ASEAN MULTI-SECTORAL FRAMEWORK ON CLIMATE CHANGE: AGRICULTURE AND FORESTRY TOWARDS FOOD SECURITY (AFCC)

The issue

Climate change already affects Southeast Asia, amongst others through the increase in frequency and intensity of extreme weather such as droughts, floods and tropical cyclones\(^1\).

“Southeast Asia is one of the world’s most vulnerable regions to climate change, due to its long coastlines, high concentration of population and economic activity in coastal areas, and heavy reliance on agriculture, fisheries, forestry and other natural resources”\(^2\). Consequences will be, amongst others, health risks, including spreading of pests and diseases and higher incidence of invasive species, water shortages, forest fires, loss of biodiversity, coastal degradation and loss of land, and constrained agricultural production. Climate change will thus threaten food security\(^3\) in the region with its dimensions food availability, food accessibility, food utilization and stability, and thus impact the economic development\(^4\), as also recognized by Heads of State and Governments of ASEAN, Australia, People’s Republic of China, Republic of India, Japan, Republic of Korea and New Zealand. in their Singapore Declaration on Climate Change, Energy and Environment on the occasion of the Third East Asia Summit (EAS) in Singapore on November 21, 2007. The threat of climate change to environment and economic development was also noted with concern by the ASEAN Heads of State in their ASEAN Declaration on Environmental Sustainability on November 20, 2007 in Singapore. This threat will be further exacerbated by additional food and energy requirements of an increased population. Natural disasters will have trans-boundary effects, and disease vectors may also move between countries. Possible impacts of climate change on agriculture and food security at local and national levels will not only hinder sustainable development, but may also lead to conflicts over the use of land and water resources to internal and regional migration of people, with possible threats to the regional security.

While recognizing that the vulnerability differs between countries and sub-regions in ASEAN countries\(^5\), there is an immediate necessity to strengthen the resilience of people and ecosystems and to enhance the adaptive capacity of farmers and fishermen to cope with the imminent threat of climate change.

\(^1\) Fourth Assessment Report, Intergovernmental Panel on Climate Change (IPCC), 2007
\(^2\) The Economics of Climate Change in Southeast Asia: A Regional Review. ADB, Manila, April 2009
\(^3\) Food security and its dimensions have been defined in the ASEAN Integrated Food Security Framework (AIFS)
Agriculture and forestry in the ASEAN region therefore offer a great potential for the stabilization of atmospheric greenhouse gas concentrations, through reduction of emissions by source and removals by sinks from deforestation and forest degradation, afforestation and reforestation, sustainable management of land (e.g. wetlands) and forests, and improved management of rice production, amongst others. More than other sectors, agriculture and forestry offer options to link adaptation and mitigation measures.

Since the impacts of climate change are affecting all sectors, close cross-sectoral collaboration and coordination is essential when planning and implementing climate change responses. This refers in particular to the economic, environment, development, energy, agriculture, fisheries, livestock and forestry sectors.

Trans-boundary impacts of potential climate change scenarios, but also potential responses, call for a coordinated regional framework, strategy and mechanism to cope with climate change and its impacts.

At the ASEAN-FAO Regional Conference on Food Security on May 27-28, 2009 in Bangkok, it was proposed to address food security together with sustainable development of agriculture, good practices for bio-fuel production, and the mitigation and adaptation of climate change in Southeast Asia. The Conference proposed the establishment of a more inclusive and participatory mechanism, and the ASEAN Secretariat was requested to develop a brief concept note on strengthening the ASEAN Secretariat’s capacity in monitoring and implementation of the convergence matrix.

In partial response to this proposal, being aware of the threat of climate change to food security in Southeast Asia, and acknowledging its potential to strengthen the resilience of its people and ecosystems, and to mitigating climate change through a coordinated response, ASEAN has developed this concept note on a Multi-Sectoral Framework on Climate Change and Food Security.

The Context

This Multi-Sectoral Framework on Climate Change (AFCC) addresses the Strategic Thrust 6: Identify and address emerging issues related to Food Security of the ASEAN Integrated Food Security Framework (AIFS) and Strategic Plan of Action on Food Security, adopted by the ASEAN Summit in March 2009. The AFCC is further aligned to and focuses on elements of the three ASEAN Blueprints for the ASEAN Economic Community (AEC), the ASEAN Political-Security Community (APSC), and the ASEAN Socio-Cultural Community (ASCC), as well as on the Initiative for ASEAN Integration (IAI) Strategic Framework and IAI Work Plan 2.

