The Asian and Pacific Network for Testing of Agricultural Machinery (ANTAM)

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

CSAM

Contents

About ANTAM

The Asian and Pacific Network for Testing of Agricultural Machinery (ANTAM) was launched on 18 November 2013 in Bangkok, Thailand. The Centre for Sustainable Agricultural Mechanization (CSAM) of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) based in Beijing, China, hosts the Secretariat of ANTAM. CSAM assists and coordinates the operation of the network by providing necessary logistical and administrative support.

The Objectives of ANTAM

ANTAM is a regional network composed of national agricultural machinery testing stations, research and extension institutes. ANTAM also works in collaboration with manufacturers' associations and farmers' organizations across the Asia-Pacific. The network aims to promote trade and adoption of safe, efficient and environmentally friendly agricultural machinery through harmonization of testing Codes and procedures. The overarching objectives of ANTAM are:

Forge a common definition and understanding of minimum standards for sustainable agricultural machinery among participating countries;

Promote mutual recognition of testing results through development and adoption of harmonized region-wide testing Codes and procedures;

Improve existing testing facilities of participating countries through capacity building programmes, seminars and site visits;

Reduce the social cost of production and use of unsafe, inefficient and inappropriate agricultural machinery;

Facilitate intraregional trade of sustainable agricultural machinery.

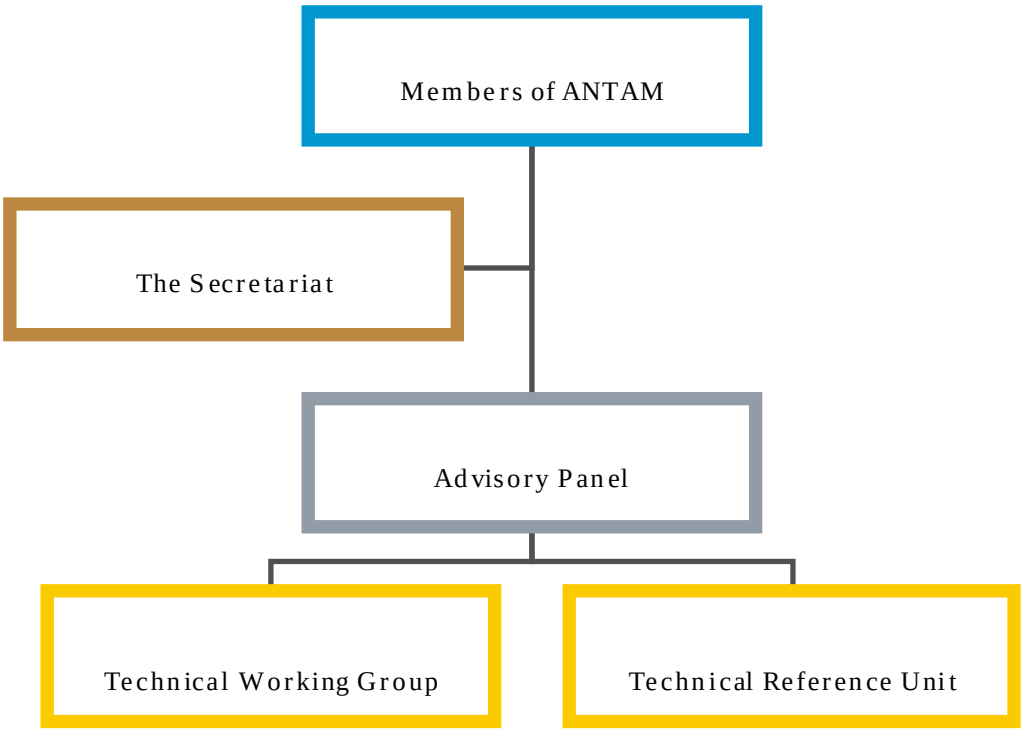
A Regional Network with Global Reach

To date, a total number of 17 member States and associate members of ESCAP have designated focal points for ANTAM – Armenia; Bangladesh; Cambodia; China; France; Hong Kong, China; India; Indonesia; Malaysia; Pakistan; Philippines; Russia; Republic of Korea; Sri Lanka; Thailand; Turkey; and Viet Nam. ANTAM focal points primarily include national testing centres and research institutions of agricultural machinery mechanization.

