

## **Webtraining on Testing of Combine Harvesters for Reduction of Losses and Increased Safety**

*11 October 2022, 14.00-16.30 GMT+8*

### **I. Background and content**

Combine harvesters are being adopted increasingly in the Asia-Pacific region, including in countries with a lower rate of mechanization, as they save time and cost in farming operations combining major harvesting operations – reaping, threshing, and winnowing. While combine harvesters contribute to increased productivity and harvesting capacity, they still imply an elevated cost in terms of food loss when less efficient or poorly maintained machines are used. This can significantly affect national production and ensuring that combine harvesters are properly tested for efficiency can contribute to food security, especially as the world faces a food crisis due to disruptions in the trade of agrifood products due to the impacts of the Covid-19 pandemic, armed conflicts, and geopolitical tensions. Furthermore, a lack of safety features and safety precautions may result in machinery malfunction and danger to the operators, for instance in presence of cutting and rotational assembly without appropriate cover. Thus, safety features incorporated in the combine harvesters and personal protective equipment for the operators play an important role in the effective use and management of combine harvesters and harvesting operations.

The Asian and Pacific Network for Testing of Agricultural Machinery (ANTAM) is an initiative led by the Centre for Sustainable Agricultural Mechanization (CSAM) of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) that aims to harmonize testing standards for agricultural machinery in the Asia-Pacific region. This has the ultimate goal of facilitating trade but most importantly promotes the use of safe, efficient, and environmentally sound agricultural machinery in support of related Sustainable Development Goals. ANTAM standardized Test Codes and procedures are developed through harmonization of the existing Test Codes used by member countries and other international practices. The ANTAM Test Codes and procedures distinctly reflect the specific characteristics of agricultural mechanization in the Asia-Pacific region, while at the same time align the regional practices with global standards. The ANTAM Codes greatly contribute to the sustainable agricultural development of the region for the benefit of farmers, food production and the environment.

Building on the experience of ANTAM participating countries and partners, the webtraining will highlight the importance of the Combine Harvester testing for reducing food losses and improving occupational safety and precautions. National experiences, in particular for the development of testing codes to address national needs, and specific testing items for the verification of efficiency and safety features will be presented. The event will allow an initial overview of testing practices in view of the development of a harmonized standard for the testing of combine harvesters according to the needs of ANTAM participating countries

## II. Format and target

The purpose of the webtraining is to offer ANTAM participating members and interested practitioners an overview of the testing features for combine harvesters in various countries, with a particular focus on items relating to reducing food loss and enhancing occupational safety during harvesting operations.

## III. Tentative Programme

Time	Item
14:00-14:10	<i>Welcome remarks</i> <ul style="list-style-type: none"><li>Ms Yutong Li, Head, ESCAP-CSAM</li></ul> <i>Introductory remarks</i> <ul style="list-style-type: none"><li>Ms Ayesha Herath, Chair of the ANTAM TWG on Combine Harvesters</li></ul>
14:10-14:40	<b>Overview of the Findings of the ANTAM TWG Survey on Combine Harvesters in Participating Countries</b> <ul style="list-style-type: none"><li>Mr Sandro Liberatori, ANTAM Technical Reference Unit</li></ul> <b>Round of discussion on country-specific testing needs</b> <ul style="list-style-type: none"><li>Ms Pem Lham, Agriculture Machinery Center, Bhutan</li><li>Mr Chao Sinh, Agricultural Post-Harvest Technology Office, Cambodia</li><li>Mr Wan Mohd Aznan Bin Wan Ahamad, MARDI, Malaysia</li></ul>
14:40-15:45	<b>National Codes' features for food loss prevention and safety</b> <ul style="list-style-type: none"><li>Mr Feng Jian, China Agricultural Mechanization Center</li><li>Dr Mukesh Jain, Northern Region Farm Machinery Testing Institute, India</li><li>Mr Seong-lim Jeong, Korea Agriculture Technology Promotion Agency</li><li>Mr Eduard Perov, Russian Association of Testing of Agricultural Machinery and Technology</li></ul>
15:45-16:25	<b>Development of National Codes and Testing Procedures</b> <ul style="list-style-type: none"><li>Ms Fatima Joy J. Raytana, Agricultural Machinery Testing and Evaluation Center of UPLB, Philippines</li><li>Ms Ayesha Herath, Farm Mechanization Research Centre (FMRC) Sri Lanka</li><li>Mr Joko Pitoyo, Indonesia Center of Agricultural Engineering Research and Development</li></ul>
16:25-16:30	<i>Concluding remarks</i> <ul style="list-style-type: none"><li>Mr Anshuman Varma, Deputy Head and Programme Officer, ESCAP-CSAM</li></ul>