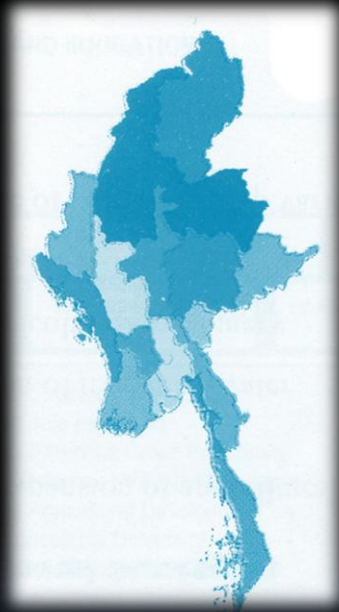


MECHANIZATION OF POTATO PRODUCTION PROCESS IN MYANMAR



BY

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**Asia and Pacific workshop on whole-process
Mechanization of Potato production**

Potato production in Myanmar

Grow year round in 4 seasons/ regions

❖ Spring (Jan-April)

Irrigated and grown at Shan State (major crops and seed from premonsoon crop /from wholesalers)

❖ Early Monsoon (April-August)

Rain fed and grown at Shan and Chin States (minor crop, seed from previous season/ from wholesalers)

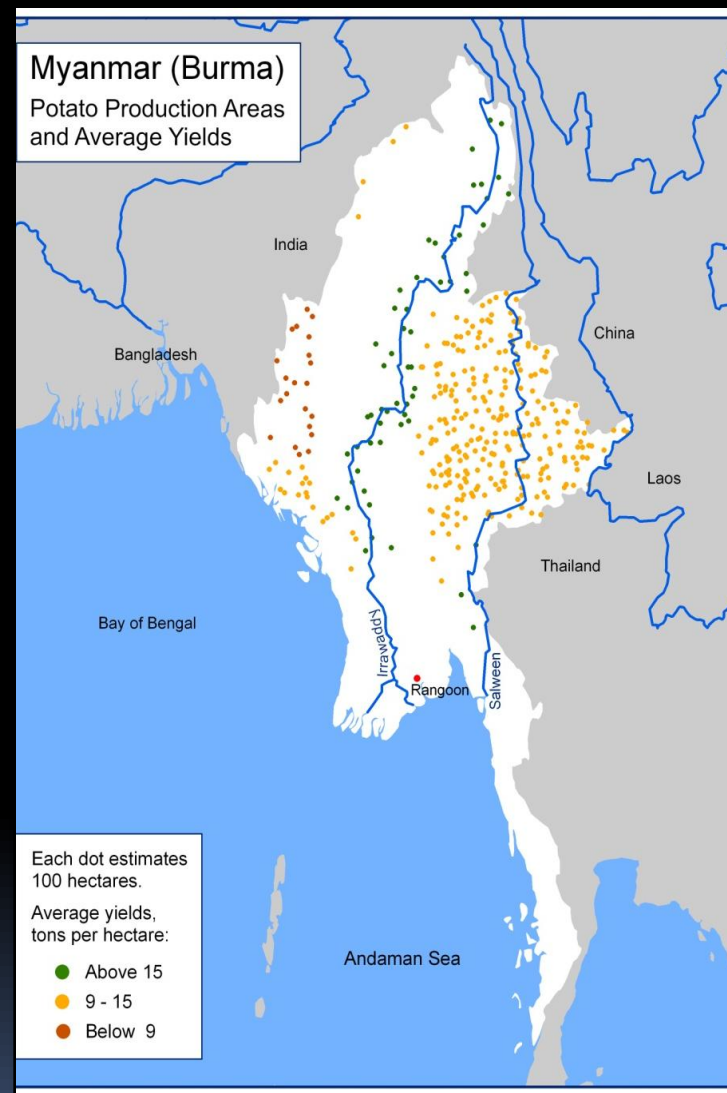
❖ Late monsoon (Aug.- Nov.)

Southern Shan State & Chin State (major growing season, seed from previous season)

❖ Winter (Nov.- Feb.)