The Advisory Panel of ANTAM brings together a pool of global experts, and solid partnership with relevant international organizations and regional networks including the Food and Agriculture Organization of the United Nations (FAO), the Organization for Economic Co-operation and Development (OECD), United Nations Industrial Development Organization (UNIDO) and the European Network for Testing of Agricultural Machinery (ENTAM) represented by the Italian Agency for Agricultural Mechanization (ENAMA) which is also the Technical Reference Unit of ANTAM.

The Technical Working Group (TWG) is tasked to develop and review ANTAM Codes and procedures based on the decision of the ANTAM annual meeting, and provide technical support to ANTAM activities. Each TWG is composed of experts in the field of agricultural machinery testing and agricultural engineering nominated by member countries. Currently, there are three TWGs on power tillers, powered knapsack misters-cum-dusters and transplanters respectively involving experts from 13 countries.

The Technical Reference Unit (TRU) provides technical support and third-party, objective check on the technical content of the testing reports performed by participating members in compliance with ANTAM Codes and procedures. The TRU is selected by consensus at the ANTAM annual meeting.



ANTAM Codes

ANTAM Codes draw upon major international standards and guidelines formulated by ISO, FAO and OECD, and merge relevant national standards and best practices popularly adopted by participating countries to reflect salient regional features. By introducing specifications, basic performance criteria and safety standards, ANTAM Codes protect the well-being of farmers, enhance food safety, preserve the environment, and promote healthy development of the agricultural machinery industry.

The ANTAM Codes (2015) on powered knapsack misters-cum-dusters and power tillers were developed by respective Technical Working Groups in Serpong, Indonesia in May 2015, and adopted by member countries at the 2nd Annual Meeting of ANTAM in New Delhi, India in December 2015. The ANTAM Codes are part of a dynamic process that involves regular updates and reviews. The annual meeting of ANTAM reviews and adopts the Codes based on consensus of participating countries. Implementation of ANTAM Codes is voluntary by participating members.

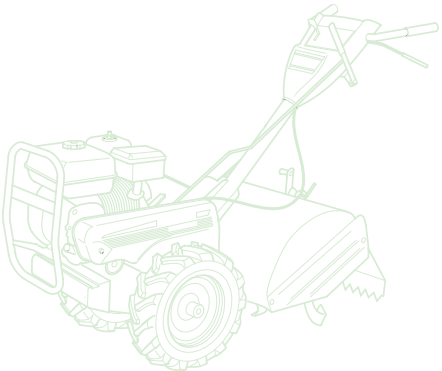
Each Code is accompanied by a training manual. The manuals have been carefully compiled to guide testing engineers in every phase of the procedures. The manuals include a complete list of equipment, specifications of testing facilities and a step-by-step explanation of testing practices.

Powered Knapsack Misters-Cum-Dusters

ANTAM Codes (2015) for testing of powered knapsack misters-cum-dusters were formulated by referring to ISO standards and FAO guidelines. Moreover, relevant national standards of China and India were merged to reflect the unique local conditions. The list of ANTAM Codes for testing of powered knapsack misters-cum-dusters includes:

Specification Check
Engine Test
Joints, Tank, Straps, Hose and Controls Test
Blower Test
Discharge Rate Test
Misting / Dusting Range and Width Test
Noise Test
Endurance Test

Power Tillers



ANTAM Codes (2015) for testing of power tillers were formulated by referring to relevant ISO and OECD standards. Moreover, relevant national standards of China, India, Indonesia, Philippines, and Thailand were included to reflect the unique local conditions. The list of ANTAM Codes for testing of power tillers includes:

- Checking of Specifications
- Engine Performance Test
- Drawbar Performance Test
- Turning Ability
- Parking Brake Test
- Noise Level Measurement

The Benefits of Adopting ANTAM Codes

- Enhance Safety and Performance of Agricultural Machinery

ANTAM tests are aimed to increase safety and technical reliability of farm machinery through the establishment of specifications and basic performance criteria. With standardization and harmonization of Codes and procedures, ANTAM Codes help to reduce huge social costs as result of use of unsafe farm machinery. Introduction of region-wide standards on safety, performance and efficiency, such as provisions on engine performance, leakage, durability, and noise will improve the quality of farm machinery traded in the market, and address the environmental sustainability of agricultural machinery.

