CONCEPT NOTE

Regional Consultation Workshop towards an Umbrella Program on Climate Change Adaptation and Mitigation in Southeast Asia for an Inclusive and Sustainable Agricultural and Rural Development

Hanoi, Vietnam 12-14 May 2015

SUMMARY OF THE PROBLEM

Agriculture is one of the sectors that is extremely vulnerable to climate change. Predictions from simulation studies in 2009 and borne out by multi-model studies in 2013 show that "higher temperatures eventually reduce yields of desirable crops while encouraging weed and pest proliferation; changes in precipitation patterns increase the likelihood of short-run crop failures and long-run production declines." Though the impact among crops across regions is not the same, the impacts of climate change on agriculture are expected to be negative overall, threatening global food security (Nelson et al 2009; Lifson et al 2013).

The developing world, host to vulnerable and food insecure populations, are likely to be the most adversely affected. In 2005, 2.5 billion people or almost half of the economically active population in developing countries depended on agriculture for its livelihood. Today, 75 percent of the world's poor live in rural areas (IFAD 2011).

In the developing parts of Asia, more than 60 percent of the economically active population and their dependents—2.2 billion people—rely on agriculture for their livelihoods (ADB 2009). Several studies have identified the adverse impacts of climate change on agriculture in the Asia-Pacific Region which include the following:

- The region will experience the worst effect on rice and wheat yields worldwide, and decreased yields could threaten the food security of 1.6 billion people in South Asia (International Food Policy Research Institute [IFPRI] 2009).
- Negative impacts of climate change on rice production combined with economic stressors such as increase in food prices and cost of living can exacerbate rural poverty in parts of the region (Hijoka et al. 2014).
- Effects on irrigated yields across regions will vary; South Asia will experience large declines across all crops (Nelson et al 2009).
- With climate change, average calorie availability in Asia in 2050 is expected to be about 15 percent lower and cereal consumption is projected to decline by as much as 24 percent compared to a no climate change scenario (IFPRI 2009).
- Climate change can increase the total number of malnourished children in Asia by about 11 million in 2050 and would require a total additional annual investments of 2.5 billion USD in rural development in South Asia, East Asia and the Pacific to counter the effects of climate change on nutrition. More than half of these investments must be for irrigation expansion (IFPRI 2009).

BACKGROUND AND CONTEXT REVIEW

In line with SEARCA's 9th Five-Year Plan (FYP), the Center developed and implemented the Climate Change Adaptation and Mitigation (CChAM) framework for the period 2009-2014. It aimed to contribute to ensuring climate change resilience in the agricultural production and sustainable natural resources management in Southeast Asia. Through the CChAM framework, SEARCA built on the gains and consolidated the various efforts of SEARCA on climate change/risks management under the 9th FYP. The framework 2009-2014 focused on the following research areas: vulnerability and risk management, adaptation, impacts, and policy studies. Its components included Research and Development; Mainstreaming in Development Management; Capacity Building and Knowledge Management, and Scholarships and Grants.

With the conclusion of the 9th FYP in June 2014 as well as CChAM Framework 2009-2014, there is a need to develop the next phase of CChAM in line with the overall thrust of SEARCA's 10th FYP, which is inclusive and sustainable ARD (ISARD). Referred to as Umbrella Program on Climate Change Adaptation (and Mitigation) or CChAM 2015-2020, it will serve as a platform for collaborative research and development (R&D), and knowledge management and capacity development on climate change adaptation and resiliency in Southeast Asia.