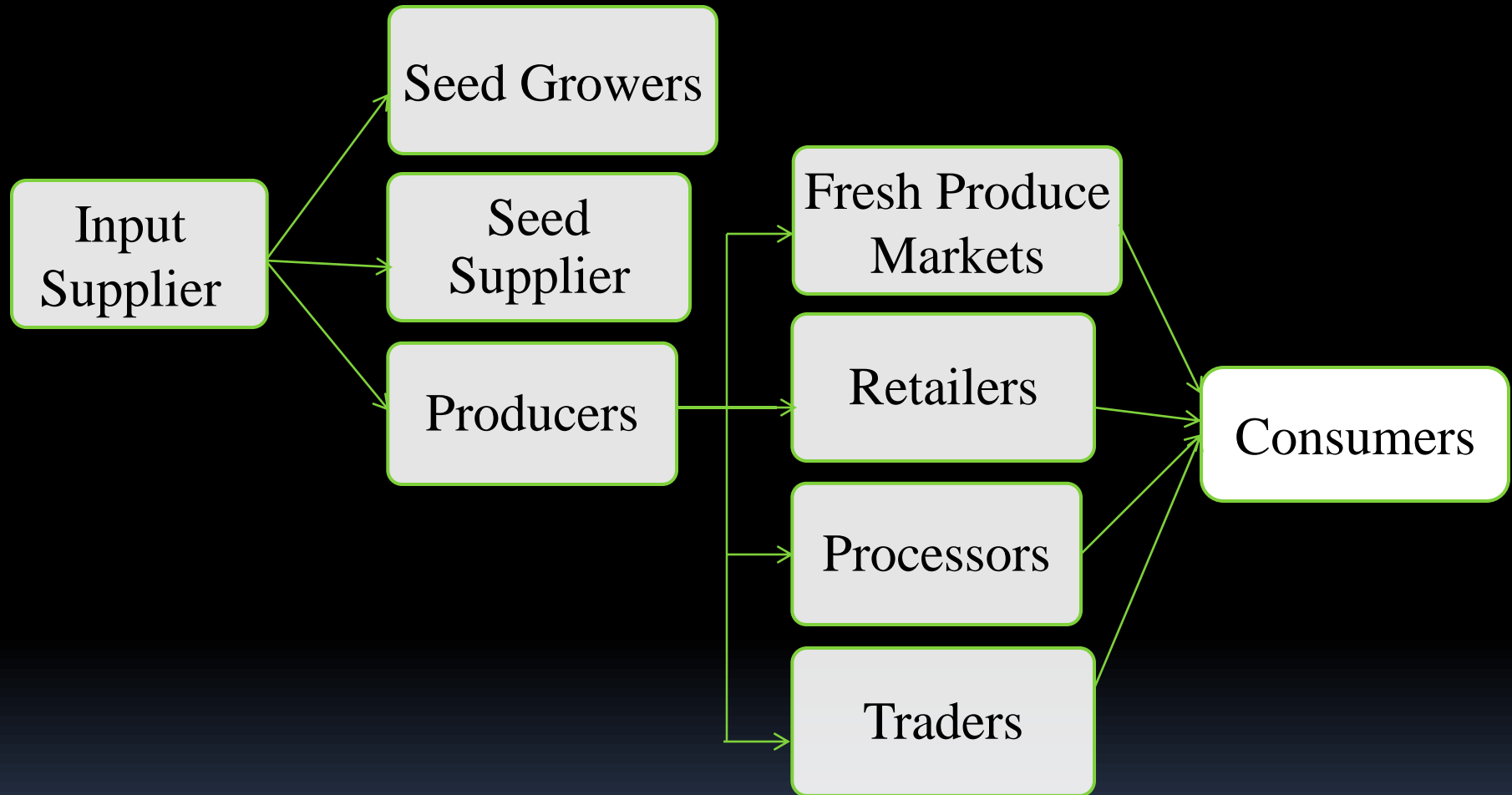
Minor winter crop grown in the alluvial plains at Magwe, Sagaing, Mandalay

Highest production - Shan State - nearly 75 % of the total national area.



