Asian and Pacific Workshop on Whole-Process Mechanization of Potato Production

Cassava production and Mechanization in Cambodia

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I. Overview of Cassava supply chain in Cambodia
II. Status of mechanization in cassava production
III. The need assessment of cassava production mechanization
IV. Challenges and constraints faced for whole-process mechanization of cassava production in Cambodia
V. Suggestions for regional cooperation for the workshop, and potential contribution
VI. Conclusion
Cassava is the second most important agricultural crop after rice. Lacking processing facilities of cassava, Cambodian farmers must sell the dried cassava chips and flour to abroad markets, where it is processed into food textiles and paper products.

The main actors in Cambodia’s cassava value chain are farmers (both small-scale and large-scale), collectors, traders, and processors.

1. Overview of Cassava supply chain in Cambodia

- Farmers
- Collector
- Local Traders
- Foreign Traders
- Factory agents
- Factories in Phnom Penh
- Factories in Cambodia
- Near-border Factories in Cambodia
- Processing Factories Oversea

Cambodia is the second most important agricultural crop after rice.
II. Status of mechanization in cassava production in Cambodia

- The cassava production is still using labor force in their work.
- The mechanization have been used in only land preparation and part of harvesting stage.
- For the cassava production, Tractors are used from 60-90 Hp for the large land and power tiller from 12-15 Hp for small one.
- Local workshop can produce only a small scale of machine.
### II. Status of mechanization in cassava production in Cambodia

#### Implements required for field operation

<table>
<thead>
<tr>
<th>No</th>
<th>Operation</th>
<th>Power</th>
<th>Implement / Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Land Preparation</td>
<td>Tractor, Power tiller</td>
<td>Disc plow, Rotary, Plow</td>
</tr>
<tr>
<td>2</td>
<td>Creating Ridge</td>
<td>Tractor, Power tiler</td>
<td>Ridger</td>
</tr>
<tr>
<td>3</td>
<td>Cutting stem for planting</td>
<td>Labor</td>
<td>Cutting machine, Wood Cutting</td>
</tr>
<tr>
<td>4</td>
<td>Planting</td>
<td>Labor</td>
<td>Hoe</td>
</tr>
<tr>
<td>5</td>
<td>Weed Control</td>
<td>Labor</td>
<td>Hoe, knapsack sprayer, hand weeder</td>
</tr>
<tr>
<td>6</td>
<td>Fertilizer and Pest control application</td>
<td>Labor</td>
<td>Knapsack sprayer</td>
</tr>
<tr>
<td>7</td>
<td>Cutting stem</td>
<td>Labor</td>
<td>Knife</td>
</tr>
<tr>
<td>8</td>
<td>Harvesting root</td>
<td>Tractor, Power tiller</td>
<td>Digger</td>
</tr>
</tbody>
</table>
III. The need assessment of cassava production mechanization in Cambodia

Farm machinery workshops are still small scale size, the technical skill of producer is low.
Technical skill is needed to be improved in order to develop adequate machinery equipment for cassava production.
Mechanization is more important when the labor force in countryside move to work in the city and abroad.
Climate change is also influence to cassava production in term of water supply and solar drying.
Farmer still operate manually in planting, pest control, fertilization and harvesting.
Chopping machine

Local product

Imported product
IV. Challenges and constraints faced for whole-process mechanization of cassava production in Cambodia

- Most of Cassava machinery using in Cambodia is imported from abroad and local workshop is still small scale.
- The producer doesn’t have enough adequate knowledge and skill, and lack of technical support from national experts.
- The local production faces high competition with farm machinery imported from neighboring country which the quality is high and price is low.
Tractor implement for Cassava production
V. Suggestions for regional cooperation for the workshop, and potential contribution

 ✓ Keeping and improving international or bilateral cooperation among Asian member state and other country to research and develop on mechanization on cassava production.
 ✓ Sharing or transferring skill, technology and knowledge to farmer and producer.
 ✓ Sharing or transferring new innovation on mechanization of cassava production among Asian member state and the Pacific country.
 ✓ Proposing regional workshop and conference on cassava mechanization regularly.
In Cambodia, the lack of local processing make no stable market. That’s why the price is depend on the middleman.

Local workshop in country can produce only a small scale of machine because most producers don’t have enough knowledge, skills and technique.

Most Cambodia farmer still operate cassava production manually.

The need of cassava production mechanization is necessary to help farmer while the lack of labor force in countryside because of the immigration.

The country product has challenge with imported product which has the good quality and the low price.
Thanks for your attention...!

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