Agricultural machinery: Where is Bangladesh heading?

SHYKH SERAJ

The whole world is saying that the corona situation will paralyze all economic sectors for long. At such a stage, turning back to the ancient profession of agriculture seems to be a ray of hope. The same happened when we saw the green revolution. It is indeed true that agricultural mechanization is changing the face of farming across the world. Let's look at Bangladesh in this aspect. If you cultivate one bigha (33 decimals) of land using plough, it will cost Tk 2,000 (23.59 USD). The cost with a power-tiller is Tk 1,500 (17.70 USD). If you do it with a tractor, it will cost you Tk 600 (7.08 USD). In case of harvesting paddy, it costs Tk 2,000 on one bigha of land. It costs Tk 500 (5.90 USD) if the harvest is done with combine harvester. In planting the paddies, it takes Tk 2,200 (25.95 USD) on one bigha. It costs about Tk 500 to transplant and saves time as well.

In all cases, the traditional method involves a lot of money and time. Nevertheless, in the modern mechanical system, the cost comes down to somewhere half to somewhere a quarter. I would like to highlight another issue on the aspect of agricultural mechanization. I have been to Japan several times. From the grassroots farmers to the policy-makers of the government, everything is in order. According to a survey in 2015, the average age of those involved in agriculture in Japan is 67 years. This average age is increasing day by day. Seventy percent of farmers in Japan are over 65 years of age. Therefore, the government is making it easier for elderly farmers to work through agricultural mechanization. On the other hand, the government thinks that the youth will be interested in mechanized agriculture. A few months ago, at the International Agricultural Machinery Exhibition in Qingdao, China, the matter was discussed with Japanese agricultural machinery researcher and journalist Yoshisuke Kisida. He said that in the last financial year, the largest budget in Japan's history was announced. The amount of the budget was 943.70 billion USD. For the first time, Japan's budget exceeded 100 trillion Yen (930 Billion USD). The budget for agriculture was increased by 5.6 percent. Japan increased its investment in agriculture with a specific goal. They want to attract the younger generation to agriculture. For this reason, they emphasize the mechanization of agriculture in their budget with organic farming and GAP (Good Agricultural Practice) certified agriculture.

The writer talks with an official of LOVOL, largest agro-machinery manufacturer in China, about the advanced fertilizer and pesticide applying machinery. The photo was taken at Weifang city in China recently. | PHOTO: **HRIDOYE MATI O MANUSH**

Shykh Seraj is Bangladesh's pioneer development journalist. He received country's two highest civilian honours, Swadhinata Puroshkar and Ekushey Padak, respectively. He is a BIDS, Ashoka and Bangla Academy Fellow. He also received highest award for agricultural journalism from the United Nations, FAO A.H. Boerma Award, Gusi Peace Prize (Philippines) and many other prestigious accolades at home and abroad. At Channel i, he's the Founder Director and Head of News. He's also Director and Host of Channel i's popular agro-documentary, Hridoye Mati O Manush.

In case of Bangladesh, a study in 2016 shows that the average age of a farmer in Bangladesh is 48 years. However, in 1978, the average age of the farmers engaged in agriculture was 35 years. Participation of the youth in the agriculture of Bangladesh is decreasing. However, when older people's physical capacity is reduced, they cannot play a successful role in agriculture. This means, increasing the participation of the youth in agriculture is just as important as increasing the mechanization of agriculture on a large scale.

Amid the COVID-19 outbreak, the urgency of raising Boro paddy at home made it clear how much mechanization of agriculture is needed today. The government has set up about 1,300 combine harvesters and 934 reapers through a subsidy of Tk 200 crore (23.5 million USD) to facilitate rice harvesting across the country. The government took the initiative to deliver various agricultural equipment, including 22 rice trans-planters to the farmers. Protecting the crops of Haor during this difficult time was a big challenge. At this time, 294 combine harvesters and 406 reapers have been used to harvest paddy in Haor region. Of these, farmers bought 128 new combine harvesters and 23 reapers with 70 percent government subsidy. It is easy to understand that without this emergency mechanization service, the situation couldn't have been resolved. When there is a new urge to increase agricultural production by making maximum use of land, then in front of us, the mechanization of agriculture has taken place as the most important factor.

