

## COMPLETION REPORT

### Role of Japan in Socio-Economic Development of Bangladesh through Agricultural Mechanization

Dr. MD. Rostom Ali  
Associate Professor  
Department of Farm Power and Machinery  
Bangladesh Agricultural University

Subject of Research Project: **Role of Japan in Socio-economic Development of Bangladesh through Agricultural Mechanization**

In the study availability of Japan made agricultural machineries and spare parts in Bangladesh was assessed. A survey was conducted at the manufacturing workshops, importers/traders, retailers and farmers levels through pre-test questionnaire. Four district towns namely Mymensingh, Bogra, Jessore and Dhaka of Bangladesh were considered as study areas. Survey was also assessed to diffusion of agricultural machinery on income distribution and changes of rural livelihoods. The data from the survey confirms that Japanese Agricultural Machinery industry has played key role at the beginning (1960s) of agricultural mechanization in Bangladesh. In 1960, first prototype pedal thresher was brought from Japan. During 1960 to 1988, significant number of two wheels tractors (power tiller) was imported from Japan. Before liberalization, BADC used to import more durable, but higher cost engines/machines from Japan. Even after heavy subsidies until the late 1980s the price of machines was very high. At that time cheaper machines were restricted because of standards and quality issues.

Farmers need high investment to purchase Japan made farm machinery. Although durability of Japan made farm machinery is high but price is generally 2-3 times higher than Asian other countries. Due to the low price of other than Japan made machinery, farmers always choose low price machines and spare parts. They know that durability of other than Japan made machinery and spare parts is low. They do not have ability to purchase Japan made machinery. Due to the demand of farm machinery with low price, some of the traders/suppliers also focus low price farm machinery in the market of Bangladesh. On the other hand some manufacturing organizations in Bangladesh are currently using Japan made spare parts only for developing domestic farm machinery in their manufacturing workshop.

Men and women equally liked the many farm machineries as these have provided a good number of benefits to them such as, decreased working hours and drudgery; increased income as grain quality improved and grain losses decreased. Farmers are free from stomach ache as they are consuming quality grain today due to timely performed post harvest activities with the help of different farm machineries. This is a clear example how mechanization has improved the livelihood of rural. Due to the utilization of farm machinery, farmers use their working hour to other purposes and it generates additional income as well.

Following points should be considered for sustainable utilization of Japan made more durable farm machinery and spare parts in Bangladesh:

- i. Government of Bangladesh should provide subsidies to purchase/import Japan made machinery and spare parts in Bangladesh
- ii. Government of Bangladesh should eliminate taxes to import Japan made machinery and spare parts
- iii. Without test and standardize certification, no machinery should be used in the field of Bangladesh
- iv. Farm machinery marketing companies should provide after sale service for a significant period for sustainable utilization of farm machinery
- v. Government of Japan should focus farm machinery and spare parts market in Bangladesh
- vi. Government of Bangladesh should provide suitable business environment for Japanese farm machinery industries.

Publication of the Results of Research Project:

<p>Verbal Presentation (Date, Venue, Name of Conference, Title of Presentation, Presenter, etc.) July, 5<sup>th</sup>, 2016, Research Progress presentation, Department of Farm Power and Machinery, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh. <i>Role of Japan in Agricultural Mechanization of Bangladesh</i> Md. Rostom Ali</p>
<p>Thesis (Name of Journal and its Date, Title and Author of Thesis, etc.) N/A</p>
<p>Book (Publisher and Date of the Book, Title and Author of the Book, etc.) N/A</p>