



Human Resource Development in the Process of Agriculture Mechanization

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Content

- **Importance of Human Resource in Agriculture Mechanization**
- **Challenge in China**
- **Thoughts from Zoomlion**
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Importance of Human Resource in Agriculture Mechanization

- Requirement from modern agriculture
 - Private
 - Agriculture projects
- Higher output and profit
- Farmer becomes a “profession” — —Skills and knowledge



Importance of Human Resource in Agriculture Mechanization

- Human resource definition
 - Management expert
 - Mechanization expert
 - Service provider
- Demand of **Mechanization Expert** to create more value on agriculture production
 - Operation
 - Maintenance
 - Management
 - improvement

AGRICULTURE POPULATION
Nearly 35% or 693 Million people

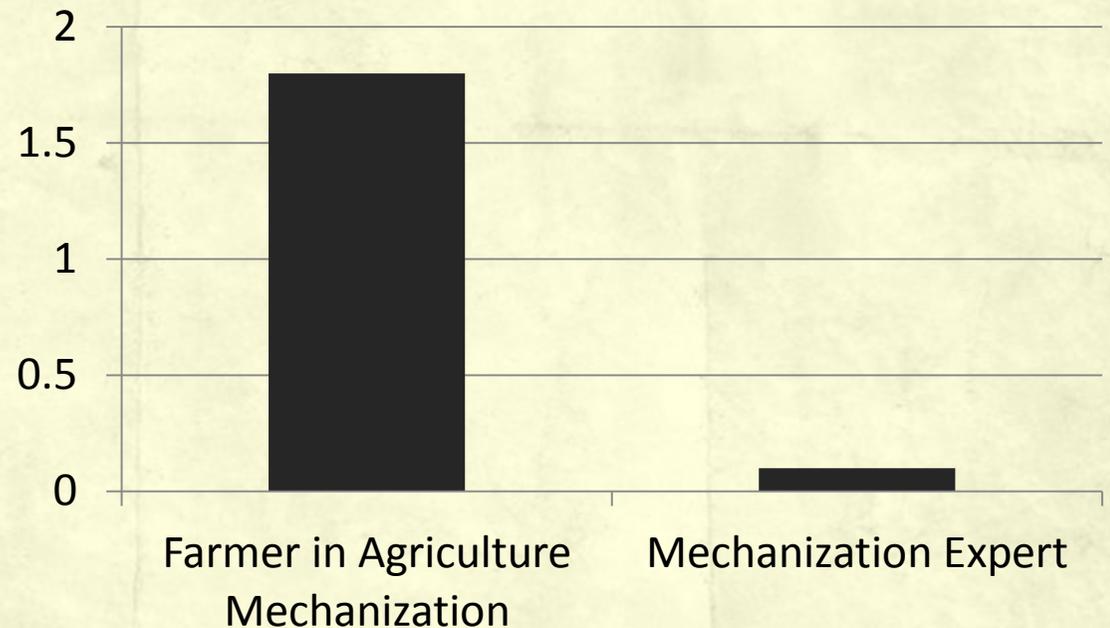


■ People Engaged
in Agriculture

Challenge in China

- **More region:** Large farm caused by land consolidation trend
- **More machinery:** Increasing 61% mechanization rate, with 1.8 M population in Agriculture Machinery.
- **More complicated:** Higher horse power, Multi-function and Specified purpose machinery

**MECHANIZATION EXPERT IN CHINA
(MILLION)**



Challenge in China

- Increasing Cross-Region Machinery Operation Activities since 1990s
 - 168,000 machinery service-providing organization,
 - 42,000 are cooperatives with more than 20% increasing rate,
 - Case in 2013, 500,000 combine for wheat harvesting, 300,000 are operated in a cross-region manner.
 - 2013, more than 36 Million Ha supported by cross-region machinery operation



Thoughts from Zoomlion

- **Re-definition of Farmer:** to direct the target
- **Change of the Training System:** Comprehensive Education, instead of temporary training
- **Multi-source of education:** bring experienced farmer, manufacturer, university professor, cooperatives and agriculture enterprise to the education system
- **Certified knowledge and skills system:** enable “Farmer” as a standard profession and occupation

Solution from Zoomlion

PRODUCT RANGES



Solution from Zoomlion

<p>Forest soil preparation</p>	<p>Excavator, bulldozer, grader, rollers, loaders and other earth-moving equipment is complete</p>	
<p>Cultivation</p>	<p>12-210 horsepower tractor , covering meshing sets, synchronizer, power shift, and other technology platform</p>	
<p>Irrigation</p>	<p>Provide a variety of equipment for irrigation network construction, realize full coverage of the various terrain and the planting of crops and agronomic requirements</p>	
<p>Field management</p>	<p>Meet the row, spreader, spray insecticide, etc all kinds of field management requirements</p>	
<p>Planting</p>	<p>Complete product series, meet rice, wheat, corn, sugar cane, cassava, etc growing demand</p>	
<p>Harvest</p>	<p>"GUWANG" wheat harvester, rice harvester, with its superior performance, sales ranked top three in China</p>	
<p>Drying</p>	<p>Circulation at low temperature, high temperature continuous and mobile dryer, meet the rice, corn, soybeans, wheat and other crops drying requirements</p>	
<p>Warehousing and shallow processing</p>	<p>Meet the demand of grain post-harvest storage and raw processing</p>	

Solution from Zoomlion

- Under the guidance of Ministry of Agriculture, Ministry of Education, Zoomlion, with more than 110 members, established **China Modern Agricultural Equipment Vocational Education Group**.

中华人民共和国农业部

Ministry of Agriculture of the People's Republic of China

中华人民共和国教育部

Ministry of Education of the People's Republic of China

 **ZOOMLION**



Solution from Zoomlion

- Member: more than 110 entities, including Manufacturer, research institute, professional college, etc
- Plan
 - Network of bases for technical training center
 - Universal certificate and training system
 - Information commutation system
 - Online technical consulting service platform



Solution from Zoomlion

- Target farmer character:

Professional

Technical

Knowledgeable

Management

Passionate

- The “GROUP” also has the division for “international cooperation and communication”
 - to conduct the cooperation with other country
 - Expand the model to overseas

Solution from Zoomlion

National Agriculture Machinery Skills Competition

 **ZOOMLION**

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Organized by
Mechanization Division, Ministry of Agriculture
Zoomlion Heavy Machinery

Solution from Zoomlion

- More than 2000 participants nationwide, 76 in the finals
- Technician, operator, head of cooperatives, farm owner ,etc
- Details:
 - Theory test
 - Practice test
 - Divided by tractor, combine harvester and other machinery
 - Maintenance, operation and sprae parts replacement



Solution from Zoomlion

- Discover the current system and make improvement
- Encourage more farmers to engage in education
- Establish the universal agriculture mechanization expertise certificate system



Thank you



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