Testing & Appraisal of Agricultural Machinery In China

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China is an agricultural country with a population of over 1.3 billion people.

The development of modern Chinese agriculture is strictly connected with the development of modern agricultural machinery.
Amount of Subsidies Provided

By the Central government (2004-2014)

MILLIONS OF YUAN
In 2014, the national comprehensive mechanization level of crop tillage, planting and harvest reached to 61%.
# 1. Public service and management system for agricultural mechanization in China

<table>
<thead>
<tr>
<th>Type of Institutions</th>
<th>Number</th>
<th>Number of Personnel</th>
<th>Number of Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>Scientists &amp; Engineers</td>
</tr>
<tr>
<td>Administrative management</td>
<td>32,632</td>
<td>107,184</td>
<td>54,550</td>
</tr>
<tr>
<td>Testing and appraisal</td>
<td>35 (at and above the provincial level)</td>
<td>1322</td>
<td>986</td>
</tr>
<tr>
<td>Technology extension</td>
<td>2,851</td>
<td>32,067</td>
<td>15,629</td>
</tr>
<tr>
<td>Safety supervision</td>
<td>80</td>
<td>3051</td>
<td>2030</td>
</tr>
<tr>
<td>Education and training</td>
<td>1,754</td>
<td>19,689</td>
<td>13,057</td>
</tr>
</tbody>
</table>

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Figure: Organizational Framework of Agricultural Mechanization Management in China
2. Testing & Appraisal of Agricultural Machinery in China

Began in the early 1950s.

Definition: Refers to the technical appraisal on the applicability, safety and reliability of agricultural machinery.
2. Testing & Appraisal of Agricultural Machinery in China

Purpose: To provide the basic information on the selection and extension of the agricultural machinery, promote the widespread use of advanced and applicable agricultural machinery, and preserve lawful rights and interests of consumers, producers and distributors.
2. Testing & Appraisal of Agricultural Machinery in China

- According to the Law on Promotion of Agricultural Mechanization issued in 2004, the Central government supports efforts to promote the wide use of advanced and applicable agricultural machines among peasants and agricultural production and operation organizations.

- The agricultural machines for popularization should meet the need of local agricultural development; and the machines should have to be proved as advanced and applicable through testing and appraisal in the area.
2. Testing & Appraisal of Agricultural Machinery in China

Classification:

- The appraisal of agricultural machinery in China includes the ministerial appraisal and provincial appraisal.

Producers or distributors of agricultural machinery can submit their products for appraisal on voluntary basis.

Products that have passed the appraisal at the ministerial level do not need to undertake tests at the provincial level.
The appraisal has three main purposes:

(I) Popularization: to comprehensively test performance and certify whether the tested machinery is suitable for popularization.

(II) Model selection: this verification is conducted by comparing test of similar types of machineries and selecting better models.

(III) Special items: to assess special performances of agricultural machinery, such as safety, reliability, energy consumption and emission etc.
Certificate and badge (logo) samples of Testing and appraisal for popularization
2. Testing & Appraisal of Agricultural Machinery in China

Working Items of a testing and appraisal project:

| a) Factory production conditions audit; |
| b) Performance test and safety inspection; |
| c) Applicability and reliability evaluation; |
| d) Verification of operating instruction and three guarantees certificate; |
| e) User survey. |

Link: Performance test report sample for a wheeled tractor.
Frame Chart for the Main Laws and Regulations

The Law of the P.R.C. on Promotion of Agricultural Mechanization

Measures of the Ministry of Agriculture for Testing and Appraisal the Agricultural Machinery

The Management Regulation of the Ability Certification for the Institutions

The Management Regulation of the Codes

The Management Regulation of the Procedure

The Management Regulation of the Certificate and Sign
2. Testing & Appraisal of Agricultural Machinery in China

Competent administrative department:

- The Ministry of Agriculture and provincial agricultural mechanization administrative departments respectively take charge of the management of the ministerial appraisal and provincial appraisals, including issuing the guideline and planning on the types of products, and publishing the codes.
At present, there is a nationwide agricultural machinery testing network comprising of 35 testing stations at the national (ministerial) level and the provincial level.
2. Testing & Appraisal of Agricultural Machinery in China

- China Agricultural Machinery Testing Center (CAMTC)
- Crop Protection Machinery Testing Station of CAMTC
- Marine fishing machinery Testing Station of CAMTC
- 31 testing stations in each province all over the country (excluding Tibet).
- State farm testing station in Heilongjiang Province
- Testing station in Xinjiang Production and Construction Corps
2. Testing & Appraisal of Agricultural Machinery in China

- **Codes:**
- The appraisal shall be in strict accordance with the codes released by the administrative departments of agricultural mechanization.

