## Grafting method increases tomato yields

A few days back, on a sunny November morning, I went to Tingaon village in Habiganj's Madhabpur upazila. The rural areas of the country have changed a lot, while some are in process. For example, farmers used to come to the field in early morning as farm work usually starts in the morning. But now farmers arrive the field around 10:00am. Agricultural technology has made their life more comfortable and easy. However, it is a popular belief that there are plenty of fallow lands in Sylhet region. In other words, the people of this area are perhaps less attracted to farming. Nowadays, farming is going through a change there with increasing investment. Moreover, young farmers are becoming more interested in farming sector.

Today, we'll see how tomatoes can transform a village. Bodu Mia, a farm entrepreneur, was also with me during my visit to Tingaon village. I know Bodu for quite a long time. This man has a deep affection for farming and farmers. As I walked along the village road from the upazila headquarters, I saw fields with bamboo poles on both sides. Reaching a little closer, I saw tomatoes being cultivated here. Bamboo poles have been used to facilitate vertical farming of tomatoes. This method of farming seems to have changed the look of the farm. Those who regularly watch 'Hridoye Mati O Manush' (Soil & People in Heart) may remember that I have presented detailed documentaries on tomato farming and marketing in Sylhet region several times. Farmers were happy to see the bumper yield of tomatoes when its production increased. When they went to the market, they faced the inevitable crisis: lots of tomatoes without any price at all. I can still remember a vivid event where many farmers wasted their tomatoes out of fury as they could not sell per maund (40 kgs) of tomatoes at even Tk 20 (USD 0.24). One morning I came across another event with

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.



Farmer Bodu Mia at his tomato farm located at Tingaon village in Habiganj's Madhabpur upazila.

HRIDOYE MATI O MANUSH

a difficult scene at Nimsa Bazaar in Cumilla. When summer tomato cultivation started in the Barind region of Rajshahi, there was a rush to ripen tomatoes using hormones across the country. It affected the markets all around the nation. I remember a few years back, I saw the administration's strict drive in Shariatpur. I have seen farmers being severely affected. But they know how to turn around. Farmers are now selling these tomatoes directly from the field at Tk 70 per KG (USD 0.83). They have wholeheartedly welcomed technology to their farming method. By adding it to their cultivation, farmers now expect to make more

When I went to the field of Dulal Mia, a farmer from Tingaon village, the scorching heat of the sun was right on our heads. The silver mulching paper on the field was so shiny. I came to learn that tomatoes are being

grafting tomato seedlings from the base of the Tit begun plant (Turkey berry). As a result, tomatoes are becoming more sustainable on one hand, and on the other, farmers are getting higher yields. In the last few years, the grafting method has changed the fortunes of hundreds of farmers in the area. According to the Department of Agriculture, tomatoes are grown on 4,500 bighas (1803 acre) of land in Habiganj, of which Madhabpur alone has 1,875 bighas (751 acre). Of these, the grafting method is being used in about 200 bighas (80 acre). Let me tell you one thing, the grafting method of vegetable cultivation started in the 1920s. It is very common, especially in the agricultural scenario in Japan and Korea, 71 percent and 54 percent respectively. Grafting methods became very popular in tomato cultivation in France and Italy in the 2000s.

produced here all year round. Farmers are I remember going to the then Institute of Post Graduate Studies in Agriculture (IPSA) in Gazipur in the late 80s, now established as Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU), to cover their research on tomato grafting with Tit begun. Since both belong to the Solanaceae family, the grafting goes well in between them. Dulal, the farmer from Tingaon village, says grafted plants face fewer diseases, gives a high yield. Earlier, an ordinary tomato plant where 5 to 10 kg of tomatoes could be harvested now that very plant gives 25 kgs of tomatoes. Grafted tomato plants are water tolerant and do not rot even during heavy rainfall. Due to huge demand for seedlings, farmer Dulal has adopted the grafting technique himself.

> Farmers are practising grafting method, keeping in mind the year-round demand for tomatoes. Earlier, tomato seedlings

were usually planted in the Bangla month of Agrahayan and Poush. Chaitra was the production month. Now farmer prepares seedlings with the target of getting the vegetable for nine months, apart from the regular season of three months in a year. And in this method, you are getting double or more yield. Talking to another farmer Belal Hossain, I came to know that his life has changed by cultivating tomatoes. This would not have been possible without technology. Talking to another tomato farmer Syed Mia, I learned that he earns around Tk 3 lakh (USD 3540) a year from tomatoes. Previously, he used to earn only Tk 60,000 (USD 708) in a year. Sometimes the losses have to be counted. Yusuf Ali was in a state of complete deprivation. He got the mantra to become successful from tomato cultivation. Now he is doing much better than before. All the farmers say that one farmer has made a great contribution to the diversification and development of agriculture in this whole area. He is Bodu, a farmer and also a great organizer. He is a hundred percent passionate farmer. Bodu has a great inclination towards new crops and technology. He has played the role of an extension worker in motivating tomato growers through local grafting technology. The humble Bodu said, he learnt about organic farming from one of my Krishi Budget Krishoker Budget (Farmers' Voices in Budget) open-field sessions in Sylhet. Since then, he devoted himself to the field of organic farming. He understands that sustainable agriculture means organic farming. Fortunately, the farmers here are not only focused on crop production and profit, but they also have in mind the idea of producing

Tomatoes have changed the economy of Tingaon village and the days of the farmers. Farmers can buy five trucks of bricks by selling one truck of tomatoes today. I saw farmers no more live in the mud-house, they now have concrete buildings. This is real prosperity, this is development. As I said before, our farmers are now much more interested and aware in using technology, understanding the benefits of commercial farming and this is how they are moving onward to higher yields. Apart from Habiganj, this grafting technology of tomato has also spread in the surrounding districts. I would humbly request the agricultural research authority of Bangladesh to do indepth research in developing tomato varieties and new technologies. As far as I know, BARI-8 variety of tomato is very popular among the farmers. If the seedlings that the farmer is making by grafting with BARI-8 and Tit begun could be developed by the research authority, then farmers would be able to save both time and extra land for making it. Farmers could benefit by producing other crops on the same land if they get the seedlings. I earnestly hope that agricultural research institutes will look into the matter and soon would be able to provide rain- and disease-resistant new tomato varieties to the farmers.



