria for best practices, which appears as **ANNEX 18**. He enumerated considerations for the selection of second crop, namely: contribution to agricultural production, economic importance, vulnerability to climate change and variability, and related risks, staple and/or feed crop, and availability of data and information based on previous published literatures. He also showed some statistics of average rice, maize, and cassava production of ASEAN countries from 2000-2012.

38. Prior to the kick-off workshop, a questionnaire was sent to the ATWGARD focal points and the national resource persons to preliminarily identify the scope and focus of the studies in terms of selecting the crops and crop production systems. The scope and focus, selection of crops, production system and geographical focus would be discussed and finalised at the national consultation meetings. Dr. Lansigan showed and verified with the national resource persons the results of the following survey questionnaires in terms of crops selection, which are as follows:

- Brunei Darussalam: rice, cassava
- Cambodia: rice, cassava
- Indonesia: rice, maize
- Lao PDR: rice, cassava, maize
- Malaysia: rice, cassava
- Myanmar: rice, maize (to be finalized with the ATWGARD focal point)
- Philippines: rice, maize
- Thailand: rice, cassava, maize
- Vietnam: rice, maize

39. In terms of scope of analyses, he stated that the coverage of the study will be national but the analyses will be sub-national/regions – representative provinces which are top producing areas for rice and maize/cassava. Current and future climate effects and impacts are also crucial to the analyses. He listed some climate-related hazard to consider, some of which include: rising temperature, erratic rainfall pattern, extreme weather events, and sea level rise. In assessing climate impacts, Dr. Lansigan told the national research persons to look at the different stages of crop growth and development, as well select hotspots where rice and maize/cassava are planted.

40. Dr. Lansigan also listed the following selection criteria for best practices for climate change adaptation:

- Potential for increasing climate resilience
- Socio-economic efficiency (i.e. cost-effectiveness)
- Positive environmental impact (e.g. watershed enhancement; reduced soil erosion, etc.)
- Contribution to sustainability of production system
- Social and cultural acceptability
- Potential for up-scaling to other similar areas
- Immediate impact/ response to urgent needs
- Promote participation and equal access to men/women



41. He also raised some possible issues and challenges to be faced by the research teams, related to: access to and availability of data on crop production/climate scenarios/climate change impacts/related documents, proper documentation and citation of references, and coordination/communication among collaborators in the study.

42. The highlights of the discussion and agreements on the scope of work and implementation issues among the AMS are as follows:

- References should be properly cited, and copies may be emailed to the mailing group and/or SEARCA for filing
- If the national research teams have difficulty in accessing data, they may seek assistance from the regional resource team
- ATWGARD focal points assigned to the initiative are expected to be involved over the course of the project
- The national teams should email the regional resource team an annotated outline of the reports for review and comments
- The studies should be endorsed and approved by the Departments/Ministries of Agriculture of each of the AMS through the ATWGARD focal point, which will be endorsed to the ASEAN bodies
- The regional resource team will consolidate the studies. The lead agency (Thailand DOA) should report the progress of the studies to the ATWGARD Meeting on May 2014, ATWGARD Chair to report to SOM-AMAF Meeting in August 2014
- Ownership of the initiative is with Thailand DOA, GAP-CC and the regional resource team is just to support in the implementation

AGENDA 6: STAKEHOLDERS' MAP AND WORKING MODALITIES

43. Dr. Rizaldi Boer, Executive Director for CCROM-SEAP, discussed the different capacities and capabilities of the key stakeholders working in relation to climate change and provided details on the possible agenda and strategies for adoption. He started with a presentation of the review of the key actors on the regional and national levels as well as the main outputs and timeline of activities on both levels. The presentation appears as **ANNEX 19**. The session aimed to solicit the suggestions from the ATWGARD focal points and the national research teams on the stakeholders and working modalities.

44. The highlights of the discussion and agreements raised during the plenary session are as follows:

- The decision on the members of the national committee/task force and other stakeholders will depend on the discussion between the ATWGARD focal point and the national resource person of each of the AMS due to each country's different situations on institutional structures/arrangements. The outputs of the studies will serve as the official inputs for the ATWGARD.
- On funding, the budget for the studies will be coursed through to each of the national resource persons from SEARCA. The management of the budget and financial requirements will depend on the internal discussion/agreement between the ATWGARD focal point and the national resource person.
- The Guidance Manual and Methodology is flexible depending on the country's situation
- If possible, make use of other official meetings in the ASEAN bodies or in the national level to discuss the status and disseminate outputs of the studies



- Regional coordinator to set up a mailing list for sharing of documentations, discussion, related literatures, and results of studies among the AMS.
- Each AMS to send to SEARCA and the regional team the schedule of the national consultative meetings.

45. Likewise, the participants have agreed on the timeline of activities, which appears as **ANNEX 20**.

AGENDA 7: CONCLUSIONS AND RECOMMENDATIONS

46. Dr. Felino Lansigan, SEARCA Regional Agricultural Value Chain/Climate Resilience Expert, briefly wrapped-up the workshop points highlighted on the second day. On behalf of Dr. Suwit Chaikiattiyos, Mr. Arak Chantuma closed the workshop and expressed his sincere appreciation to the delegates from the ATWGARD and partner institutions.