The development of the Umbrella Program on CChAM will be more strategic and anchored on the ASEAN Multi-Sectoral Framework on Climate Change (AFCC) and reflective of areas where there is willingness to collaborate at the regional level among the participating institutions. The AFCC aims to contribute to food security through sustainable, efficient and effective use of land, forest, water and aquatic resources by minimizing the risks and impacts of and the contributions to climate change. Its components, under which are several strategic thrusts, are 1) integration of CChAM strategies into the economic and social development policy framework; 2) cooperation on the implementation of adaptation and mitigation measures; 3) strengthening of national and regional knowledge sharing, communication and networking on climate change and food security; and 4) developing a more comprehensive multi-sectoral strategic framework and a roadmap for implementation' (Brochure developed from the ASEAN Document on AFCC, endorsed by the 31st Meeting of the ASEAN Ministers of Agriculture and Forestry in November 2009).

The development of the Umbrella Program will likewise draw from the work, experiences, and lessons of other institutions or research programs working on related subject matter.

In as much as no single research institution working alone can address the critically important issues of global climate change, agriculture and food security, the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) aims to address these challenges through a strategic collaboration between CGIAR and Future Earth. It is a collaboration among CGIAR research centers and with over 900 institutional partners around the world. Together, CCAFS partners examine the effects of climate change on agriculture and food security and test options for adaptation and mitigation in close consultation with farmers, policy-makers, donors,

and other experts (http://ciat.cgiar.org/climate-change-research, 16 March 2015). CCAFS Southeast Asia Program is hosted by the International Rice Research Institute (IRRI) in its Vietnam Office.

CIAT has the mission to reduce hunger and poverty, and improve human nutrition in the tropics through research aimed at increasing the eco-efficiency of agriculture. Since the whole of tropical agriculture is too broad to be covered by any one organization, CIAT complements the efforts of others by focusing on selected crops and research areas. It develops technologies, methods, and knowledge that better enable farmers, mainly smallholders, to enhance eco-efficiency in agriculture. This makes production more competitive and profitable as well as sustainable and resilient through economically and ecologically sound use of natural resources and purchased inputs (http://ciat.cgiar.org/climate-change-research, 16 March 2015)

As lead center for CCAFS, CIAT is working around the world to identify both the risks and the ways in which farming can adapt to climate change, while also reducing its greenhouse gas emissions (http://ciat.cgiar.org/climate-change-research, 16 March 2015).

In line with their respective mandates, priorities and capabilities, SEARCA, CIAT and CCAFS SEA (which is a partnership 10 CGIAR Centers operating in Southeast Asia together with national partners) lead the development of a collaborative umbrella program for R&D on CChAM in the Southeast Asian region.

PROJECT OBJECTIVES, EXPECTED OUTPUTS/OUTCOMES AND TARGET BENEFICIARIES

To ensure that the impacts of climate change in the region are addressed through effective and efficient actions, which also build economic and social resilience for present and future generations, there is a need to develop a unified and integrated agenda for collaborative research, capacity development, and knowledge management on climate change adaptation and mitigation. Toward this end, a consultation workshop is proposed among the Southeast Asian University Consortium for Graduate Education in Agriculture and Natural Resources, or the *University Consortium* (http://www.searca.org/index.php/networks-and-linkages/university-consortium), selected partner universities in the Greater Mekong countries, relevant government agencies from SEA, and representatives from research and development organizations, and SEARCA.

To help in the crafting of the framework, a survey will be conducted among the participating universities/institutions prior to the workshop to acquire information on climate change-related issues and initiatives in ARD in the University/Institution/Country, the University's/Institution's strengths and areas of interest in the proposed collaboration on the Umbrella Program on CChAM, and the regional needs and priorities for climate change research and development (R&D) and knowledge management and capacity development (KMCD).

In the above-mentioned survey, KMCD involves activities in support of R&D and linking R&D to development outcomes. Specifically, KM will involve capture, organization, and use/re-use of information/knowledge generated by the research projects and will provide a platform where various research projects may share knowledge with each other, towards linking their outputs to policy development and action planning. KMCD includes, but is not limited to, regional/sub-regional conferences, short-term training courses, workshops, seminars development of communication materials, online platforms, and information-databases on identified topics.