With their ASEAN Declaration on Environmental Sustainability, and their ASEAN Declaration on the 13th Session of the Conference of Parties to the UNFCCC, both signed on November 20 2007 in Singapore, as well as with their East Asian Summit (EAS) - Singapore Declaration on
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*Climate Change, Energy and the Environment*, signed on November 21, 2007 in Singapore, Heads of States from ASEAN and east Asian countries had declared, amongst others, to

- carry out individual and collective actions to address climate change, including greenhouse gas emissions;
- promote cooperation on afforestation and reforestation, and to reduce deforestation, forest degradation and forest fires, including by promoting sustainable forest management;
- deepen the understanding of the region’s vulnerability to climate change and implement appropriate mitigation and adaptation measures;
- underline the importance of adaptation and call on all countries to incorporate climate change impact and adaptation strategies into their national development strategies and policies;
- agree to enhance cooperation and collaboration amongst ASEAN Member States to support the implementation of the ASEAN Declaration to COP 13 and task the relevant ASEAN ministerial and sectoral bodies dealing with climate change to carry on the cooperation in implementing the objectives of said declaration; and
- implement measures and enhance international and regional cooperation to combat transboundary environmental pollution, including haze pollution, through, among other things, capacity building, enhancing public awareness, strengthening law enforcement, promoting environmentally sustainable practices, as well as combating illegal logging and its associated illegal trade.

ASEAN cooperation on climate change is guided by the ASEAN Socio-Cultural Community (ASCC) Blueprint (Section D10 on Responding to Climate Change and Addressing Its Impacts). The cooperation targets at enhancing regional and international cooperation to address the issues of climate change and its impacts on socio-economic development, health and the environment in ASEAN Member States through implementation of mitigation and adaption measures, based on the principles of equity, flexibility, effectiveness, common but differentiated responsibilities, respective capabilities, as well as reflecting on different social and economic conditions. Under the purview of ASEAN Senior Officials on Environment (ASOEN), an ASEAN Climate Change Initiative (ACCI) is being developed to provide a regional framework on cooperation and coordination of climate change issues in ASEAN, and an ASEAN Working Group on Climate Change (AWGCC) to be established as a mechanism to implement the ACCI.

The 30th meeting of the ASEAN Ministers on Agriculture and Forestry (AMAF) in October 2008 called upon elaborating a more comprehensive regional strategy to address climate change. Subsequently, the ASEAN Secretariat drafted an *ASEAN Strategy in Addressing the Impact of Climate Change on Agriculture, Fisheries and Forestry*, which was further outlined during the
ASEAN High - Level Seminar on Climate Change Adaptation and Mitigation: Towards a Cross-Sectoral Program Approach in ASEAN, held in Berlin, Germany on March 23-25, 2009. This ASEAN High - Level Seminar noted the design of cross-sectoral programs and the management of interministerial/departmental coordination to be among the priorities for ASEAN. The Seminar consequently developed a draft proposal to this end which is further outlined below. This present draft framework does not intend to duplicate ASEAN concepts and strategies developed earlier. Neither does it intend to interfere with the many climate change-related activities already in motion at national levels of ASEAN Member States. It rather intends to complement them, to foster mutual learning and sharing of experiences, and combines strategic thrusts already agreed upon by the ASEAN Ministers with additional ones to help ASEAN Member States cope with the challenges for food security resulting from climate change.

Coverage

This Multi-Sectoral Framework covers the Agriculture, Fisheries, Livestock and Forestry sectors and will coordinate with the Environment, Health and Energy sectors.

Goal

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.

Objectives

To achieve the overall goal of the framework, the following objectives are considered:

1. Coordination on the development of adaptation and mitigation strategies;
2. Cooperation on the implementation of integrated adaptation and mitigation measures;

Components and Strategic Thrusts

These components and strategic thrusts structure further the tasks ahead. ASEAN Member States are already contributing to these strategic thrusts through climate change-related activities they

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6 References to components already approved under the various blueprints are, the IAI, the Food Security Framework, or the Singapore Declarations: AIFS: ASEAN Integrated Food Security Framework; APSC: ASEAN Political Community Blueprint; ASCC: ASEAN Socio-Cultural Community Blueprint; IAI: Initiative for ASEAN Integration Strategic Framework; S1: ASEAN Declaration on Environmental Stability; S2: EAS-Singapore Declaration on Climate Change, Energy and the Environment; S3: ASEAN Declaration on COP 13 of the UNFCCC, all Singapore, November 2007
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are undertaking. The present components and strategic thrusts will further strengthen and add value to these activities and experiences.

