Human Resource Development for Sustainable Agricultural Mechanization in Indonesia

Amiq Nurul Azmi, STP
Indonesia Center for Agricultural Engineering Research and Development,
IAARD
Ministry of Agriculture

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TARGET OF INDONESIA AGRICULTURE DEVELOPMENT

- SUSTAINABLE FOOD SELF SUFFICIENCY & SECURITY
- INCREASE ADDED VALUE, COMPETITIVENESS EXPORT
- INCREASE FOOD DEVERSIFICATION
- INCREASE FARMER WELFARE
Strategies, Policies, and National Programs to Achieve National Target in Agricultural Development

Capacity Building of human resources

Irrigation

Policy and regulation

Seed

Storage

Fertilizer

Land Expansion

Agricultural Machinery

Food self-sufficiency
Pre-harvest machinery:
1. Four wheel tractor
2. Two wheel tractor
3. Pump
4. Rice Transplanter
5. Chopper
6. Cultivator

Agricultural machinery grand
2014: 24,000 unit
2015: 60,000 unit
2016: 83,000 unit

Target:
Increase cropping area
Increase cropping index
Reduce post harvest losses
Reduce production cost

Government support for farm Machinery
Government subsidies and grand for harvesting and post-harvesting machinery in 2015

- Combine harvester: 2,790 units
- Paddy vertical dryer: 170 units
- Corn vertical dryer: 220 units
- Corn sheller: 2,000 units
- Power thresher: 1,500 units
- Rice milling unit: 666 units
Constrain in developing sustainable agricultural mechanization

1. Low capability of custom hiring manager, operator and technician of agricultural machinery
2. Lack of agricultural mechanization training program
3. Limited number of agricultural mechanization extension worker
4. Lack of agricultural mechanization expert including engineer and researcher
5. Limited number of agricultural machinery workshop
Government Strategy to Achieve Sustainable Agricultural Mechanization

1. Increase the capacity of agricultural machinery custom hiring from beginner to advance through national training program
2. Increase the number and capacity of extension worker (10 000 new extension worker in 2016)
3. Increase the number of farm machinery workshop up to district level
4. Improve extension program of agricultural machinery for:
   Extension worker, manager of custom hiring, farmer group and operator of agricultural machinery and technician for repair and maintenance
5. Improve the capacity of engineers, researchers & lecturers of agricultural mechanization
National Training Program

1. Training for Trainer (TOT):
   - University lecturer : 15 people
   - Extension worker : 25 people
   - Agricultural extension officer : 21 people

2. Topic of Training: operation, repair and maintenance of various agricultural machinery and management
   - Two wheel tractor
   - Four wheel tractor
   - Pump
   - Rice transplanter
   - Power weeder
   - Rice combine harvester
   - Power thresher
   - Rice milling unit
1. Increasing training program for agricultural mechanization by Agricultural Human Resources Development, Ministry of Agriculture

2. R&D and Planning:
   - Need assessment of agricultural mechanization

3. Technical Aspects:
   - Agricultural machinery & equipment design and manufacturing
   - Production, storage, processing, packaging techniques
   - Cultivation
   - Pest control

4. Management Aspects:
   - Agricultural machinery & equipment and management
   - Farming management
   - Marketing, human resource and information management
THANK YOU VERY MUCH