

# ANTAM Survey Analysis

By  
Yuxin Ai, Senior Expert of  
**UNAPCAEM**



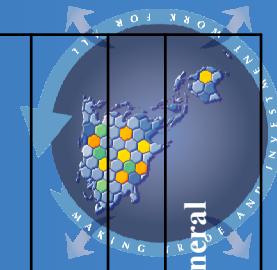
# Background

- 14 countries: China, Bangladesh, Fiji, India, Indonesia, Malaysia, Myanmar, Nepal, Papua New Guinea, Philippines, Russia, Sri Lanka, Thailand and Viet Nam
- 16 questions, 4 parts: overview, testing procedure, testing facilities, ANTAM



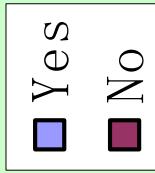
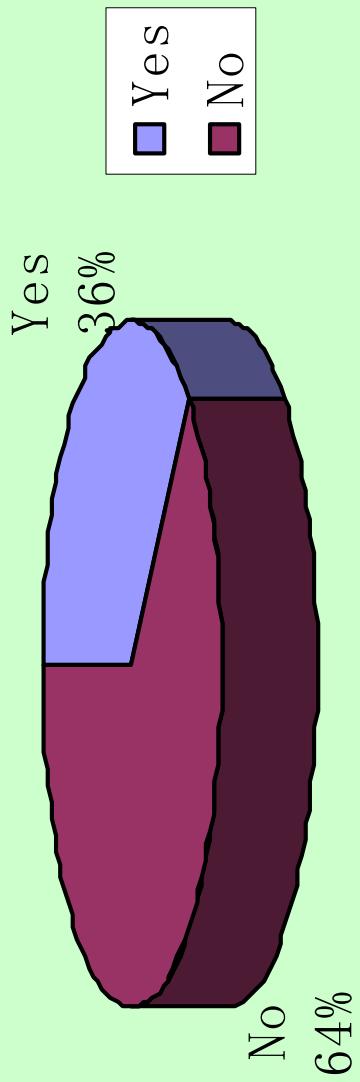
# Key Findings

Testing Standards/Requirements for Import & Export of Agricultural Machinery			
Country	Yes	No	Specifics
Bangladesh	✓		
China	✓		
Fiji		✓	Lack testing standards, knowledge and equipment
India		✓	
Indonesia	✓		
Malaysia		✓	In the process of setting up centre for testing agricultural machinery and implements, MARDI
Myanmar		✓	Lack testing and measuring equipment, no national standardization agency and legislation
Nepal		✓	
Papua New Guinea		✓	Majority of the farmers are subsistence, no policy on agricultural mechanization, no subsidy, agriculture has less priority
Philippines		✓	
Russia	✓		
Sri Lanka	✓		
Thailand	✓		
United Nations ESCAP Viet Nam		✓	Government decree and legislation to exercise general management of product quality



# Key Findings

Testing standards/requirements for import & export of agricultural machinery & implements



# Key Findings

## Application/Adoption of Testing Standards

Country	ISO	OECD	RNAM	National/Local
<b>Bangladesh</b>			✓	
China	✓			✓
<b>Fiji</b>				
India	✓			✓
Indonesia	✓		✓	✓
Malaysia	✓	✓	✓	
<b>Myanmar</b>				
Nepal			✓	
Papua New Guinea				
Philippines	✓			✓
Russia	✓	✓		✓
Sri Lanka				✓
Thailand				✓
Viet Nam	✓			✓



RNAM test codes and procedures first published in 1983 contain 15 test codes and procedures. The 2nd edition in 1995 contains three additions. Currently, RNAM codes and procedures are still used by some countries in the region.

