

Sustainable Mechanization Across Agri-Food Chains Network in Asia and the Pacific Region (SMAACNET)

Functional Statement



Food and Agriculture Organization
of the United Nations



UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

CSAM
Centre for Sustainable Agricultural Mechanization

CONTENTS

A. BACKGROUND.....	3
B. STRUCTURE	4
1. Name	4
2. Establishment.....	4
3. Goal and objectives.....	4
4. Membership.....	5
5. SMAACNET Activities	5
6. Working modalities	5
7. Division of work and focal agencies.....	5
8. Language	6

A. BACKGROUND

Agricultural mechanization is playing an increasingly important role in agri-food systems development across Asia and the Pacific region. The region has made considerable progress over the past two decades in the adoption of mechanization and is now the largest market for agricultural machinery, implements and equipment, globally. Despite this progress, the level of agricultural mechanization in the region as a whole is lagging behind that of developed countries. Agricultural mechanization is still at a very basic stage of development in most countries of the region.

With urbanization, the feminization of agriculture and an increasing scarcity of labor in rural areas across the region, there is a growing need for mechanization to address productivity enhancement in a sustainable manner so as not to jeopardize production systems now and in the future. Of equal importance is the need to address the use of mechanization in post-production systems - harvesting, post-harvest handling and in processing operations - to assure improvements in efficiency and profitability across agri-food value chains.

Toward meeting that end, a holistic approach must be taken, wherein emphasis is placed on the development of sustainable production and post-production systems - that is systems that maintain optimal production without jeopardizing production factors; which employ practices that assure energy efficiency, reduce carbon and gas emissions and which avoid accelerating erosion and soil degradation by applying measures to conserve soil fertility, through, for example, the efficient and appropriate use of agricultural inputs and which reduce post-production losses. Sustainable mechanization must also contribute to enhancing the financial performance of agri-food value chains, improving food security, reducing the drudgery associated with work in these chains and help to alleviate labor shortages in rural areas of the region. Sustainable mechanization is, therefore, of vital importance in supporting inclusive and efficient agro-food value chain development in the region.

Sustainable Agricultural Mechanization Strategy or SAMS, is a planning strategy that contributes to the agricultural goal of sustainability, while meeting food self sufficiency, generating economic development and inclusive growth as well as social benefit. SAMS is part of the enabling environment for sustainable, inclusive and efficient agri-food value chain development. It integrates consideration for the on- and off-farm use of mechanization inputs with special consideration and attention to addressing the needs of youth and women in rural areas. SAMS also integrates consideration for the dominance of smallholder farmers and micro-, small and medium agro-food processing enterprises across the region.

Participants to a High Level Multi-stakeholder Consultation on Sustainable Agricultural Mechanization, convened by the Food and Agriculture Organization of the United Nations, Regional Office for Asia and the Pacific (FAO-RAP) in collaboration with the UNESCAP Centre for Sustainable Agricultural Mechanization (UNESCAP-CSAM), commended the joint efforts of FAO and CSAM in promoting sustainable mechanization across agri-food chains (SMAAC). Participants further highlighted the need for knowledge sharing on issues of relevance to sustainable mechanization across agri-food value chains in the region.

To meet this end, it is proposed that a web-based network, titled *Sustainable Mechanization Across Agri-food Chains Network for Asia and the Pacific Region* (SMAACNET) is jointly developed by FAO and UNESCAP/CSAM. In addition to knowledge sharing, this Network would provide member countries of both FAO and UNESCAP/CSAM the opportunity to connect to each other, thereby facilitating collaboration and dialogue on the use of sustainable mechanization in the region.

SMAACNET will also provide a mechanism to promote advocacy for the economic, social and environmental values and benefits of sustainable mechanization among stakeholders (including policy makers, researchers, academic institutions, civil society organizations - including farmer organizations and private sector associations engaged in machinery manufacture) associated with the use of agricultural mechanization in value chains across Asia and the Pacific Region. It is envisaged that SMAACNET would be linked and closely associated with existing efforts to promote the testing and standardization of agricultural machinery to ensure the safety of farmers, the environment and food production, through the Asia and Pacific Network for Testing of Agricultural Machinery (ANTAM).

B. STRUCTURE

1. Name

The name of the web-based Network will be **Sustainable Mechanization across Agri-food Chains, Network for Asia and the Pacific Region** (SMAACNET).

2. Establishment

SMAACNET will be established on the basis of receipt of consensus by 2/3 of the countries invited to join.

3. Goal and objectives

SMAACNET will be a partnership of stakeholders promoting knowledge sharing and the sharing of experiences on climate friendly sustainable mechanization across agri-food value chains, as well as advocacy for the economic, social and environmental values and benefits of sustainable mechanization, with an overarching goal of assuring that the sustainable use of mechanization contributes to food security, economic development and ecological balance in the region. SMAACNET aims to bring together key partners and stakeholders, including researchers, policy makers, public and private sector

entities and representatives of civil society organizations (CSOs), and development partners from across Asia and the Pacific Region, with the following specific objectives:

- To **exchange knowledge**, share experience and promote collaboration and concerted efforts among all stakeholders on the use of climate friendly, sustainable mechanization across inclusive agri-food value chains.
- To **advocate for the economic, social and environmental values and benefits of using sustainable mechanization** across agri-food value chains.
- To **promote effective linkages among public and private stakeholders** associated with the use of sustainable mechanization in countries of Asia and the Pacific Region.
- To **facilitate the implementation of SAMS** at the regional, sub-regional and national levels as well as the implementation of policies and institutional mechanisms associated with SAMS.

4. Membership

SMAACNET will have a neutral identity. It will operate in an open, transparent and flexible manner. It will be linked and closely associated with existing networks. It will be established at no cost to member countries.

The inaugural members of SMAACNET will include representatives from :

- Member countries in the Region – nominated by member governments
- Private sector (including associations).
- Civil Society Organizations – including farmers associations
- Technical Training Centers, Academic and research institutions
- Development partners

5. SMAACNET Activities

SMAACNET will serve as a platform for knowledge sharing with a wide range of partners and stakeholders working on various aspects of sustainable mechanization, and will seek to promote cooperation and collaboration among international and regional organizations, Technical training centers, research and academic institutions, CSOs, public and private-sector entities and other associated groups working on sustainable mechanization.

C WORKING MODALITIES

6. Division of work and focal agencies

SMAACNET will be collaboratively established and managed by FAO and CSAM, and will be linked to country web-sites as well as other web-sites that may be of interest to other countries. Management procedures and responsibilities of the network will be collaboratively elaborated by FAO and CSAM at a later stage in a separate document.

7. Language

The working language of SMAACNET will be English.