

Country's first digital livestock management

MA Sabur of Kanchan in Narayanganj brings eight cows under Digi Cow technology

SHYKH SERAJ

In 2015, I was amazed when I visited De Marke, Netherlands. De Marke is a dairy research farm that researches and demonstrates technologies for clean and sustainable dairy farming. The wonderful use of modern technology gave the farm a different look. It seemed like it was not a cow farm, as if I had come to an industrial establishment. It was a reminder that the Internet of Things (IoT) is going to bring revolutionary transformation in the farming sector. This is called smart technology. The definition of smart has changed at present. Smart now means to be connected to the internet, where any information is available. In this century we have entered the smart age. De Marke was also smart one. Everything is controlled smartly there. From feeding cows to collecting milk, everything is regulated using internet.

There is a chip for every cow in the smart farm management. The chip is usually attached to the neck collar or ears. It is a chip that can collect all the physical and surrounding information of the cow. For example, cow's body temperature, blood circulation, chewing practice, breeding period; it gives accurate information about everything. It helps prevent untimely abortion by giving all types of information about maternal physical status of a mother cow. What kind of nutrients a cow needs, how much light and air it needs, and even the time when the cow is ready to milk; a farmer can easily know all from the information that will come to his mobile phone through internet connected to the base station.

In early December 2018, Grameenphone invited me to the launching programme of smart technology in cow farms. I could not attend it because I had a schedule to attend a programme in South Korea. Coincidentally, I got to visit a smart farm in South Korea. In South Korea, it was shivering cold then. The temperature at noon was minus 1. On that day of freezing weather, I reached Kim's dairy farm in Chungnam province situated almost 250 km from Seoul.

It is better not to call Kim's farm a farm. Rather, a dairy industry. Local representatives, livestock department officials and others were present at the farm to welcome us. Please note, large companies and local government provide active support to run such dairy farms in South Korea. Kim's farm is quite big. Compared to that, there were not many labourers. This facility of technol-

ogy is controlling the farm environment, light and air, everything. Weather and environment need to be favourable for the good health of any animal. Especially, in a place like South Korea, where it is too hot and cold, people need to be always updated with such information. In this case, smart technology is very effective, Kim said. "The Korean weather is extreme, so I always have to be aware of the farm's temperature," added Kim. To get good production, the animals have to be provided with nutritious food as well as good environment. Farmers in our country do all these using their indigenous knowledge, which is not as effective as Kim's, but they get the result.

Everything in the farm is controlled from Kim's office, where the main computer and routers are. It's called the base station. Data is always transmitted to the base station from the chip in each cow's collar. A lot like the GPS chip. If the cow does not eat properly or does not behave properly, then the chip will automatically send information to the base station. From there, Kim is getting information on the computer. Wherever Kim is, notifications pop up in his mobile phone.

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*.



Shykh Seraj with MA Sabur at the latter's Digi Cow installation.

PHOTO: HRIDOYE MATI O MANUSH

MA Sabur, businessman of Kanchan in Narayanganj, has brought eight cows from his cattle farm under Digi Cow smart management. Last week, I visited MA Sabur's Masco Dairy Farm. I have already mentioned that agricultural technology means investment in the sector. The big businessmen are investing in this. MA Sabur's son is very fond of agriculture. So, three years ago, he established a 14 bigha (approximately 4.62 acres) dairy farm seeing his son's passion for the smart cattle farm. Big businessmen like MA Sabur are now investing in agriculture. He is doing it more out of love than for any commercial purpose. It has turned out to be a potential investment sector. The agricultural scenario is changing day by day. Eminent businessman MA Sabur's farm also represents its possibilities. Two hundred cows are being raised in seven sheds of this huge farm. Each shed has different varieties of cow. Bulls, pregnant cows, dairy cows and calves have been kept in separate sheds. Here, a digital device has been attached with eight cows. These are now 100 percent under computer control.

Eight devices, called neck tags, are hung on the necks of eight cows. It basically provides information to the computer by analyzing common data from the cow's diet to its behaviour. The device attached to the cow's ears is called smart

tag. It provides information on the reproductive period of the cows and related problems. All information is regulated by a router and, through the computer's special software, notifications are sent to farmers about the cow's overall state. Also, advanced reminders for cow's vaccination or medication are sent to the farmer's mobile. So that the farmer can take steps to solve any problem before any damage can occur.

