

Testing of Farm Machinery in India and the Role of ANTAM



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TESTING NETWORK IN INDIA



1. CRFMT&TI, Budni, M.P
2. NRFMT&TI, Hissar, Haryana
3. SRFMT&TI, Garladinne, AP
4. NERFMT&TI, Biswanath Chariali, Assam

Proposed Two New CFMTTI:

1. Maharashtra
2. Bihar

Other Institutions for Testing Agricultural Machinery in India (29)

SAUs	-	19
ICAR Institutes	-	2
Central University	-	1
National Institute	-	2
State Agencies	-	5

OBJECTIVES OF TESTING IN INDIA



1. Assessing functional suitability and performance
2. Deciding the suitability of machine for Indian conditions for import, production and popularization
3. Information to farmers and users to compare performance
4. Recommendations to financial institutions for assistance to farmers and manufacturers
5. Feedback to manufacturers on design deficiencies, field complaints and after sales service
6. Promoting mechanization in accordance with international standards
7. Assisting Bureau of Indian Standards (BIS) in formulation of standards
8. Input for R&D organizations in agricultural machinery and equipment

PURPOSE OF TESTING



1. Maintaining proper standards in quality
2. Adherence to safety aspects
3. Certification for financial assistance
4. Protection of interests of farmers

TYPES OF TESTS CARRIED OUT



Commercial Tests

1. Initial test on machines ready for commercialization
2. Batch test on commercial machines in regular manufacture
3. Series test of large number of machines simultaneously under same conditions for comparative evaluation
4. Survey for assessing general performance to get feedback

Confidential Tests

Tests carried out for providing confidential information on the performance of the machine to manufacturer before commercialization

TEST CODES FOR MACHINERY



BIS certification, two test codes are followed

1. Specifications of machinery and materials used
2. Elaborate testing requiring laboratory, field and endurance test

BIS CODES FOR MACHINERY



1. Specifications of equipment
2. Test codes for various machinery
3. Safety and operational requirements
4. Standards for raw materials used in the fabrication of agricultural machinery
5. Code of practices for installation, operation and maintenance
6. Nomenclature of equipment and glossary of terms

Total No of Standards: 71; Primary Tillage: 13; Secondary Tillage: 17; Sowing and Planting: 7; Interculture and Weeding: 7; Harvesting: 21; Threshing: 13



ASIAN AND PACIFIC NETWORK FOR TESTING OF AGRICULTURAL MACHINERY (ANTAM)

ANTAM is a regional platform for member countries of Asia-Pacific region

- To promote harmonization of testing codes and standards of agricultural machinery**
- To address quality performance, occupational safety and environmental aspect of agricultural machinery**

BENEFITS OF ANTAM



- Ensuring prescribed quality standards of the agricultural machinery being imported / exported
- Benefit to farmer in the selection and procurement of quality machinery
- To facilitate government assistance if the machinery qualifies the prescribed test standards

PROGRESS OF ANTAM



- 1st Annual Meeting of ANTAM was held at China Agricultural Machinery Testing Centre of the Ministry of Agriculture at Beijing, China during 16-19 September, 2014
- 2nd Annual Meeting of ANTAM held at Delhi during December 2-4, 2015
- Participants from 19 member states of UNESCAP as well as representatives from relevant UN agencies and international organizations including ESCAP, FAO, OECD, UNIDO and ENAMA/ENTAM, and representatives of manufacturers, industry associations and farmers' organizations across the Asia-Pacific attended the meeting

FOCUS OF ANTAM IN LAST 3 YEARS



- Development of test codes of Power tiller and Powered knapsack mister cum blower through harmonizing international and national test protocols and standards among member countries
- Capacity building of test engineers
- Constituted Technical Working Group of Power tiller, Powered knapsack mister cum blower and Rice transplanter
- Pre testing of codes and identification of test centre in the region

CHALLENGES OF ANTAM



- Harmonisation of test facilities available in member countries with the requirement of newly developed standards
- Ensuring smooth export of machinery among member countries
- Identification and certification of test centre(s) for testing of equipment with ANTAM test code
- Accelerate the pace of code development with more number of machinery to satisfy need of member countries
- Augmenting testing facilities at identified test centre(s)
- Ensuring participation of other stakeholders such as manufacturers, national agencies on standard development, statutory agencies and users
- Financial augmentation

WAY FORWARD



- Accelerating development and adoption of test codes of required machinery
- Each member-country should develop testing facilities for agricultural machinery
- Identification of test centres in member countries and their certification
- Countries not having test facilities can collaborate with others through a MoU
- Preparation of a Check list of requirement in member countries to ensure smooth export of machinery among member countries

FUNDING OF ANTAM



- Governments of respective member-countries should provide funds for the establishment of test facilities
- It may be own funds or in collaboration with other countries
- Operational expenses may be met from the testing fee
- UN CSAM should explore providing some seed money for establishing testing centres

STRENGTHENING OF ANTAM INITIATIVE



- Local manufacture of machinery in respective countries through sharing of technologies
- Strategies for appropriate agricultural mechanization and agri-business development
- Strategies for skills development through exchange of man-power and training

Thank You All