It should be emphasized that this Umbrella Program on CChAM is not an attempt to develop a new research agenda on climate change nor does it attempt to put all the existing research agenda of the partner institutions under one "umbrella program". In as much as institutions already have their respective priorities, focus areas on the subject matter, and accomplishments, the expectation is to identify priority areas of convergence and collaboration at the regional and sub-regional levels, where institutions can work together, pool resources, and address gaps or move in directions where their joint efforts provide a strategic advantage for climate resiliency in SEA. It is hoped that the synergy created by the Umbrella Program can produce added value in terms of new knowledge, technologies, capacities, and processes than what is currently being generated by institutions working on their own specific research agenda.

In the interest of time and toward more meaningful discussions, the draft proposed framework that will be developed will be circulated among the participants prior to the workshop. Other relevant documents will likewise be made available.

Objectives

Specifically, the consultation-workshop aims to:

- 1. Achieve a common understanding of climate change impacts, particularly on agriculture and rural development;
- 2. Develop a climate change conceptual framework for collaborative research, capacity development and knowledge management in Southeast Asia;
- 3. Discuss and prioritize issues and gaps in climate change policy, research, capacity development, and knowledge management in the region;
- 4. Develop the *Umbrella Program on Climate Change Adaptation and Mitigation for Southeast Asia 2015 2020* that asserts the following:
 - Guiding principles, operational framework, and strategies;
 - Overall focus and priority areas for convergence/collaboration in research, capacity development and knowledge management for each focus area;
 - Key collaborating institutions in research, capacity building, and/or knowledge management in each identified subject matter/project to be pursued; and
 - Indicative work plan for the next five (5) years and next steps immediately following the consultation workshop.

- 5. Map the strengths/capabilities and needs/weaknesses of the institutional partners to optimize synergy and support, and ensure that each benefits from the partnership and participation in the Umbrella Program.
- Discuss resource mobilization strategies, including access to adaptation funds and other climate change financing sources and investment mechanisms at national and regional levels.

Outputs

- 1. Climate Change Conceptual Framework for Southeast Asia;
- 2. Key collaborating institutions, with respective commitments on roles and contributions;
- 3. Umbrella Program on Climate Change Adaptation and Mitigation in Southeast Asia for an Inclusive and Sustainable Agricultural and Rural Development, 2015 2020; and
- 4. Indicative work plan for the whole Program, including partnership and resource mobilization strategies.

Target Participants

Participants are expected to come from the University Consortium, selected partner universities in the Greater Mekong countries, relevant government agencies from Southeast Asia, and representatives from research and development organizations, and SEARCA. Around 40 to 50 participants are expected.

To ensure that the umbrella program to be developed will be reflective of the initiatives in SEA by various organizations/programs, other participants to be invited will include the ASEAN Secretariat, United Nations-Food and Agriculture Organization (UN-FAO), World Agroforestry Center (ICRAF), the International Rice Research Institute (IRRI), International Livestock Research Institute (ILRI), and WorldFish, as well as representatives from donor/development organizations and grant programs.

PROPOSED PARTNERS AND COLLABORATORS – CIAT, *CCAFS SEA*, *IRRI* (http://ccafs.cgiar.org/), Ministry of Agriculture and Rural Development (MARD) of Vietnam, and relevant research and development organizations in the region.

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TENTATIVE PROGRAM

	ILIVIIIVE I ROOMI	
DAY 1		
8:30 - 9:00	REGISTRATION	
9:00 -10:00	OPENING SESSION	
	Welcome Remarks	Ministry of Agriculture and Rural Development, Vietnam
	Opening Remarks	Dr. Gil C. Saguiguit, Jr. <i>Director, SEARCA</i>
		Dr. Dindo Campilan Regional Director for Asia, International Center for Tropical Agriculture (CIAT)
	Message	Dr. Tran Van Dien Rector, Thai Nguyen University and Country Representative of Vietnam to the SEARCA Governing Board
	Overview of the Consultation-Workshop	Dr. Bessie M. Burgos Acting Program Head for Research and Development, SEARCA
	Introduction of Participants	
	Group Photo	
10:00-10:30	COFFEE BREAK	
SESSION 1	Initiatives on Climate Change vis-à-vis Agriculture and Rural Development	
10:30-10:50	ASEAN Initiatives on Climate Change and Agriculture and Forestry	ASEAN Secretariat/ASEAN Member State
10:50-12:30	Other Initiatives on Climate Change and Agriculture	CIAT CCAFS-SEA FAO SEARCA-APAN ILRI ICRAF Mekong River Commission

