



ESCAP

Economic and Social Commission
for Asia and the Pacific

Invitation to Discussion on Promoting Regional Harmonization for Agricultural Machinery Testing in Thailand through the ANTAM Initiative

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Asian and Pacific Network for Testing of Agricultural Machinery (ANTAM) aims to promote harmonization of test codes and procedures of agricultural machinery testing amongst participating countries in the Asia-Pacific region in order to enhance the quality, performance, occupational safety and environmental dimensions of the machinery as well as to support more integrated trade in agricultural machinery.

Currently the network includes 19 participating countries.

ANTAM has achieved harmonized regional test codes and procedures for testing of five types of agricultural machinery having strong relevance for smallholders.

ANTAM Training of Trainers is organized annually to strengthen capacities of national testing engineers in application of the ANTAM testing Codes.



- Identification of the need for a harmonized testing standard for a particular type of agricultural machinery through member country consultations and surveys.
- A Technical Working Group (TWG) consisting of technical experts, engineers, and researchers from participating countries is then formed to manage the code development process.
- The TWG collects and studies relevant international and national standards, guidelines, and testing procedures to support the harmonization process.
- TWG prepares a draft ANTAM test code that includes testing procedures for Specification check, Engine Performance, safety requirements, performance evaluation, and reporting methods.
- The draft code is discussed and revised through technical consultations and negotiations among TWG members until consensus is achieved.
- The proposed testing procedures are then validated through field testing and practical demonstrations to ensure their feasibility and reliability.
- After completing the revisions and validations, the TWG finalizes the draft ANTAM test code through mutual agreement among the members.
- The finalized draft is submitted to the ANTAM Annual Meeting, where participating member countries review and approve the code through regional consensus.
- Once approved, the ANTAM test code is officially published and ready to be implemented voluntarily by testing stations and relevant institutions in participating countries.



Scope	Defines the type of agricultural machinery covered by the code and the purpose
Definitions and Terminology	Provides definitions of technical terms used in the code to ensure uniform understanding
Test Conditions	Describes the machine, environmental, field, crop, and operating conditions required during the tests
Specifications of the Machine	Includes detailed information about the machine being tested, such as dimensions, engine power, weight, components, and manufacturer details
Instruments and Equipment	List of the instruments, tools, and measuring devices needed to conduct the tests accurately
Performance Tests	Explains the procedures used to evaluate the operational efficiency and technical performance of the machine
Safety Evaluation	Contains requirements and procedures for assessing operator safety and machine safety features
Fuel Consumption and Efficiency Measurements	Measures fuel usage, field capacity, output, and overall operational efficiency where applicable
Data Recording and Calculations	Provides formulas, methods, and tables for recording observations and calculating test results.
Test Report Format	Specifies the standard format for preparing and presenting the final test report
Annexes and Appendices	Includes supplementary tables, diagrams, sample forms, formulas, and additional technical information related to the tests



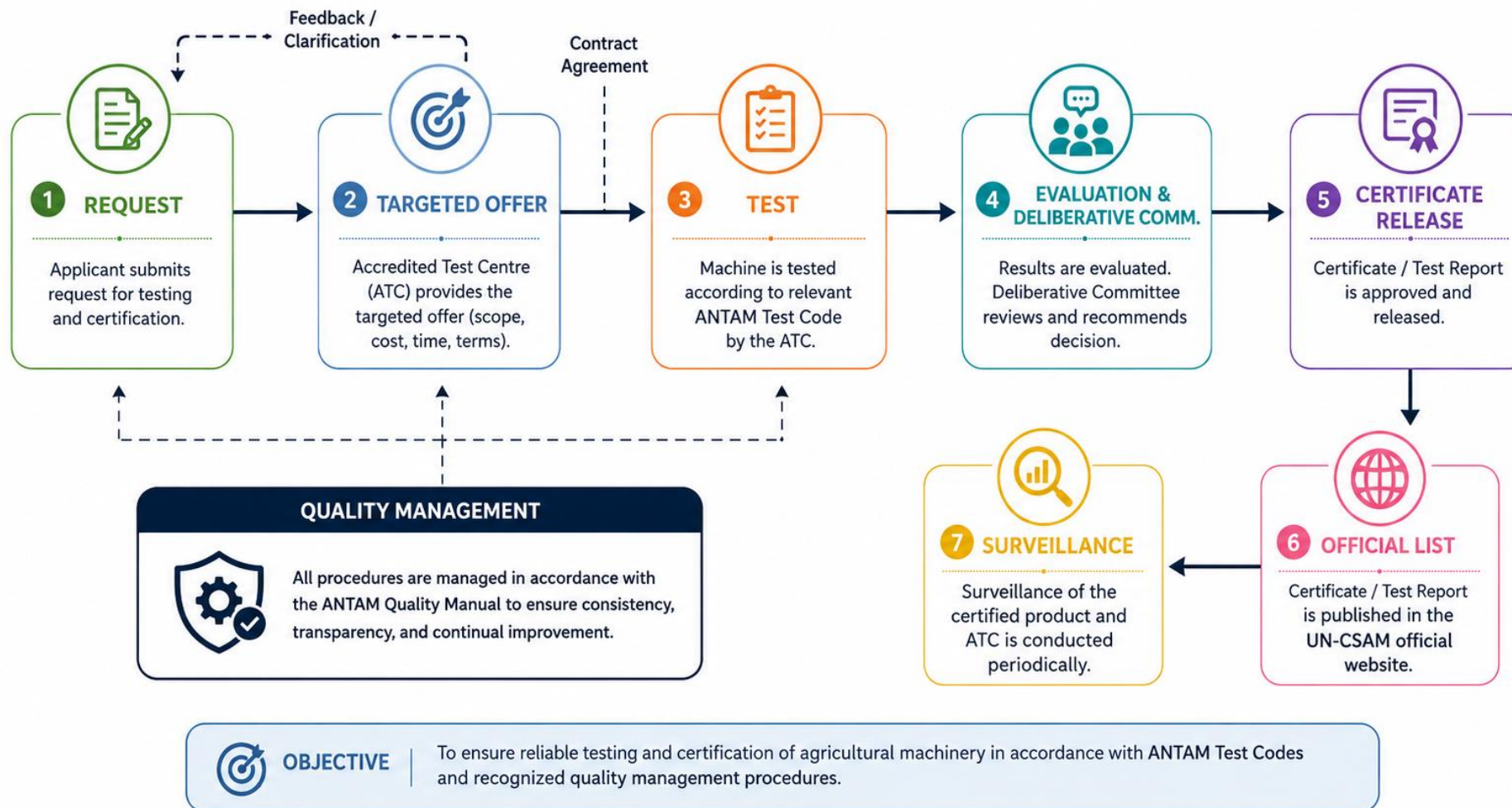
ANTAM Code	Machinery Covered
ANTAM 001	Power Tillers
ANTAM 001a	Mini Tillers
ANTAM 002	Powered Knapsack Misters-cum-Dusters
ANTAM 003	Paddy Transplanters
ANTAM 004	Rice Combine Harvesters

Engine Performance Evaluation Test, Noise Measurement Test and Vibration Measurement Test are common for all ANTAM codes to maintain uniformity and harmonization among member countries.





ANTAM QM – 8.1 CERTIFICATION PROCESS





Thank you

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