Component 1:

Integration of climate change mitigation and adaptation strategies into the economic and social development policy framework

As also stressed in the readily available information such as the 4th Assessment Report of the United Nations Intergovernmental Panel on Climate Change (IPCC AR4) (2007), climate change-related policies and actions should not be developed and implemented in isolation. Since climate change impacts will affect economic and social development of countries and regions, responding policies and actions should be linked to and become part of the National Development Plans.

In order to get a clearer idea of the dimensions of the challenge of climatic change for food security in the ASEAN region, a “stocktaking” of impacts on and risks of climate change for food security is required. This assessment will also factor in the economic and demographic development, and will build up on information already available, and information available at national levels. Under this component information on the anticipated impacts of climate change on agriculture, forestry and food security in the region, and on the ecosystems and communities most affected or most vulnerable will be provided. Priority areas and communities for the strengthening of resilience against climate change and its impacts will be identified, and the policy - and implementation-relevant results will be embedded in national development strategies and policies.

Strategic Thrust 1: Assess the impacts of climate change on and risks for Agriculture, Fisheries, Livestock and Forestry and contributions of those sectors to climate change (in line with AEC A6 and A7, ASCC B3 and B7, IAI D 10)

Strategic Thrust 2: Assess environmental impacts and risks, specifically on biological diversity (in line with ASCC D8);

Strategic Thrust 3: Assess the socio-economic impacts and risks of climate change, and identify the most vulnerable and priority geographic areas and communities for climate change adaptation and mitigation;

Strategic Thrust 4: Formulate food security measures to address and respond to climate change to enhance sustainable development and strengthen livelihoods (in line with AEC A7)

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7 IPCC AR4, the recent ADB study “The Economics of Climate Change in Southeast Asia: A Regional Review”, a recent study by the Economy and Environment Program for South East Asia Climate matters in Southeast Asia, EEPSA & IDRC, 2009
**Strategic Thrust 5:** Incorporate climate change adaptation and mitigation measures and strategies into national development strategies, policies and programs (in line with AEC A6 and A7, ASCC B3, S3).

**Component 2:**

**Cooperation on the implementation of adaptation and mitigation measures**

Increasing population pressure and the resulting need for food and energy, additionally to climate change impacts, will lead to an increased competition for land and water resources in particular among the agriculture, fisheries, livestock, forestry and other sectors. Countries will, even more than at present, have to weigh trade-offs between different land-use options. In climate change adaptation much can be learnt from local people, who had to adapt their production systems over many generations to climate variability. However, agriculture, fisheries and forestry also offer opportunities for climate change mitigation. In particular in the agriculture, livestock and forestry sectors climate change adaptation and mitigation measures can be linked. Mitigation measures in forestry will differ between forest - rich and forest - poor countries. This component aims at sharing, promoting, and cooperating on the implementation of integrated climate change adaptation and mitigation measures in the agriculture, fisheries, livestock and forestry sectors, including response to climate-related disasters.

**Strategic Thrust 1:** Strengthen land- and water-use planning at national and sub-national levels (AEC A6 and A7);

**Strategic Thrust 2:** Cooperate on the promotion of integrated adaptation and mitigation of agricultural production systems including crops and livestock management (in line with AEC 7, ASCC B3, B7, S1, S2);

**Strategic Thrust 3:** Cooperate on the promotion of adaptation and mitigation in forestry (in line with AEC A6 and A7, ASCC D 11, IAI D 11, S1, S2);

**Strategic Thrust 4:** Cooperate on the promotion of adaptation and mitigation in fisheries (AEC A6 and A7);

**Strategic Thrust 5:** Foster co-benefit approaches integrating environmental concerns such as biodiversity conservation into climate change-related measures (in line with ASCC D1 and D8, S1, S2);

**Component 3:**

**Strengthening of national and regional knowledge sharing, communication and networking on climate change and food security**
Information sharing and networking on impacts of climate change, disaster management and response, as well as on tested practices for adaptation and mitigation offer ASEAN countries opportunities of mutual learning, of responding jointly or in a coordinated way, where possible, and of reducing costs when planning and implementing adaptation and mitigation measures. This component aims at developing an information and networking system related to climate change and food security in the region, at developing common positions on climate change-related issues, and as well as to share and coordinate, where possible, climate change-related communication and raising of public awareness. It also strengthens, among others, the ASEAN Regional Knowledge Networks on Forests and Climate Change, and Forest Law Enforcement and Governance, ASEAN Food Security Information System (AFSIS), and ASEAN Network on Fisheries Statistics and Information, to provide research-based policy recommendations to decision makers and of the ASEAN Forest Clearing House Mechanism (CHM) to provide a regional learning platform.