If we do not give farmers the right tools and technology now, we will not be able to reach the desired success in agriculture. When the use of hoe in agriculture started in the world, people found the science behind the work. This mechanism has evolved and improved over the years. More than a hundred years ago, Rabindranath Tagore thought of the first ploughing machine. He brought such a machine to his ancestral Zamindari of Patisar in Naogaon district. In the case of agricultural machinery, Netrakona farmer Abdul Hai, or the late Kanu Mistri of Mymensingh have dedicated their lives in making sustainable and affordable agricultural machinery. I have seen all kinds of changes in the agricultural machinery sector while working in the field. Once upon a time, our country's agricultural workers used to get scared when they heard about agricultural machinery. They thought the machine would come and take away their work. Now an agricultural machine is the safe employment of a young man.

The picture of agricultural mechanization in Bangladesh is 95 percent in land cultivation, 95 percent in irrigation, 1.5 percent in harvest, 95 percent in paddy threshing, and less than 0.5 percent in planting. If the farmers are made efficient through the necessary training, agricultural mechanization will be more productive for us. Bangladesh Agricultural University invented the modern machine for drying rice. The machine made in a local workshop can dry 500 kg of paddy, keeping 12 to 14 percent moisture in just four to five hours. This instrument will come in handy to the farmer in Boro or Aus season. The reality is that the process of mechanization of agriculture in our country is quite slow. The government has taken an initiative to hand over 56,000 agricultural equipment to the farmers through a project worth Tk 3,198 crore (31.98 Billion USD). Through the project, farmers will be able to purchase agricultural tools in the Haor area at 70 percent subsidy and 50 to 60 percent subsidy in other areas.

Fisheries, dairy farms, and poultry industries have also undergone diverse mechanization worldwide. Much more production has been ensured in these sectors due to mechanization.

I talked to Planning Minister Abdul Mannan about why we are avoiding the issue of mechanization in the sub-sector. He said any initiative for agriculture would be given priority. The government has plans to mechanize not only crop agriculture but also other sub-sectors of agriculture. About 80 percent of the agricultural machinery used in our country comes from China. For several years now, I have been attending one of the largest agricultural machinery exhibitions in the world held in China. The last fair was held in Qingdao from October 30 to November 1. Seeing the excellence of machinery there, it is understood that the whole world is constantly preparing for agriculture and food production. China is now the world's leading manufacturer and trader of agricultural machinery. They are also advancing very fast in the export of agricultural machinery and hold the first position. The United States is in second place followed by Germany in third. Then there are Japan, The Netherlands, South Korea, France, Hong Kong, England, and Italy.

According to an estimate of Bangladesh Agricultural University, the market for agricultural machinery in our country last year was USD 1.2 billion. However, the size of this market is increasing due to various reasons, including a rapid decline in the rate of agricultural labour and an increase in opportunities for crop production. I talked to Alimul Ehsan Chowdhury, president of Agro Machineries Manufacturers Association and he said there is no tax to import complete agricultural machinery. Nevertheless, they are making or assembling, about 28 types of agricultural machinery. About 40 types of parts are required to make these machines. The situation has improved and the price of the device will be reduced a bit. Besides imports, domestic manufacturers are meeting 20 percent of the demand for agricultural machinery in Bangladesh. The demand for effective agricultural machinery is increasing day by day, including harvesting, planting, processing of crops, packaging, and application of fertilizers in the land. About 20 to 25 companies in the country are involved in importing large scale agricultural machinery while the number of importers of small scale agricultural machinery and small parts are much bigger. ACI Agribusiness is playing a big role in building the agricultural machinery market in Bangladesh. The organization's Managing Director and Chief Executive Officer FH Ansarey said the main problem of mechanization in agriculture is the lack of communication with the farmers. He urged the government to integrate all digital platforms, including the mass media. There are 60 foundries, 2,000 agricultural types of machinery, parts manufacturing factories, and 20,000 machinery repair factories. Domestic companies are meeting 80 percent of the demand for spare parts.

