

# Advanced agro-machinery controls modern farming

SHYKH SERAJ

It's been a privilege to attend China International Agricultural Machinery Exhibition (CIAME) for the third time. This year the exhibition was held at Shandong's Qingdao in China. I have attended the previous two exhibitions in Wuhan. CIAME is a unique event of international agricultural machinery, in fact one of the biggest in the world. Like always, I attended the exhibition to see the most updated agro-technology as well taking a close look at some of the technologies that might be effective for Bangladesh's farming sector.

This year's exhibition was held at Qingdao World Expo City. Agricultural machinery manufacturer, businessmen, distributor, scientist, researcher and journalists from around the world gathered at the event. Key ministers of China, policymakers, public and private high officials also illuminated the event. The China Agricultural Machinery Association (CAMA), China Agricultural Mechanization Association (CAMMA) and China Agricultural Machinery Distribution Association (CAMDA) jointly organized the 70th exhibition of CIAME this year. The exhibition was held on 200 thousand square-foot area where 2100 agro-machinery manufacturer organizations from 60 countries showcased their tools for the future farming. This year's theme for the fair was, 'Mechanization and Modernization of Agriculture in Rural Areas.'

Qingdao has many skyscrapers, modern high-rise buildings for people to live in and the province has the most advanced communication system. In fact the entire China is like



PHOTO: HRIDOYEMATIO MANUSH

Shykh Seraj at China International Agricultural Machinery Exhibition (CIAME) 2019 exhibition where range of modern agro-machinery is showcased.

this. The main river Moshui is flowing through the city. At the west of the city is the Yellow Sea.

Every year, the number of visitors is increasing. It shows how the scenario of agricultural mechanization is changing rapidly. Millions of visitors are coming from all corners of the world. It is a three-day long fair. It is obvious that people are getting more and more interested in agriculture machinery. The expo has machines from large to small ones. I was excited to see a small rice mill. Farmers can thresh paddy and make rice. The price of it around Tk 65,000 (USD 769).

Parts of agricultural machinery is also sold at one corner where Bangladeshi manufacturers visit regularly. They assemble those at home and they are happy to get any part of the machinery they want. It is really wondering to see the amount and variety of agricultural machinery parts in the section. Artificial Intelligence (AI) is in full swing now. It was no wonder to see the AI based agro-technologies at the fair. The attributes of these technologies are that they are pretty intelligent and can save a lot of labour. They would make the work faster and save more time.

However, the question still remains in our part of the world where people are not actually habituated with this. But, the modern farming world like

China believes there would be a time when there would barely any need for physical labour. Some say, people would become lazy in presence of such technologies and machines but some others differ that technology has the pin-point solution to any agricultural need.

I had a chat with a visitor named Leo at the fair.

"Could you tell me how agriculture is moving onward to evolution through use of technology?" I asked Leo.

"It is changing everything. These machines here are cheaper than those of Europe and America," he replied.

"So, what's the future look like?" I asked again.

"Artificial Intelligence and Internet of Things (IoT) will be the rulers of future farming," replied Leo.

It was great to learn that when small farmers can't afford expensive machinery, government comes forward to help them. And those who are rich and big farmers in China, they buy the big machines to put them at work on the field. The small farmers can rent the machines under the assistance of public-private initiative and the farming scenario of China is now being dealt by the youth who are very much accustomed with modern technology.

I have also noticed machinery for

spreading fertilizer on farmlands. The huge tractors attracted me like always. There were also small ones. Many tractors are AI assisted and thus self-run where there is no need for humans for operation. Horsepower is a key factor behind the price of a tractor. I talked with a participant who came at the fair to showcase his tractors. I talked with him about different models.

"What's the horsepower of it?" I asked.

"80," he replied.

"What about this?" I pointed to another one.

"60, but that's for fruit orchard like grapes, apples and other fruits," he replied.

"I also have tractors for rice and wheat," he added.

"What is the price of those that you use in rice and wheat?" I asked.

"USD 5000," he replied.

"Which one is the cheapest?" I asked him again.