Link: [Directory of Current Codes for Appraisal at the Ministerial Level](#)
2. Testing & Appraisal of Agricultural Machinery in China

Procedure:

The machinery producers or the distributors who apply for appraisal should submit the following materials to competent organizations: (1) application forms; (2) copies of the business licenses of enterprise legal persons; (3) the documents related to the new product; (4) the product standard; (5) the product specifications.

Link: The working procedures of ministerial popularization appraisal
2. Testing & Appraisal of Agricultural Machinery in China

Outcomes:

- To provide significant technical support for effective implementation of subsidy policy.
- To guide farmers in their purchase of equipment.
- To promote technological advancement and guide manufactures with common guidelines.
The number of Ministerial Testing and Appraisal Reports, 1983~2013
3. Other certification systems for Agricultural Machinery in China

- Production Licensing for Industrial Products
- *Chinese Compulsory Certification (CCC)*

General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China
3. Other certification systems for Agricultural Machinery in China

- Production Licensing for Industrial Products:
  - Regulations of the People's Republic of China on Administration of Production Licensing for Industrial Products

- Those important industrial products involving human health and personal property safety shall be under compulsory management of Production Permission and Supervision in China.
3. Other certification systems for Agricultural Machinery in China

- Production Licensing for Industrial Products:
- Currently, 62 kinds of Industrial Products are under the Production License Management System, involving 5 kinds of agricultural machinery which are **pump**, **motor**, **thresher**, **internal combustion engine**, **feed mill** and **cotton processing machinery**.
3. Other certification systems for Agricultural Machinery in China

- **Chinese Compulsory Certification (CCC):**

- **Regulations of the People's Republic of China on the Administration of Product Quality Certification and Regulations for Compulsory Product Certification**

In order to protect national security, prevent fraud, protect human health or safety, protect animal or plant life or health, and protect environment, the related products must be certified and marked Certification logo before leaving the factory, being sold, imported or used in other business activities in China.
3. Other certification systems for Agricultural Machinery in China

- **Chinese Compulsory Certification (CCC):**

- To date, there are 149 kinds of products must be conducted compulsory certificate, including 2 kinds of agricultural machinery which are **wheeled tractor** (powered by single cylinder diesel engine or multi-cylinder diesel engine of not more than 25 horsepower) and **plant protection machinery**.
Currently, there are 11 certification institutions conducting compulsory certification in China.

China Certification Center for Agricultural Machinery is specialized in compulsory certification for agricultural machinery with 7 testing laboratories.
4. Lists of advanced and applicable agricultural machinery in China

According to "guidance on the implementation of agricultural machinery purchase subsidy 2015-2017" newly released in 2015 by the Ministry of Agriculture of China, the types of national fiscal subsidized products range for 137 items.

Link: [the types of national fiscal subsidized products]
4. Lists of advanced and applicable agricultural machinery in China

The qualifications for fiscal subsidized products are as follows: the product must be within the territory of the People's Republic of China the production of products. All of subsidized products, excluding the new pilot production, should have effective ministerial or provincial appraisal certificate.
4. Lists of advanced and applicable agricultural machinery in China

- Personal directly engaged in agricultural production or other operation organizations can all have chance to get subsidies.
- They can buy fiscal subsidized products from distribution enterprises or from the production enterprises directly.
This year, entrusted by the department of agricultural mechanization of Ministry of Agriculture, CAMTC is responsible for classifying and checking fixed subsidies of 61 items of national fiscal subsidized products which have ministerial or provincial appraisal certificates.

And other items will be classified by provincial governments.
4. Lists of advanced and applicable agricultural machinery in China

- Link: [Information table for central fiscal subsidized products-1]
- Link: [Information table for central fiscal subsidized products-2]
Link: [Brief introduction about CAMTC]
THANKS for your attention