To know what the government is thinking about the mechanization of agriculture, the Minister for Agriculture Abdur Razzaque said the government would be able to ensure 100 percent use of agricultural machinery in the harvest in three years while transplantation will take more time. However, in the mechanization of agriculture, the government will have to patron the local agricultural machinery and equipment manufacturers to be more productive and self-sufficient. Today's world has become technology-dependent and this dependence is further increased in the corona situation. Technology must now be a friend of development. Otherwise, we will not be able to achieve the desired success in the farming sector.

Employees undergo medical check-up because of coronavirus outbreak while entering Rooppur Nuclear Power Plant in Pabna's Ishwardi upazila. | PHOTO: **STAR**

ROOPPUR NUCLEAR POWER PLANT

Rising infections among workers

AHMED HUMAYUN KABIR TOPU, *Pabna*

More and more workers of different sub-contracting firms at Rooppur Nuclear Power Plant in Ishwardi upazila are getting infected with the novel coronavirus.

Upazila Health Officer Dr AFM Asma Khatun said 103 people in the upazila have been diagnosed with the virus till July 6. Of them, around 90 workers were infected with Covid-19 in the last three days. The majority of the workers who tested positive for coronavirus work at Paharpur Cooling Tower Ltd, a sub-contracting firm of the Rooppur project.

The number of Covid-19 patients has increased as over 800 employees of the sub-contracting firms at the plant gave samples to the labs of different government and private institutions for Covid-19 testing in the last few days, said the doctor, adding that the number of infected workers is increasing every day.

Most of the Covid-19 patients are the workers of Paharpur Cooling Tower Ltd, a sub-contracting firm of the plant, said Dr Asma Khatun, adding that the authorities of different sub-contracting firms at Rooppur Nuclear Power Plant have collected samples of several hundred workers and sent those to the lab of a private institution in Dhaka for coronavirus testing but they are yet to get copy of the test reports from the private institution.

ABM Ruhul Kuddus, site officer of Rooppur Nuclear Power Plant, said Paharpur Cooling Tower Ltd is working for construction of basement of the cooling tower under the project. A few workers of the sub-contracting firm tested positive for coronavirus last month and it was then put on lockdown.

There are 22 to 23 sub-contracting firms at the plant, he said.

The novel coronavirus began spreading among people in the area but it is not hampering the entire work of Rooppur Nuclear Power Plant, claimed Dr Shawkat Akbar, project director of the plant.

Construction work of Rooppur Nuclear Power Plant runs under medical monitoring, he said.

Asked about the infected employees, Shawkat said they all were the job seekers who came to work at the sub-contracting firm, not regular workers of the project.

There are around 8,000 local and foreign workers at Rooppur Nuclear Power Plant, he added.

Civil Surgeon Dr Mehedi Iqbal said as of Monday, 584 people in Pabna have been diagnosed with Covid-19. Of them, 110 were infected with the virus in the entire district on July 6.

Eight people have died from Covid-19 while 155 patients recovered from the disease here till the date, said the civil surgeon.

Meanwhile, 12 people have died from coronavirus-like symptoms till now, said sources at different hospitals in the district.

Killing in 'shootout' sparks protest

OUR CORRESPONDENT, *Pabna*

The killing of a youth in a 'shootout' with cops sparked protest in Pabna.

Family members of the victim, Md Tanjib Sheikh, 30, son of Babu Sheikh of village Ramchandrapur in Pabna Sadar upazila, alleged that the police mercilessly beat him, later shot him dead while district police in a press release claimed that Tanjib received bullet injury in a gunfight with cops at Char Shibrampur Beribandh in Pabna town during a raid to recover firearms early Wednesday.

"Tanjib, accused in five criminal cases, was arrested from Library Bazar area on Tuesday night. Taking the arrestee, a police team raided Char Shibrampur Beribandh area at about 12:10am on Wednesday. As his fellows attacked police, the latter returned fire that left Tanjib bullet-hit. He later died at Pabna General Hospital," the press release stated.

