# Practice and Prospect of Human resource development of Nanjing Research Institute for Agricultural Mechanization (NRIAM)



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# I. Brief Introduction of NRIAM



- Nanjing Research Institute for Agricultural
  Mechanization (NRIAM), Ministry of Agriculture.
- Established in 1957.
- A public national research institute in agricultural engineering.



# Mainly responsible for

- Technological innovation of agricultural equipment;
- Quality testing;
- > Education training;
- > Etc.



### **During the early time from the establishment**

- Developed the **first** rice transplanter in the world;
- Achievement in machinery for crop protection, charge plough paddy field, walking tractor, rotary cultivator and threshing machine;



### **During the early time from the establishment**

- Carried out a large number of agricultural mechanization mode and policy research;
- > Set standards of agricultural quality and machinery operation



# At present, NRIAM has extended the scope to further research field ...

- Machinery for food crops;
- Machinery for economic crops;
- Facility equipment and engineering in agriculture;
- Crop protection and environment engineering technology;



# At present, NRIAM has extended the scope to further research field ...

- > Agricultural products processing engineering technology;
- Agricultural resources development engineering technology
- Agricultural machinery quality test and control technology;
- Agricultural mechanization policy and technology model.



# II. General situation of agricultural mechanization of human resources development



NRIAM has a staff of 260 with 24 researchers and61 associate researchers.



# **➤** Divided in 11 key disciplines:

- machinery for tillage and soil preparation
- machinery for planting and sowing
- equipment for crop protection
- machinery for underground fruit harvesting
- machinery for crop grain harvesting
- machinery for fruit, vegetable and tea harvesting



# **➤** Divided in 11 key disciplines:

- machinery for crop stalk harvesting
- equipment for agro-product classification and storage
- technology and equipment for agro-product processing
- equipment for biomass conversion and utilization
- agricultural mechanization and system assessment



- In the aspect of agricultural mechanization of human resources development:
  - 1) Formulating concessional introduced intelligence policy to attract high-level talents for domestic and overseas;
  - 2) Establishing incentive system of science and technology evaluation;
  - 3) Encouraging researchers to update their knowledge, more cooperation with universities and enterprises at home and abroad.



➤ In the aspect of cultivation of graduate students:

- NRIAM has right to confer Master's Degree and Doctoral Degree, with 3 doctoral tutor and 30 master student supervisor;
- Combines training with Nanjing Agricultural University (NAU) and Anhui Agricultural University (AAU) of the postgraduate, has 50 graduates in institute at present.



- ➤ In the aspect of domestic agricultural mechanization talent training:
  - NRIAM has a National Agricultural Mechanization Training Center;
  - Conducts trainings on aspects of senior management personnel, technical personnel and leaders of cooperatives and family farms of agricultural mechanization,
  - With a total account in organizing 10 training courses annually (more than 300 trainees).



- In the aspect of Foreign agricultural engineering technical training:
  - Holding "Aquatic products or livestock and poultry breeding technology training" annually in Vietnam,
     Thailand and other ASEAN countries;
  - In 2014, "Rice production mechanization technology training" successfully organized toward ASEAN and African countries.



- ➤ In the aspect of Foreign agricultural engineering technical training:
  - This year, 2015, NRIAM has conducted a training oriented to SCO countries, named "Policies supporting agricultural mechanization and technology management workshop".



# III. Future plan on human resources development



- > Good opportunities
- > Future works



# Good opportunities

- The Strategy of reinvigorating China through human resource development and innovation-driven;
- Modern agricultural development steps into an era of mechanization;
- Agricultural "Go Out" and "One Belt and One Road" strategy.



- A. Strengthen international cooperation and communication in agricultural equipment technology;
- B. Organize more training courses toward agricultural mechanization talent in Asia-Pacific region;
- C. Set up the mechanism of agricultural mechanization normalization of cooperation in the Asia-pacific region.



- A. Strengthen international cooperation and communication in agricultural equipment technology
  - a. Technology project cooperation
  - b. Talent exchange training
  - Build mechanization demonstration farms in expect of comprehensive experiment and demonstration on variety, agriculture and mechanization technology



- B. Organize more training courses toward agricultural mechanization talent in Asia-Pacific region
  - a. Training Key Fields
  - a) Quality inspection of agricultural machinery
  - b) Rice production mechanization
  - c) Conservation tillage technology equipment
  - d) Agricultural pesticide technology and equipment
  - e) Small tractors and complete set of agricultural machinery use, etc.



B. Organize more training courses toward agricultural mechanization talent in Asia-Pacific region

b. Master graduate students will be more recruited



C. Set up the mechanism of agricultural mechanization normalization of cooperation in the Asia-pacific region.

More Connection with agricultural machinery technology organizations, academy, Industry Association and agro-machinery enterprises in Asia-Pacific countries.



C. Set up the mechanism of agricultural mechanization normalization of cooperation in the Asia-pacific region.

#### **Expectations**

- Forming a regular contact consultation mechanism;
- Hosting academic conferences;
- Communicating research progress;
- Promoting scientific research achievements conversion applications.



#### > Contact

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# Thank You



