Status Agricultural Mechanization in Bangladesh

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Bangladesh is predominately an agricultural country. Farm mechanization for crop production has become an important issue for agricultural production in the country. To feed her 150 million people from 8.2 million hectares of cultivable land is difficult. Every year almost 0.20 million people are adding to the total population whereas the estimated annual reduction of agricultural land is about 0.08 million hectares due to constructions of houses, offices, roads, mills, factories etc. The country's food production has increased from 11.0 million tons in 1971 to about 30 million tons in 2007. Now, the country is self sufficiency in cereal production. This is due to mechanized tillage and irrigation development and also partial mechanization in other agricultural operations as well as development in other crop production sectors. But to meet up the food requirements of the ever growing population of the country in 2015, an additional 5 million tons of food grain need to be produced from the continuously decreasing agricultural lands. To increase food production and cropping intensity, the most important task will be the faster development of agricultural mechanization and other crop production sectors. Replacing the traditional inefficient agricultural tools, efficient mechanized cultivation must be introduced and extended. The government has already given due importance to agricultural mechanization in the National Agricultural Policy. In the Policy it is included that "The Government will encourage production and manufacturing of agricultural machinery adaptive to our socio-economic context. Manufacturing workshops and industries engaged in agricultural mechanization activities will be provided with appropriate support." Over the past two decades, the use of farm machinery has increased rapidly. Now, irrigation is almost mechanized by using more than 1.5 million diesel and electric driven pumps. The cultivable land under irrigation is about 61 percent. The next operation that has been mechanized is the tillage operation mainly done by power tiller (two wheel tractor). Now, use of tractor is increasing day by day and about 80 percent of the land preparation is done by power tillers and tractors. The next operation that is being rapidly mechanized is threshing. Power operated multicrop threshers and shellers are widely using by the farmers for threshing paddy, wheat and maize. Shelling of maize is accomplished almost 100% by power and hand maize shellers and those of paddy

and wheat are over 80% by both power and manual threshers. At present, the most important operation to be mechanized is the harvesting of paddy and wheat. Due to lack of timely harvesting of paddy and wheat, a considerable amount of food grain is lost every year in the country. Power required for crop production operations are always shortage. In 1960, farm power availability was only 0.24 kW/ha, which has increased to 1.05 kW/ha in 2006. Present Government has realize the shortage of farm power and has undertaken some project to mechanize different crop production operations like tillage, seeding transplanting, fertilizing, weeding, herbicide spraying, harvesting and threshing. Government will subsidize 25 to 60 percent price to the farmers to purchase different farm machinery to perform the above mentioned operation in time. It is expected that the introduction of farm machinery through project will enhance agricultural mechanization program in Bangladesh.

Table: Present Status of Farm Machinery used in Crop Production

Farm machinery	
Name of Machines	**Quantity**
Power tiller	3,50,000
Tractor	40,000
Seeder	2,000
Weeder	2,00,000
Fertilizer applicator	8,500
Sprayer	12,50,000
Reaper	50
Combine harvester	100
Power thresher	2,00,000
Maize sheller	2,000
Winnower	200
Irrigation machinery	
Name of Machine	**Quantity**
Low lift pump	1,40,000
Deep tube well	31,300
Shallow tube well	13,05,000

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