



Knowledge sharing event

Low emission and resilient pathways in livestock systems: Towards sustainable climate-smart animal agriculture, eco-health, and food security

**Tuesday, August 31st, 2021
09:00 – 10.30 (Bangkok/Jakarta time, UTC+7)
via Teams, livestreaming from SEARCA Facebook live**

Background

Livestock is a source of food and nutrition, livelihoods and income, asset savings, agricultural traction, and a host of other economic, social, and cultural benefits or purposes. Its production though has strained many of the world's resources. One third of the globe's land-surface and almost 60% of freshwater, plus a third of the global grain production, are used for growing livestock. It is estimated that by 2050, consumption of meat will increase by 76% and of dairy products by 64%, putting added stress on already strained resources (Climate Nexus, 2020).

In addition, the sector is one of the largest contributors to water pollution, a leading driver of deforestation, and closely linked with biodiversity loss. Animal farm operations may also be an avenue through which pathogens and diseases may thrive, leading to public health risks.

In Southeast Asia, the livestock sector is an important contributor to national output, employment, and food security though its relative importance varies across the ASEAN Member States (AMS). Smallholder livestock production is still predominant in the less developed AMS where it contributes to poverty alleviation, food security and nutrition and gender equality (ASEAN SPA for Cooperation in Livestock, 2016-2020). Though there are land areas that are grasslands and woodlands suitable for crop production in the region, the conversion of these areas into cultivation for feed can lead to losses of biodiversity, ecosystem services and a significant release of greenhouse gases.

The livestock sector has also been recognized as contributing an estimated 14.5 percent of global greenhouse gas (GHG) emissions, or 7.1 gigatons of CO₂ equivalent annually. Furthermore, it is said to account for 5% of global anthropogenic carbon dioxide emissions; represent 44% of anthropogenic methane emissions; and comprise 44% of all anthropogenic nitrous oxide emissions. Methane, 25 times more potent than carbon dioxide in trapping heat in the atmosphere, is the primary driver of climate change related to livestock but is a short-lived climate pollutant compared to carbon dioxide. (FAO, 2013, 2021; Rojas-Downing et al, 2017; Climate Nexus, 2020, EPA, 2021).

Response to these interconnected challenges must be comprehensive, science-based, and innovative to allow the transformation of this agricultural system into a sustainable, climate-smart production system that will promote health and food security.

It may also be worthwhile to view livestock systems from an eco-health perspective, which is a holistic approach to health that emphasizes how the complex relationships among ecosystem components affect human health and environmental quality. (SEARCA 2018; Hung 2013).





ASEAN Member States (AMS) have been increasingly responsive to how climate change is impacting agriculture throughout the region including the livestock sector. Livestock is a rapidly growing sector and has become an important source of income and food but is vulnerable to the impacts of climate change as well. The ASEAN Comprehensive Recovery Framework (ACRF) and its associated Implementation Plan recognize the role of climate-smart agriculture, food security, and climate change mitigation and adaptation for promoting a sustainable response to the challenges posed by the COVID-19 pandemic. It articulates ASEAN response through the different stages of recovery, by focusing on key sectors and segments of society that are most affected by the pandemic, setting broad strategies, and identifying measures for recovery in line with sectoral and regional priorities (ACRF, 2020).

The ASEAN Climate Resilience Network (ASEAN-CRN) is a platform for regional exchange, particularly for sharing information, experiences, and expertise on climate smart agriculture (CSA). Since its establishment in 2014, the ASEAN-CRN has successfully and vigorously launched activities that aimed to ensure adaptation of the agriculture sector to climate change and optimize its mitigation potential. In 2021, it is hosting a series of virtual events on different aspects of climate-smart land use and its role in Green Recovery from the COVID-19 pandemic. The

The ASEAN-CRN is being supported by the [Climate Smart Land Use in ASEAN \(CSLU\)](#) project. The CSLU project, funded by the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by GIZ, aims to strengthen cooperation within and between AMS for promoting climate-smart land use in the ASEAN region. For the event series is collaborating with the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA).

Objectives

Forum/Workshop objectives:

- Increase awareness and understanding of the interconnections among climate change, livestock production, eco-health, and food security
- Promote knowledge exchange of ASEAN Member States (AMS) on experiences in implementing policies and practices towards sustainable livestock production and management
- Identify options how the insights generated can inform regional and national policies and programs.

Target Participants

The event is open to the public, but it is specifically targeted at ASEAN-CRN members, National focal points from different ASEAN working groups (especially ATWGARD, ASWGL, ASWGC, AWGCC, AWGNCB), development agencies, FAO, and research institutions.





Draft Agenda

Time	Topic	Speaker/ facilitators
09:00	Opening remarks	Host country Dr Viengsavanh Phimpachanhvongsod – NAFRI – Laos
09:05	Intro to agenda and virtual housekeeping	Facilitator Ms. Danellie Joy O. Medina – SEARCA
09:15	- Interlinkages among climate change, livestock production, and food security (focus on SEA) (20min) Q&A	Dr Rommel C. Sulabo , Director, Institute of Animal Science, College of Agriculture and Food Science (CAFS), - University of the Philippines Los Banos, Laguna - Philippines
9:45	- Enhancing NDCs: Opportunities for livestock Sector in Southeast Asia (15 min)	Dr Nathan Borgford-Parnell – CCAC
10:00	- Experience from AMS on implementing policies and practices towards sustainable livestock systems (10 min)	Dr Tran Cong Thang - Director General, Institute of Policy and Strategy for Agriculture and Rural Development – Vietnam
10:10	- Questions and reactions from the audience	Facilitator Ms. Danellie Joy O. Medina – SEARCA
10:20	Summary	Facilitator Ms. Danellie Joy O. Medina – SEARCA
	Closing and next steps	Mr Taufiqui Mujib – GIZ