I talked to Imtiaz Mahbub, product manager, Grameenphone's Smart Agri division, about the technology. He said that 46 percent of the total population of Bangladesh is raising cattle and 20 percent of the population does it for a living. Since 1980, the farmers of the country started breeding cows through crossbreeding or artificial breeding. Identifying hormonal heat periods of the cows is the main obstacle in this method. In a number of cases, there was a loss of around Tk 13,000 every time farmers failed to detect the hormonal heat period of the cows. There is no way to understand or identify health issues of cows or cattle. As a result, the rate of cow mortality in the country is currently 5.6 percent.

Shafiqul Islam is in charge of overall supervision of Masco Dairy Farm. I talked to him as well. He said the cost of making base station is Tk 28,500 and the cost of each tag is Tk 6,500. The total cost

of bringing eight cows of the farm under smart technology is Tk 80,500.

The milking process is not yet covered by this technology. Environmental monitoring technology has not been brought either. But since it has started, we will soon see all the smart technologies of the developed world coming here.

Dear readers, future farming scenario means smart agriculture. IoT means Internet of Things based on artificial intelligence. There is no doubt that artificial intelligence will keep on adding new dimensions to agriculture, which will provide many new information. The developed world is now using modern technology in livestock and dairy farms. Farmers of Europe, USA and Africa are getting benefitted by using smart technologies. South Korea is working with the goal of bringing 10 percent of the livestock farms under the use of smart technology by 2022. Keeping in mind the benefits, farmers can use this smart technology. Proper public and private support to ensure small and medium scale farmers is needed above everything else. And one thing is well proven. When technology is used more in numbers, then the cost comes down and becomes relatively low. And we have to agree that there is no alternative to technology for safe, secure and high production.

16y-yr-old gang-raped in Habiganj

Locals catch three youths, hand over to police

OUR CORRESPONDENT, Moulvibazar

A 16-year-old girl was gang-raped in Habiganj's Madhabpur upazila on Tuesday.

A teenage boy and two youths were detained in this connection, said Chandan Kumar Chakrabarty, officer-in-charge of Madhabpur Police Station.

The detainees are Khurshed Ali, 16, of Belapur village, Monir Hosain, 20, of Baniapara village, and Abdal Mia, 20, of Bohora village in the upazila.

Quoting locals, the OC said the victim lives at her grandfather's house.

She fell in love with Khurshed a few days ago. Khurshed visited the victim's house four days ago and left his sunglasses there.

On Tuesday he phoned the girl and asked her to come to an abandoned bridge area with the sunglasses. At that time, the trio raped the victim and threatened her with dire consequence if she disclosed the matter to anyone.

After returning home in the evening, the condition of the girl worsened due to excessive bleeding. She was sent to Habiganj Sadar Hospital.

Rajib Chowdhury, a physician at the hospital, said the victim became very sick due to excessive bleeding.

As the news spread, neighbours caught the three early yesterday and handed them over to police after giving them a good beating. The arrestees were later produced before a court that sent them to jail.

The victim's father filed a case, accusing the trio, said the police official.

UP chairman held as VGF rice misappropriated

OUR CORRESPONDENT, Barishal

Anti-Corruption Commission (ACC) yesterday arrested the chairman of Chadpura Union Parishad in Barishal Sadar upazila on charge of misappropriating 5.20 tonnes of rice allocated for special Vulnerable Group Feeding (VGF) in 2016.

The accused, Amanulla Aman was arrested from Chowmatha of the city, said Abul Hasem Kazi, assistant director of ACC's Barishal district office.

A case was filed against him with Bandor Police Station on November 27 in 2018. He had been in hiding since then. He was produced before the Chief Metropolitan Magistrate's Court that sent him to jail.

EMBEZZLING SONALI BANK MONEY 8 former staff jailed

OUR CORRESPONDENT, Faridpur

A Faridpur court yesterday sentenced eight former officials of Sonali Bank to different terms in jail for misappropriating over Tk 47.2 lakh from the bank's main branch in Gopalganj.