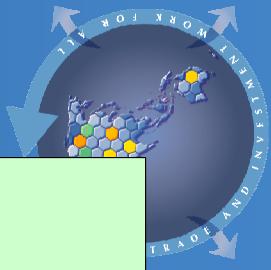
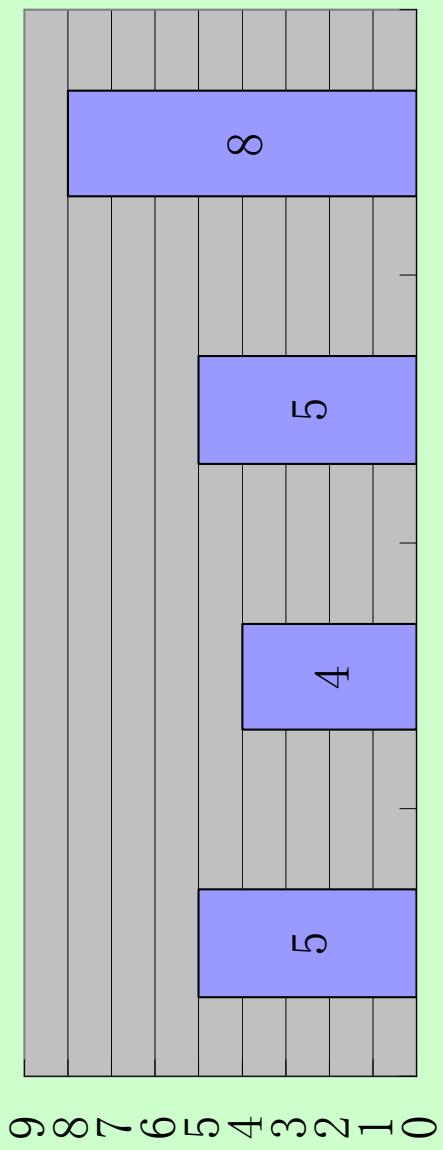
# Key Findings