Police recovered a pistol, a revolver, eight bullets and five spent cartridges from the spot and four policemen including a sub-inspector were injured in the incident, police claimed.

Tanjib's family members in a press conference held at Pabna Press Club yesterday noon demanded justice for the killing.

"Without investigating police tortured and killed Tanjib and tried to pass it off as a shootout. We want justice after proper judicial investigation," victim's father Babu Sheikh said in the press conference.

Victim's wife Meghna Khatun claimed that he took position against drug peddlers in the village.

Asked about the allegation against police, Pabna Superintendent of Police Md Rafikul Islam said, "We will investigate if the victim's family members submit complaint regarding the incident."

Government of the People's Republic of Bangladesh
Local Government Engineering Department
Office of the Executive Engineer
District: Bhola
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শেখ হাসিনার মূলমন্ত্র

Memo No. 46.02.09.00.000.14.02.2020.1415 Date: 09/07/2020

e-Tender Notice No. 02/2020-21

e-Tender is invited in the National e-GP System Portal (http://www.eprocure.gov.bd) for the procurement of:

Sl No.	Upazila	Package No.	T-ID No.	Name of scheme	Last date of selling	Last date of receiving
				Program for Supporting Rural Bridges (SupRB)		
1.	Charfassion (Sl-1 to 11) Tazumuddin (Sl-12)	SupRB/ Bho/ Maint/19-20/W-78	466948	1. Minor maintenance of 9.9m long RCC Box Culvert on Shashibussion GC-Gajaria GC via Majirhat Road at Chainage 200m 509252003. 2. Minor maintenance of 12.2m long RCC Girder Bridge on Shashibussion GC-Gajaria GC via Majirhat Road at Chainage 7100m 509252003. 3. Minor maintenance of 10.5m long RCC Girder Bridge on Shashibussion GC-Gajaria GC via Majirhat Road at Chainage 9918m 509252003. 4. Minor maintenance of 18.0m long RCC Box Culvert on Shashibussion GC-Gajaria GC via Majirhat Road at Chainage 11490m 509252003. 5. Minor maintenance of 18.0m long RCC Box Culvert on Shashibussion GC-Gajaria GC via Majirhat Road at Chainage 13920m 509252003. 6. Minor maintenance of 16.50m long RCC Girder Bridge on Gazaria GC-Char Manika RHD via Dularhat Anjurhat Road at Chainage 2861m 509252009. 7. Minor maintenance of 12.70m long RCC Box Culvert on Gazaria GC-Char Manika RHD via Dularhat Anjurhat Road at Chainage 9561m 509252009. 8. Minor maintenance of 378.40m long PC Girder Bridge on Gazaria GC-Char Manika RHD via Dularhat Anjurhat Road at Chainage 18250m 509252009. 9. Minor maintenance of 22.60m long RCC Girder Bridge on Gazaria GC-Char Manika RHD via Dularhat Anjurhat Road at Chainage 18400m 509252009. 10. Minor maintenance of 8.80m long RCC Box Culvert on Gazaria GC-Char Manika RHD via Dularhat Anjurhat Road at Chainage 23557m 509252009. 11. Minor maintenance of 16.0m long RCC Girder Bridge on Dularhat GC Abubakarpur Chowmohani Hat - Kalmir More RHD Shashibusion GC via Fakir Hat Road at Chainage 8377m 509252010 under Charfassion Upazila. 12. Minor maintenance of 30.00m long RCC Girder Bridge on Tazumuddin Hospital RHD-Downir GC via Khasher Hat GC & Bangla Bazar Road at Chainage 8800m 509912003 under Tazumuddin Upazila.	28.07.2020 till 17:00pm	29.07.2020 till 12:00pm

This is an online tender where only e-Tender will be accepted in the National e-GP Portal and no offline/hard copies will be accepted. To submit e-Tender, registration in the National e-GP System Portal (http://www.eprocure.gov.bd) is required. The fees for downloading the e-Tender documents from the National e-GP System Portal have to be deposited online through any registers bank branches up to 28/07/2020. Further information and guidelines are available in the National e-GP System Portal and e-GP help desk (helpdesk@eprocure.gov.bd).

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