- Facilitate Cross Border Trade

ANTAM is tasked to ensure access to safe, reliable, appropriate and affordable agricultural machinery by millions of farmers in the region. Under ANTAM, mutual recognition of testing results is achieved through harmonized standards and procedures. ANTAM Codes will facilitate cross border trade of agricultural machinery by enabling both importing and exporting countries to accept with confidence the testing results conducted by another country. ANTAM Codes will result in simplification of trade procedures and save costs of manufacturers by avoiding repetition of tests. Through standardization, ANTAM Codes enhance market access of the manufacturers, provide market transparency and promote fair trade.

- Uplift Regional Standards and Converge with Global Standards

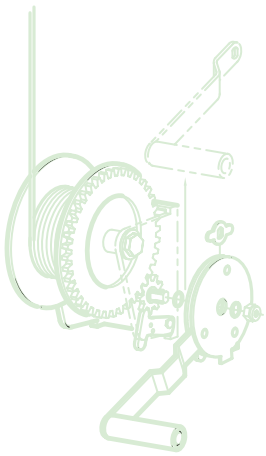
The ANTAM network offers a greater chance to enter a global market with regional standards that draw upon relevant international standards and guidelines while referring to popular codes and specific characteristics of machinery used in the Asia-Pacific region. ANTAM tests are developed to be: locally relevant, cost-effective, enforceable and sustainable.

- Stimulate Technological Innovation

Given the dynamic process of review and update of the Codes, their adoption promotes constant technological innovation based on globally recognized standards, latest trends in agricultural mechanization and demands from the end users. The international pool of technical experts and engineers behind the development of the Codes are carefully selected to align the interests of farmers in the region and the industry with global safety, efficiency and environmental standards.

- Promote Sustainable Agriculture for the Attainment of SDGs

Sustainable intensification of agricultural production requires reduced negative impact of agricultural production on the environment, including that generated by agricultural mechanization. In line with the Sustainable Development Goals (SDGs) promoted by the United Nations, ANTAM Codes contribute to sustainable agriculture through region-wide standard-setting to address safety, efficiency and environmental aspects of agricultural mechanization in the region. They promote implementation of resilient agricultural practices that increase productivity and production. In addition, they help reduce potential food loss associated with use of inappropriate and substandard machinery. ANTAM also offers a platform for technology transfer by assisting participating countries in upgrading their technical and institutional capacity to adopt sustainable agricultural mechanization.



Participating Members[1]


Armenia


Bangladesh

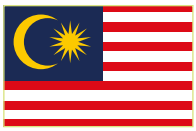

Cambodia


China


France


India


Indonesia


Malaysia


Pakistan


Philippines


Republic of Korea


Russian Federation


Sri Lanka


Thailand


Turkey


Viet Nam


Hong Kong, China[2]

1. These member States and associate members of ESCSAP have designated focal points for ANTAM as of January 2016.
2. Hong Kong, China is an associate member of ESCAP.

Collaborating Partners

CSAM, Centre for Sustainable Agricultural Mechanization, is a regional institution of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), based in Beijing, China. CSAM is built upon the Regional Network for Agricultural Machinery (RNAM) and the United Nations Asian and Pacific Centre for Agricultural Engineering and Machinery (UNAPCAEM), and started operations in 2004. CSAM serves the 62 members and associate members of UNESCAP.

The vision of CSAM is to achieve production gains, improved rural livelihood and poverty alleviation through sustainable agricultural mechanization for a more resilient, inclusive and sustainable Asia and the Pacific.

CSAM's objectives are to enhance technical cooperation among the members and associate members of UNESCAP as well as other interested member States of the United Nations, through extensive exchange of information and sharing of knowledge, and promotion of research and development and agro-business development in the area of sustainable agricultural mechanization and technology transfer for the attainment of the internationally agreed development goals including the Millennium Development Goals in the Asia-Pacific region.

Further Information:
The following websites can be consulted for additional information on and latest development of ANTAM, including latest publications, news and events, Codes, training manuals, and list of participating countries.
www.un-csam.org
www.antam-network.net

Secretariat of ANTAM:
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