"The 30 horsepower is the cheapest which would cost around USD 4300," he replied.

China's young generation are more eager to move into cities than getting into farming, which is of course happening in Bangladesh. They go for corporate jobs and that's why China is facing the labour crisis at the field. In fact, it has become

a global phenomenon. That's why they are adding AI and IoT into their technologies.

It was amazing to witness wheat, peanut and corn harvesters at the fair. They also demonstrated cow milking machines each worth USD 600. The machine has two tanks, each can hold 25 litres of milk at a time from two cows, meaning two tanks would be able to hold up to 50 litres of milk. It is essential for our country where a farmer can use this in his farm as we know our livestock sector is doing pretty well in producing milk and meat. Most importantly, we need such machines for biosafety purposes. And such machines are not that expensive.

At the three-day exhibition this year, 30 high level meeting, seminar and symposium were held. Research articles and reports on challenges and prospects in farming sector were presented at these seminars. These included transportation of heavy agricultural machineries, development of GPS drone operation, upgrade agricultural machinery for vegetables, annual report on China's agricultural technology, technology for producing cash crops, irrigation, manufacturing of highly intelligent machinery, overall technology for raising livestock, tech and machine for producing fish in healthy environment, agricultural

development and extension by mechanization in hilly areas and many other agendas. There was also a meeting with the international media organization Asia Pacific Agro Media Association (APAMA) of which I am one of the founding members. At that meeting, Bangladesh was awarded for its special contribution in mass media to spread the news on CIAME.

Japan, Thailand and Nepal were also awarded for their contribution for the same cause.

China sits at the top of world's 10 best agriculture manufacturers list. According to a research published last year, China is progressing rapidly in exporting agricultural machinery. USA comes second while Germany comes third. After that, Japan, the Netherlands, South Korea, France, Hong Kong, England and Italy are on the list. In Bangladesh, the scenario of farm mechanization is 95 percent in ploughing, 95 percent in irrigation, 1.5 percent in harvest, 95 percent in rice threshing and below 0.5 percent in plantation. More or less, 80 percent of agricultural machineries used in our country is coming from China. According to a report of Bangladesh Agricultural University, the market of farm machines in our country last year was approximately USD 1.2 billion.

A recent research on farm mechanization in SAARC countries states that local manufacturers are meeting the need for 20 percent and the rest dependents on import.

Bangladesh government highly focuses on farm mechanization. They are providing 50 percent subsidy for purchase of farm machinery. They also provide 70 percent subsidy to Haor farmers for the same reason.

Besides, over USD 353 million is allocated for purchasing farm machinery. About 25 organizations are involved in importing large agricultural machinery. The number of importers of small farm machinery or spare parts is even higher. These importers also attended CIAME 2019.

Dear readers, CIAME represents new wonders every year for the farm mechanization sector across the world. I can see the astounding evolution of farm machines. China is carrying out diverse research and development works to expand their dominance not only in Asia but all over the world. This expo showcases those yearlong perseverance of China. It is necessary to come up with convenient ways to import more agricultural machines for our country, considering prospects and facilities. The sooner we will have mechanization in our farming sector, the production will be more. It is the perfect time for Bangladesh to move onward to most advanced farm mechanization.

Shykh Seraj is Bangladesh's pioneer development journalist. He received country's two highest civilian honours, Swadhinata Puroshkar and Ekushey Padak, respectively. He is an 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.

## AFTERMATH OF CYCLONE BULBUL

# Over 100 edu institutions razed in two districts

OUR CORRESPONDENT, Patuakhali

Cyclone Bulbul left 106 structures of educational institutions badly damaged in coastal districts of Patuakhali and Barguna.

Out of the two districts, Patuakhali saw 61 structures collapsed while Barguna a total of 45.

With final examinations just around the corner, guardians, teachers and students are now concerned over resumption of academic activities at the institutions.

In Patuakhali, the institutions affected by Bulbul include 41 madrasas, 18 high schools and two colleges, said Jahangir Hossain, district education officer in Patuakhali.

"We sent a list of damaged structures to the higher authorities, urging necessary steps to repair the structures," he added.