## With vs. Without



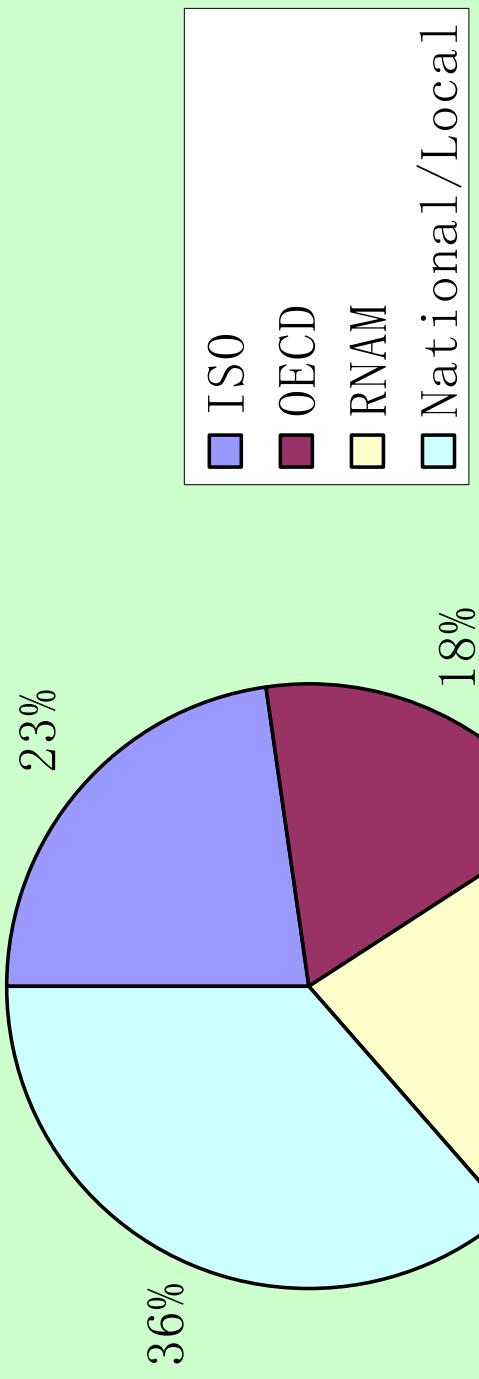
# Key Findings

## Application/Adoption of Testing Standards



# Key Findings

Application/Adoption of Testing Standards



# Key Findings

## Testing Agencies and Institutions for Regulating Standards

Country	Testing Agencies	Institutions for regulating standards	Specifics
Bangladesh	n/a, research institutes, BIRRI, Bangladesh Agricultural Research Institute	n/a	Agricultural Machinery Standardization Committee (AMSC) was abolished in 1988
China	✓	✓	
Fiji	n/a	n/a	
India	✓	✓	
Indonesia	✓	✓	
Malaysia	n/a	✓	
Myanmar	n/a	n/a	
Nepal	n/a, Nepal Agricultural Research Council	✓	No agricultural machinery standards and testing codes
Papua New Guinea	n/a	✓	
Philippines	✓	✓	
Russia	✓	✓	
Sri Lanka	✓	✓	
Thailand	✓	✓	
Viet Nam	✓	✓	

# Key Findings

## Standardization Agencies in Countries

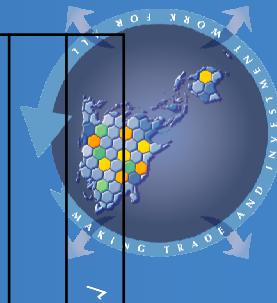


# Key Findings

Country	Mandatory Testing	
	Mandatory	Specifics
Bangladesh		
China	partly	Pesticide sprayers and belt driven tractors less than 18 KW; machinery purchased by farmers with government subsidies
Fiji	partly	Safety test: tractors, combine harvesters, trailers, power tillers; performance test: threshers, sugarcane crusher and chaff cutters
India	✓	All kinds of agricultural machinery even local made or imported must be tested by Ministry of Agriculture for distribution
Indonesia		
Malaysia		
Myanmar		
Nepal		
Papua New Guinea		
Philippines	partly	Only mandatory with machinery purchased with government funds
Russia	partly	There are special annual tests of different kinds of agricultural and forestry machines under the national and partly harmonized standards with OECD codes and ISO.
Sri Lanka		
Thailand	partly	Only one standard is mandatory-small size water cooled diesel engines
Viet Nam T E D N A R	partly	Per request of Ministry of Agriculture and Rural Development

# Key Findings

Primary Purpose for Testing		
Country	Performance, safety, quality guarantee	Qualifying for government subsidy/funding
Bangladesh		
China	✓	✓
Fiji	✓	✓
India	✓	✓
Indonesia	✓	
Malaysia	✓	
Myanmar		
Nepal		
Papua New Guinea		
Philippines	✓	✓
Russia		✓
Sri Lanka	✓	
Thailand	✓	
Viet Nam	✓	✓



# Key Findings

- Realization of necessity of having testing codes and procedures
- Existence of testing agencies/research institutes with ability to perform some testing
- Standardization agencies well established
- Testing agencies are public organizations
- Demand for upgrading facilities, transfer of technology/prototype, knowledge sharing, training, quality machinery, cross-border trade



# Key Findings

- Inadequate government support
- Dysfunctional/limited capacity
- Lack of trained professional, knowledge about test codes and procedures and equipment
- Substandard machinery hurt farmers interest



# Challenges and Prospects

- National, regional gaps: high degree of variation of testing codes and procedures
- Consensus on standardization
- Sustainability: low-cost, maintenance, technical support
- Private sector participation



# Challenges and Prospects

- A virtual network in partnership with associations and the private sector
- Information platform / knowledge sharing
- Capacity building, i.e. upgrade facilities, human resources development
- Technology / prototype transfer



# Funding and Operation Modality

- Membership fee, testing fee, technical aid, manufacturers participation, UNAPCAEM funding
- Secretariat, taskforce to provide technical support
- Collaboration with other UN agencies and research institutes and associations



# Thank You

