

Agricultural Mechanization in Bangladesh – The Future

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Grand Ballroom, Pan Pacific Sonargaon
Dhaka, Bangladesh



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Bangladesh has made great strides in mechanizing many aspects of agricultural production since the early 1980's when manual labour and animal power did all the work. To a degree the cyclone of 1970 followed by the war of liberation in 1971 and then prolonged floods of 1988 changed everything. To replace quickly the large number of draught animals lost in the 1988 flood the government withdrew brand and testing restrictions on the import of agricultural machinery and allowed the duty free import of irrigation engines, power tillers and spare parts. As a result, thousands of low cost power tillers and irrigation engines were imported making possible the rapid expansion of mechanization of primary tillage, irrigation and threshing. By the mid 2000s, the draught animals in use earlier had been replaced by 300,000 power tillers. Now 700,000 power tillers till more than 97% of cultivated land and 74% of rice is now threshed by 370,000 engine powered threshers. This has also led to a rapid expansion of the light engineering sector that makes machines such as multi-crop threshers and maize shellers machines and spare parts for power tillers and tractors.

There is, though, still a long way to go before agriculture in Bangladesh is appropriately mechanized. For example, almost all of the 11.5 million hectares of rice planted³ and the 50 million tons of rice harvested each year is transplanted and harvested manually. The private sector have responded to this through the aggressive promotion and sale of mini combine harvesters and rice transplanters and the government through the provision of subsidies on the sale price of a range of machines including combine harvesters and rice transplanters.



The Workshop Objectives

This workshop will review progress made with the introduction of agricultural mechanization technology, within this context the workshop will seek to identify

1. Opportunities for mechanizing crop production operations that are still partly or fully done manually,
2. Constraints to accelerating the pace of mechanization and the required changes in government and private sector policy that will make that happen,
3. How the Bangladesh light engineering sector could be supported to manufacture agricultural machinery and spare parts for domestic as well as international markets,
4. Support that rural women and youth need to gain employment in the agricultural machinery sector and establish agricultural mechanization based businesses,
5. Innovative ways of financing agricultural machinery manufacture, sales and service provisions.

The Workshop Outcomes

The workshop outcomes will be used to promote informed policy discourses to facilitate the policy changes within government and the private sector that will support:

1. Rural populations adapt to increasingly mechanized agricultural systems,
2. Agro-entrepreneurs invest in the development of new agricultural machinery,
3. The agricultural manufacturing and marketing sectors so that they are transformed into an internationally competitive industry.

Workshop format and participants

This two-day workshop will have four sessions in which the results of studies and opinion documents specifically conducted and prepared for this workshop will be presented. These presentations will be made by the agricultural machinery manufacture and marketing industry, leading agricultural research institutes, government departments and the financial services sector. In addition to the academia and policy makers the workshop will have a strong private sector representation. Each session will be followed by a discussion led by a panel of experts on the session subject and questions from the audience.

1. Mrema, G., Soni, P., Rolle, R. S., 2014. Sustainable mechanisation across agri-food chains in Asia and the Pacific region, Food and Agriculture Organisation, Bangkok Thailand

2. Gurung, T. R., Kabir, V. & Bokhtiar S., M., 2017. Mechanisation for Sustainable Agricultural Intensification in SAARC Region, SAARC Agricultural Centre, Dhaka, Bangladesh

3. Year Book of Agricultural Statistics, Bangladesh Bureau of Statistics, April 2021