CIRAD

Open Forum

12:30-1:30	LUNCH BREAK	
SESSION 2 1:30 – 3:00	Towards a Focused Climate Change Conceptual Framework for Southeast Asia A Proposed Climate Change Adaptation and Mitigation (CChAM) Framework in Southeast Asia	Dr. Juan M. Pulhin Workshop Technical Coordinator and Professor, College of Forestry and Natural Resources, University of the Philippines Los Baños (UPLB)
	Open Forum Refinement of the conceptual framework	
3:00-3:30	COFFEE BREAK	
SESSION 3	CChAM Priority Areas and Gaps in Research and Development, Knowledge Management and Capacity Development	
3:30-4:30	Panel- National Climate Change Programs (Philippines, Cambodia, Laos, Vietnam) Open Forum	Moderator: Dr. Leo Sebastian Regional Program Leader for Southeast Asia, CGIAR Program on Climate Change, Agriculture and Food Security (CCAFS)
4:30-5:30	Panel Discussion Partner Universities: Institut Pertanian Bogor (IPB), Indonesia Kasetsart University (KU), Thailand Universitias Gadjah Mada (UGM), Indonesia University of the Philippines Los Baños (UPLB) Universiti Putra Malaysia (UPM), Malaysia Yezin Agricultural University, Myanmar Royal University of Agriculture, Cambodia National University of Laos, Lao PDR Vietnam National University of Agriculture, Vietnam Thai Nguyen University, Vietnam	Moderator: Dr. Ma. Celeste H. Cadiz , Program Head for Knowledge Management, SEARCA
5:30-5:45	Open Forum	
5:45 -6:00	Wrap-up for Day 1 Organization of breakout groups for Day 2	
6:30	Cocktails/Dinner	

DAY 2		
8:45-9:00	Recapitulation of Day 1	
SESSION 4	Funding Opportunities for CChAM Research, Capacity Building, and Knowledge Management	Moderator: Dr. Campilan
9:00 -10:00	Panel Discussion Donor/Development Organizations, Grant Programs (GAPCC, ASFCC, IFAD, ADB and other relevant donor/development agencies based in Hanoi)	
	Open Forum	
10:00-10:30 SESSION 5	COFFEE BREAK Crafting of the Umbrella Program on CChAM for Southeast Asia 2015-2020	
10:30-12:00	Facilitated discussion on priority areas for collaboration	Facilitator: Dr. Pulhin/ Dr. Burgos
12:00- 1:00	LUNCH BREAK	
1:00 - 5:00	Breakout Sessions	
	Action planning to address priorities, partnerships, timelines and milestones, and financing of activities	
	Preparation of presentation materials	
DAY 3		
9:00-10:00	Plenary Session: Group Presentations	Moderator: Dr. Maria Cristeta N. Cuaresma, Program Head for Graduate education and Institutional Development, SEARCA
10:00-10:30	Reactions to and Insights on the presentations	Discussants
10:30-11:00	COFFEE BREAK	

11:00 - 12:00

CLOSING PROGRAM

Noon

Presentation of Key Highlights of the draft

CChAM

Remarks - insights from CCAFS program Remarks - insights from a national partner

Vote of Thanks

Drs. Pulhin and Burgos

Dr. Leocadio Sebastian

Vice Minister Le Quoc Doanh

MARD

Dr. Gil C. Saguiguit, Jr.