<https://research.cip.cgiar.org/>

Potato supply chain in Myanmar



- ❖ constraints at all levels of the chain
- ❖ process and product upgrading currently missing

Status of mechanization in potato production in Myanmar



❖ Land is usually plowed, often with the use of animals and man power, but rarely with tractors

❖ Even if tractors were available, difficult to use on the mountain slopes where potatoes are typically grown (eg., in Shan and Chin State)

❖ Potato lifter or harvester was used at harvesting time but most of the potato producing farmer from rural area harvest manually and nearly 60% of the crop is damaged

Need assessment of potato production mechanization in Myanmar



- ❖ In Myanmar, the level of utilization of farm machinery at various stages of crop processing is still low compare to other potato producing and exporting countries.
- ❖ Seed bed former, planter, seed bed maintainer and the potato lifter, or harvester are still needed.
- ❖ Undeveloped warehouse and poor distribution system as well as higher transportation costs causes potatoes often spoil before getting to market.

Need assessment of potato production mechanization in Myanmar

- ❖ No or low availability of healthy and disease free seeds of proper variety and sprouted at time of planting
- ❖ High production costs due to lack of decision support facilities for the application of chemicals (fertilizers, pesticides) as well as price instability due to absence of a structured market (storage, contracts, processing industry).
- ❖ Limited irrigation possibilities in the dry season outside river beds.
- ❖ Low degree of organization of growers into groups, cooperatives or unions making knowledge transfer and joint purchase and selling impossible reflect limited access to higher value market
- ❖ Labor cost is likely to increase in future and therefore there is an increasing need for or small mechanized tools

Challenges and Constraints of whole-process mechanization of potato production in Myanmar

- ❖ The present state of mechanization of potato production in Myanmar's agriculture is still far from increasing the rate of farming incomes and productivity. This is because mechanization plan has not been formulated following a well designed, reliable and thorough analysis
- ❖ Private sector has played an increasingly significant role in agricultural mechanization.
- ❖ Increased levels of farm power and mechanization is therefore one of the major factors required to increase potato production.
- ❖ Need development and introduction of mechanized assistance of all forms and at any level of sophistication in potato production to improve efficiency of human time and labour.

Challenges and Constraints of whole-process mechanization of potato production in Myanmar

- ❖ High cost of transport and the poor condition of transport infrastructure - rural roads, rural-urban highways, border crossings, and ports.
- ❖ Seasonal nature of produce supply. There is a large need to invest in affordable small greenhouses in the cool mountain areas, irrigation in the dry zone and hills, cold storage at urban and export market points.
- ❖ Lack of access to market information. There is no mechanism to provide farmers with knowledge of market prices and supply/demand trends for individual agricultural products; hence, there is little guidance on planting, storage, or marketing decisions.
- ❖ Returns to farmers tend to be based on the low prices at harvest time, with most profits going to traders and exporters.

Regional cooperation for whole-process mechanization of potato production in Asia and the Pacific

- ❖ In Asia and the Pacific region the potato is a commercial crop both for fresh consumption and for processing. Better varieties with integrated crop management practices will increase yield and provide higher productivity for the farmers.
- ❖ To be sufficiently competitive, the production needs of farmers have to be addressed in order to generate sustainable technological inputs to their farming systems.
- ❖ The availability and marketing of healthy potato seed, processing varieties, ware potato for fresh consumption and potato post-harvest technology are important for farmers in all potato producing countries in the region.
- ❖ The involvement of all members of the value chain of the potato industry is required to share the benefits of technological development.

Conclusion

- ❖ Mechanization is essential tool to improve yield for potato production in Myanmar.
- ❖ Farmers who have embraced mechanized agriculture and use of high quality seeds as well as appropriate fertilizers will be assured of increased production.
- ❖ Need guaranteed lower production costs giving higher profits
- ❖ Need to develop both rural and urban wholesale markets as well as to enhance connectivity and trade with neighboring countries should be a priority for the near future.
- ❖ Throughout Asia and the Pacific for the spread of wholesale markets as collection points and conduits to cities has been extremely important to the development of value chains.

Thank You Very Much for Your Kind Attention



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