**Strategic Thrust 1:** Synergize data bases and information systems related to climate change and food security (in line with AEC A7, ASCC D6);

**Strategic Thrust 2:** Strengthen national and regional cooperation, coordination, consultation and communication on the impacts of and response to climate change on agriculture, fisheries, livestock and forestry towards food security (in line with AEC A6 and A7, AIFS C3);

**Strategic Thrust 3:** Strive for coordinated or common positions on climate change and food security (AEC A7);

**Strategic Thrust 4:** Strengthen regional partnerships and coordination with ASEAN partners on climate change and food security (AEC A7).

**Component 4:**

**Developing a more comprehensive multi-sectoral strategic framework and a roadmap for implementation**

The long term challenge of climate change demands a long-term response. It requires close collaboration with sectors other than the agriculture, fisheries, livestock and forestry, such as environment, energy, mining, health, and the infrastructure sectors. Therefore, the multi-sectoral framework will have to be implemented through a phased-approach.

During the implementation of Phase 1, the AFCC will concentrate on the agriculture, fisheries, livestock and forestry sectors. In component 4 of Phase 1, it will be further developed into a more comprehensive ASEAN Multisectoral Strategic Framework on Climate Change and Food Security, coordinating closer with energy (e.g. co-benefits between food security and bio-fuel production), environment and health (e.g. impacts of pests and diseases) sectors, as well as the
management of and response to climate change-related disasters, emergency food assistance and rapid response mechanisms.

Phase 1 will also provide the space for the development of long-term financing modalities and strategies to implement climate change and food security measures, and for the development of the required institutional structure.

Implementation

The AFCC will be implemented in consultations with relevant bodies/stakeholders at the regional and national levels to obtain relevant inputs and ensure consistency of the Strategic Thrusts, and Action Programmes/Activities as well as promote sense of greater ownership of the AFCC. The nature of climate change impacts and respective responses requires: leadership at the highest level and close collaboration and coordination between sectors. Since climate change impacts and potential adaptation and mitigation responses can be very site-specific, respective action has to be taken at sub-national and local levels. The framework is set to promote cross-sectoral and interministerial/interdepartmental coordination and cooperation.

During Phase 1, mechanisms of cross-sectoral coordination will be tested to apply appropriate governance arrangements in ASEAN. Relevant ASEAN sectoral bodies will coordinate the implementation of the AFCC, while relevant government agencies will be responsible for overseeing the implementation and preparation of more detailed action plans at the national level. Partnership and cooperation arrangements with the international organisations, donor agencies, private sector, industry associations and the wider community at the regional and national levels will also be actively sought where required to ensure participation of all stakeholders in the implementation process.

The multi-sectoral and multinational nature of the framework suggests that the high-level policy coordination will be done by the Senior Officials Meeting of the ASEAN Ministers of Agriculture and Forestry (SOM-AMAF).

It further suggests the establishment of the ASEAN Ad hoc Steering Committee on Climate Change and Food Security, which leads the mutual learning process on climate change and food security. Proposed members of the interministerial Ad hoc Steering Committee will come from the agriculture, forestry, food security, environment and energy sectors and be nominated by ASEAN Member States. The Ad hoc Steering Committee will work in close cooperation with the ASEAN Working Group on Climate Change. Members from academia, civil society and the private sector, as well as eminent regional experts can be invited as appropriate.

For the successful implementation of the AFCC, the necessary institutions or mechanisms, resources, capacity and political will be accorded to the implementation process. Details and terms of reference on the bodies concerned will be further developed.
Conceptual Diagram

ASEAN Multi-Sectoral Framework on Climate Change (Phase 1):
Agriculture, Fisheries and Forestry towards Food Security

Goal

Objectives

Contribute to food security through sustainable and efficient use of land and water resources by minimizing the impacts of and the contributions to climate change

Coordination of adaptation and mitigation strategies

Cooperation on the implementation of integrated adaptation and mitigation

Components

Cooperation on the implementation of adaptation and mitigation measures

Integration of climate change mitigation and adaptation strategies into the economic and social development policy framework

Strengthening of regional information, communication and networking on climate change and food security

Developing a more comprehensive multi-sectoral strategic framework and a roadmap for implementation
Governance of ASEAN Multi-Sectoral Framework on Climate Change (Phase 1)

ASEAN Ministers on Agriculture and Forestry

SOM on Energy

SOM-AMAF (ASEAN High-Level Coordination Meeting)

ASEAN Ad-Hoc Steering Committee on Climate Change & Food Security

ASEAN Working Group on Climate Change