

BUILDING CLIMATE-RESILIENT FOOD SYSTEMS IN EAST AND SOUTH-EAST ASIA: VULNERABILITIES, RESPONSES AND FINANCING

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SUPPLEMENTARY MATERIAL

Table S1 Key regional/national strategies, policies, and plans for climate adaptation

Nation(s)	Year	Policy document	Food system related objectives	Agri-food specific contents
Myanmar	2019	Myanmar Climate Change Strategy and Master Plan (2018–2030)	Climate-smart agriculture for food security; Sustainable management of natural resources for healthy ecosystems; Resilient and low-carbon energy, transport and industrial systems for sustainable growth; Resilient, inclusive and sustainable cities and towns; Climate risk management for people's health and well-being	Integrate climate change into relevant policies, planning and budgeting procedures of agriculture, fisheries and livestock sectors; Climate-resilient adaptation technologies supported by international and domestic finance; Institutional coordination and multi-stakeholder engagement framework to support the implementation of climate-smart responses in agricultural sectors
Cambodia	2013	National Strategic Plan on Green Growth 2013–2030	Promote a national economy with growth stability, reduction and prevention of environmental pollution, safe ecosystem, poverty reduction, and promotion of public health service, educational quality, natural resources management, and sustainable land use and water resources management to increase energy efficiency, ensuring food safety and promote the national culture	Green agricultural activities that increase in rice yield with no harm to environment, such as the use of organic fertilizers; Agricultural conservation based on harmlessness to productive soil quality; Ecological agricultural system for the long term

Laos	2018	National Green Growth Strategy of the Lao PDR till 2030	Encourage and promote economic growth and poverty reduction in a comprehensive, inclusive and fair manner; Raise the efficiency and effectiveness of the use of limited natural resources; Promote economic growth that is clean and environmental-friendly; Increase economic resilience to climate change, natural disasters and of global uncertainties	Promote the expansion of the coverage and management of the national social security system widely and inclusively to protect agricultural production from the impacts of climate change; raising the efficiency, effectiveness and sustainability of using natural resources (land, water resources and so on) to ensure co-benefits (e.g., raising the efficiency and effectiveness of the production, reducing the wastes and pollution, and promoting organic agricultural production)
Philippines	2011	National Climate Change Action Plan 2011-2028	Prioritize food security, climate-smart industries and services, sustainable energy, and knowledge and capacity development as the strategic direction.	Food Security: ensure availability, stability, accessibility, and affordability of safe and healthy food amidst climate change; Ecological and environmental stability: the protection and rehabilitation of critical ecosystems, and the restoration of ecological services; Climate-friendly industries and services: the creation of green and eco-jobs and sustainable consumption and production
Vietnam	2020	National Climate Change Adaptation Plan for 2021–2030, with a vision towards 2050	Reduce vulnerability and risks from climate change impacts through strengthening resilience and adaptation capacity of communities, economic sectors and ecosystems; Promote the integration of climate change adaptation contents into relevant strategies and planning	Adopt climate change adaptation actions in agricultural sector; Enhance effectiveness of agricultural land use; Arrange suitable crop structure and types of plants; and Intensify highly effective fishing and aquaculture methods
Indonesia	2021	Long-Term Strategy for Low Carbon and Climate Resilience 2050	Emission reduction, economic growth, justice or fairness and climate resilient development	Improve crop productivity and cropping intensity; Implement integrated farming or complex agroforestry; Optimize the use of unproductive lands; Reduce food loss and waste; Improve adaptive capacity of natural ecosystems and biodiversity to climate change impacts through intensifying the management of ecosystems and biodiversity
Thailand	2015	Climate Change Master Plan 2015–2050	Develop the knowledge base and technology required to support low carbon development and sustainable adaptation to climate change; Increase the resilience to climate change by an integrated approach to adaptation measures between stakeholders at all levels; Reduce GHG emissions and develop sustainable low carbon growth modalities	Manage the risks associated with climate change and natural disasters; Build capability for adaptation and mitigation through measures such as generating second incomes from environmental-friendly agriproducts; Ensure sustainable food security by the key actions and measures (e.g., the impact assessment of climate change on food security at national and local level, farmers' rights protection to access and benefit from biodiversity in a sustainable manner, Promotion of an ecosystem-based approach to fisheries)

Malaysia	2009	National Policy on Climate Change	Wise management of resources and enhanced environmental conservation resulting in strengthened economic competitiveness and improved quality of life; integrate responses into national policies, plans and programs to strengthen the resilience of development from arising and potential impacts of climate change; and strengthen institutional and implementation capacity to better harness opportunities to reduce negative impacts of climate change	Identify and recommend options towards low carbon economy for sectors including forestry and agriculture; Incorporate and facilitate implementation of climate-friendly measures and technologies; Integrate measures into policies, plans, programs and projects in areas including agriculture and food security; Establish criteria and indices for environmentally sustainable socio-economic growth
China	2022	National Strategy on Climate Adaptation 2035	By 2035, climate change monitoring and early warning abilities will be advanced; climate risk management and prevention system be basically mature; risks of major climate disasters be prevented and controlled; technical and standards system for adaptation be further perfected; societal ability to adapt to climate change be improved; and climate-adaptable society be completed	Optimize the pattern of agricultural climate resource use; Strengthen the climate change adaptation and disaster mitigation work system for agriculture; Enhance the climate resilience of agricultural ecosystems (e.g., soil and water conservation and ecological protection); Establish a climate change-adapted food security assurance system (e.g., climate-smart agriculture pilot demonstrations and certification of climate-friendly low-carbon agricultural products)
	2021	Carbon Dioxide Peaking Before 2030	By 2030, the share of non-fossil energy consumption will reach around 25%, and carbon dioxide emissions per unit of GDP will have dropped by more than 65% compared with the 2005 level, successfully achieving carbon dioxide peaking before 2030	Develop green, low-carbon and circular agriculture; Conduct research on applied agricultural technologies that can increase carbon sequestration; Improve the quality of cropland and protect China's chernozem soils; Control the use of mineral fertilizers, pesticides, and agricultural plastic sheeting; Advocate green and low-carbon living style (e.g., curb luxury, waste, and unnecessary consumption, expand green consumption, promote green and low-carbon products)
ASEAN	2018	ASEAN Multi-Sectoral Framework on Climate Change and Food Security	Mainstream cross-sectoral, collaborative, inclusive approaches and mechanisms to addressing climate-related challenges and opportunities into regional, national, and local policies, programs, plans and investments; Strengthen the scientific foundation with local knowledge on climate change and food security; Facilitate the achievement of Nationally Determined Contributions in the agriculture and forestry sectors; Advance integrated climate change mitigation and adaptation responses; Initiate and sustain comprehensive capacity development of local, national and regional institutions; Strengthen knowledge management mechanisms; Provide and strengthen platforms for developing and advancing ASEAN common interests on issues related to climate change and food security in international fora; Securing climate change financing	Promote the adoption of appropriate climate-smart technologies; Document and upscale existing good and innovative practices; Integrate ecosystem-based adaptation and sound climate mitigation strategies in land use planning; Conduct long-term monitoring and assessment of environmental and social changes in landscape/watershed areas; Adopt and continuously improve appropriate governance models suitable for landscape approaches; Create enabling policies, legislation and related institutional mechanisms; Continue to assess the effectiveness of integrated climate change adaptation and mitigation responses

Note: ASEAN is the abbreviation of the Association of Southeast Asia Nations.