The convicts are, Shawkat Hossain, the then chief cashier of the branch, and seven other cashiers—Amol Chandra Biswas, HM Siddiqur Rahman, Monjurul Haque, Mosharrif Hossain Molla, Golam Mohammad Munshi, Dilip Kumar Mondal and Yusuf Ali Khandakar, Faridpur Anti-Corruption Commission (ACC) Public Prosecutor (PP) Mujibur Rahman said.

Faridpur Special Judge's Court Judge Mohammad Motiur Rahman sentenced Shawkat to life imprisonment and 17 years under two separate sections and seven others to 18 years each, PP Mujibur said, adding that the court delivered the verdict in presence of seven of the eight accused in the case while Shawkat is in hiding.

The court also fined convict Shawkat Tk 48,26,28.38, in default, he is to suffer 14 months more in jail, and seven others Tk 90,000 each, in default, they are to suffer one year more jail, the PP added.

According to the case statement, Shawkat in cooperation with nine other cashiers of the branch embezzled Tk 47,26,28.38 in 2003.

Manager of the branch later filed a case with Gopalganj Sadar Police Station on December 8, 2003 against 10 people.

Two other accused, Parimol Biswas and Khobir Uddin died while the then Faridpur ACC Deputy Assistant Director Abul Bashar conducted the investigation of the case.



Swapan and his family members hold a mat depicting the picture of Bangabandhu Sheikh Mujibur Rahman making a gesture during his historic March 7 speech in 1971. Above right, the passionate handicraft artiste gives finishing touches to a bag woven with pati bet (a variety of cane). Below right, shitol pati (cool mat) with decorative patterns, also made by the artiste.

PHOTO: STAR

Swapan's enterprise to keep age-old art alive

MIRZA SHAKIL, Tangail

A craftsman in the district, specialising in weaving shitol patis (mats) with pati bet (a variety of cane), is making different items with the natural fibre for bringing a positive change in the traditional industry and keeping the age-old form of art alive.

Swapan Chandra De, 40, a craftsman of Silimpur village in Kalihati upazila, is trying to revive the industry that is faltering due to shrinking demand for the mats and increasing production costs, which are forcing many traditional craftsmen to leave the profession.

"Although the mats made with the natural fibre are environment-friendly, colourful and comfortable, the demand for those has gone down recently due to an influx of mats made of plastic and inferior reeds, which are much cheaper," Swapan said.

The items produced with fibre are not only good looking but also durable as well as easy to carry, moreover, those are not damaged by water, he said.

Swapan produces different types of beautiful bags, sandals, hats, belts, photo frames, table mats, pen stands, etc. Prices of the products range from Tk 15 to Tk 600.

"The products will be of better quality and more durable if the production cost is increased," he said.

A brigadier general from Shaheed Salahuddin Cantonment in Ghatail first inspired Swapan in 2014 to produce different items with the fibre, and also arranged opportunities for sale of the products through Sena Kalyan Sangstha.

According to craftsmen, about 2,000 families from the Hindu community at Chatipara, Silimpur, Khilda, Awlia, Dhanail, Pichutia, Kokdohora, Patitapara and Mohirjora villages in Kalihati upazila are engaged in the mat weaving industry.

Around 3,000 families from the same community in Hingnagar village under Delduar upazila are also engaged in the industry.

A variety of cane used for making the items is cultivated on over 1,000 acres of lands at villages in the two upazilas, and most of the villagers are engaged in produc-

tion related activities.

Swapan's father Anil Chandra De said they have been producing mats for seven generations. The 70-year-old craftsman pursues his ancestral profession that has been in the village for around 200 years.

"Although it is hard to make a living out of making mats these days, we still hang on to the age-old profession as we do not know any other trade," Anil added.

Swapan's mother Promila Rani De, 60, known as the best craftswoman in the village, said she has been weaving the mats since her marriage 40 years ago.

"The financial situation of the craftsmen in the area is very bad. Many have even left the profession to make ends meet, while others are contemplating to do the same," she said.

Prithish Chandra De, a veteran craftsman, said Swapan's enterprise is a ray of hope for the craftsmen in the area.

However, the government, businessmen and exporters will have to come forward with ideas and assistance for reviving the industry, he added.



The coastguard seizes 500 kg of jatka (hilsa less than ten inches long) from two passenger launches on the Meghna river at Chandpur on Tuesday. The fish were later given to a few orphanages in the district.

PHOTO: STAR