There are 30 madrasas, 12 high schools and 3 colleges that were damaged by Cyclone Bulbul in Barguna, said Sahadat Hossain, district acting education officer in Barguna.

The list has already been sent to the higher authorities and they will hopefully take swift measures to repair the damaged structures of the institutions

for the sake of the students, he added.

Syed Manzurur Rob Murtaza Ahsan, principal of Bamna Faizunnesa Women's College, one of the colleges affected by the tropical storm in Barguna, said academic activities at the college will suffer greatly as an 80-foot-long partial brick building of the college has been destroyed.

Classes of common subjects such as Bangla and English used to be held in the building that could house a large number of students at one time, but now it will be difficult to arrange those classes for all the students in smaller classrooms, added the principal of the college that has 1,457 enrolled students.

Academic activities at ABN High School in Patuakhali's Naldowani village under Dumki upazila are now in jeopardy as the school's only building, made of tin and wood, collapsed when Bulbul lashed out on the country's coastal areas.

AKM Abdus Salam, the school's founder, said a large tree toppled by the storm caused severe damage to the school building, leaving all concerned worried about upcoming examinations and all other activities of the school.



As the water level falls, villagers catch fish with polo, a traditional bamboo-made tool, from Shail Sundar Beel at Kakrajan in Tangail's Sakhipur upazila. The photo taken a few days ago gives a typical picture of many rural areas of the country during the dry season.

PHOTO: COLLECTED



PHOTO: STAR

The decades-old wood structure of ABN High School in Patuakhali's Dumki upazila could not withstand the weight of a large tree toppled by the tropical storm Bulbul.

# Ranga's punishment demanded

OUR CORRESPONDENT, Pirojpur

People from all walks of life at a human chain, formed yesterday at Mathbaria upazila town, demanded exemplary punishment for Mashiur Rahman Ranga's derogatory remarks about anti-autocratic movement martyr Noor Hossain.

Noor Hossain, born in Mathbaria, was killed on November 10, 1987, during a popular movement against the then autocratic regime of HM Ershad.

Jatiya Party Secretary General Mashiur Rahman Ranga made the remarks while addressing a discussion on Sunday.

The human chain, formed under the banner of 'Jago Lakhko Noor Hossain' in front of the Shaheed Miner premises in Mathbaria town, lasted about an hour.

Speakers at the program demanded exemplary punishment for Ranga and revocation of his membership in the parliament as he has offended crores of people in the country by his false and offensive comments on Noor Hossain.

Freedom fighter Mostafa Shah Alam Dulal, Awami League leaders Ariful Haque and Emadul Haque Khan and Noor Hossain's cousin Nurul Islam spoke among others.

# Idols vandalised in Tangail Hindu temple

OUR CORRESPONDENT, Tangail

Unidentified miscreants vandalised five idols in a Kali temple at Silimpur Uttar Senbari village of Kalihati upazila early yesterday.

Protish Chandra Sen, president of the temple committee, said in the morning, they found lock of the iron gate of the temple broken, heads of four idols out of six idols inside the temple cut and also missing head of another one.

Strongly condemning the incident, Govinda Chandra Saha, general secretary of Puja Udjapan Parishad in the upazila, said insecurity was prevailing among the Hindus in the area over the incident.

Terming the incident as part of conspiracy of damaging communal harmony among the Hindu-Muslim people in the area, Govinda urged the administration to take

necessary action against the culprits as such incident would not occur in future.

On the other hand, being informed, local lawmaker Hasan Imam Khan, Md Shahidul Islam, deputy commissioner, Sanjit Kumar Roy, superintendent of police, ASP Rasel Monir, upazila parishad chairman Ansar Ali, upazila nirbahi officer Shamim Ara Nipa and Mayor of Kalihati municipality Ali Akbar Zabbar visited the spot and assured the local Hindus of taking necessary action in this regard.

Contacted, Hasan Al Mamun, officer-in-charge (OC) of Kalihati Police Station, said a case was under process in this regard.

They were investigating the matter, said the OC, adding that action will be taken against those responsible for the incident after investigation.