The 3rd Regional Forum on Sustainable Agricultural Mechanization

9-11 December 2015
Manila, The Philippines

Presented by:
Mr. Phatnakhone Khanthamixay
Mobile phone: 00856-20-55508315
K_69phat@yahoo.com
Myanmar
Thailand
Vietnam
China
Cambodia
Lao logo
Lao flag
Vientiane Capital city
Area: 236,800 km²
Border to:
Welcome to LAOS
Presentation outline

• History of mechanization in Lao PDR
• Current situation of agricultural mechanization
• Strategy, policy and National programme/initiatives of human resources development of SAM
• The need assessment of human resources development of SAM
• Challenge and Constraints
• Solution and Suggestion for human resources development for SAM
Historic information on agricultural mechanization

• The first period was marked to promote agricultural mechanization to farmer collective production. Until Year 1989

• In Year 2001, *Department of National Agricultural and Forestry Extension Service* (NAFES)

• Year 2012 Department of Agricultural Extension and Cooperatives (DAEC) under DAEC: *Division Agricultural Technique and Mechanization Promotion*
General information on agriculture
Rice Production

• Rain fed-rice area 700,000 hectares.
• Irrigated rice area is 126,000 hectares
• Paddy Rice Production in Year 2014 is accounting at 4 mill. Tones.
Source of Farmer Income

- On farm business: 60%
- Non-farm business: 31%
- Off-farm business: 9%
Poverty reduction

Country Poverty rate

1992/93: 46%
1997/98: 38%
2002/03: 33.500%
2007/08: 26.700%
2014/15: 16%
GDP composition

Country GDP composition 2015

- Service: 42%
- Industry: 34%
- Agriculture: 24%
Labour force composition

Country labour force by occupation

- Agriculture: 70%
- Service: 23%
- Industry: 7%
Tractor Population

- Tractors: 3831
- Middle tractors: 3727
- Walk behind tractors: 76156
From subsistence to modernization
Cash crop for boosting rural income generation

Rice harvesting with 4.1 ml tones, 2014

Monoculture boom, e.g. cassava for tapioca
Rice harvesting

Combine harvester

Developed thresher
Land preparation for rice cultivation

Power tiller  

Rotor tractor
Demonstration on rice seed broadcasting with motorized equipment

Broadcasting rice seedling

Motorized equipment
Farm machinery

Vegetable garden farm

Mechanization in Cattle farm
Rice transplanting

Motorized equipment for rice seedling transplanting

Manual Rice seedling transplanter
Rice seed transplanting

Rice seed with direct seed

Rice seedling transplanting with hand work
Current situation of mechanization service

- Public sector, Extension Department
- **Private sector**
  - Local manufacturer
  - Importers
  - Dealers and
- Farmers
Agricultural mechanization Extension

- Service providers
  - Groups
  - Private group
- Public extension/Donor projects
- Entrepreneurship company

Farmers
Strategies, policies and national programmes initiative of human resource development of agricultural mechanization

• National policy promote to modernize agricultural sectors to achieve target 4,2 mill. Tones of rice by 2020 for food security and commodity production

• Support capacity building through technical training, demonstration at Training Center (mechanization service, maintenance and repairing service),

• Facilitate private sectors to play a roll for service and demonstration on AM.

• modernized lowland market-oriented agricultural production

• Supporting academic educational program on agricultural mechanization in agricultural college lecture
Challenge and constraints faced for human resource development of agricultural mechanization

• lack of data on the current number of different types of machinery, equipment and their use.
• Limitation of human resources on agricultural mechanization (academic skill).
• Limitation of educational institutions on AM (poly techniques college, training center, testing center)
• In fact, training center on AM to build capacity for extension workers and farmers not exist.
• Incomplete legal status on AM
• Limitation of public investment on AM
• Public and private sectors collaboration still weak
Solution and suggestion faced for human resource development of agricultural mechanization

• Training need for extension officers to improve their skill on agricultural mechanization to be able to train farmers and to expose them to new technologies and opportunities.

• Establish education system agricultural engineering, mechanization.

• Strengthening the existing Technical Training enter on agricultural mechanization (machinery operation, maintenance, repairing, transferring new technology to the farmers).
Training on Tractor maintenance for local Government extension workers
Kob Jai

Thank You very much