The prices of TSP, a fertiliser that is widely used by farmers on winter crops, have been rising alarmingly in Lalmonirhat. This photo of a farmer applying TSP on a cauliflower filed was taken recently from Karnapur village in Lalmonirhat Sadar

## TSP fertiliser prices on the rise in Lalmonirhat

Our Correspondent, Lalmonirhat

Rising prices and scanty supply of triple superphosphate (TSP) fertiliser are worrying farmers in Lalmonirhat.

They said the situation spells trouble for them as they are currently in the mid-season of growing various winter crops including potato, maize and winter vegetables.

They also demanded the authorities increase their monitoring activities at fertiliser markets during the primetime of winter crop cultivation.

Naresh Chandra Barman, a farmer in Kamalabari village of Aditmari upazila, said the TSP is needed to be applied on the crops every day at this stage of the cultivation. But if it is not applied in time due to unavailability or higher prices, quality or yield of the crops might fall.

The authorities, therefore, need to be vigilant for price manipulation at fertiliser markets, he also said.

Acknowledging that there is a supply shortage of TSP, Shamim Ashraf, deputy director of Department of Agricultural Extension (DAE) in Lalmonirhat, said instead of the TSP, the DAE advises farmers to use diammonium phosphate (DAP), which has higher nutrients and is cheaper than the TSP.

The TSP includes only phosphate whereas the DAP includes both phosphate and urea. "But without realising the advantage, the farmers have been in

favour of the TSP," he added. However, farmer Nazrul Islam, from

Karnapur village in Lalmonirhat Sadar upazila, said he prefers TSP to DAP as the former is more effective in controlling diseases and ensuring essential nutrition in winter crops.

Mozammel Haque, another farmer from the same village, said according to the government rate, the TSP is to be sold at Tk 22 per kilogram.

But fertiliser traders have been selling it at Tk 28 to 29 per kg. "Since we have to get TSP [for the crops], we are compelled to buy it at higher prices," he added.

When asked, Ashraful Islam, a fertiliser dealer of Bangladesh Agricultural Development Corporation (BADC), said the supply of TSP has been less than the demand requires and they have been getting it at higher prices from Patenga in Chattogram.

And that is why they have to sell it to farmers at higher prices, he explained.

Mozammel Haque, in-charge of BADC fertiliser depot in Mahendranagar, said each fertiliser dealer has been allotted 6 tonnes of TSP in November and all fertilisers are being sold to farmers at preset prices via 92 dealers in the district.

Contacted, Shamim Ashraf, deputy director of DAE in Lalmonirhat, claimed that their field officers have been working to control fertiliser prices.

Admitting that some dealers might sell TSP at higher prices due to supply shortage, he also said, "I will be sending a letter to the ministry concerned to increase the supply of TSP as soon as possible.

## Addict man kills minor son for money in Dinajpur

Our Correspondent, Dinajpur

A drug addict youth killed his minor son allegedly over a family feud for money in Phulbari upazila of the district yesterday.

Villagers, however, caught culprit Subash Chandra Mohanta, 28, son of Sunil Chandra Mohanta of Barai village, and handed him over to the police.

Anita Mohanta, mother of the 22-month-old victim Babu, said her drug addict husband often used to torture her for money since their marriage two years

Wednesday afternoon, Subas demanded some money from her for

buying drugs. When she refused to give him the money he physically tortured her, she said, adding that her parents were supposed to visit her house yesterday morning to settle the matter.

But around 7:00am, Subash stabbed his son to death with a knife, when she went out for her work and started behaving abnormally, Anita alleged.

Locals rushed to the house, caught Subas from the spot and informed the police.

On information, police went to the spot, recovered the body and sent it to M Abdur Rahim Medical College Hospital for autopsy, Officer in Charge of Phulbari Police Station Fakhrul Islam said.

A case was filed with the police station accusing Subas the same evening, he added.

After the murder a pall of gloom descended the

GD-1889

## Government of the People's Republic of Bangladesh

National Malaria Elimination Program Disease Control Division DGHS, Mohakhali, Dhaka-1212

**Standard Format for Advertising Expressions of Interest (EOI) for Services** 

1	Ministry/Division			Ministry of Health & Family Affairs.				
2	Agency			Directorate General of Health Services.				
3	Procuring entity name			Director, Disease Control & Line Director (CDC), Directorate				
				General of Health Services, Mohakhali, Dhaka-1212.				
4	Title of service			Lot-1 Round Table Discussion & Supplementary Publication				
					,	2 Round Table Discussion a	ınd	
				Live Recorded Telecast in Electronic Media.				
5		entity district	_	Dhaka.				
6		n of interest for selection of	-	Consulting Firm.				
7	EOI Ref No.			DGHS/DC/Mal/Admin/2020.4370				
8	Date			November 25, 2020.				
KEY INFORMATION								
9		ent method	(	Quality and Cost Based Selection (QCBS).				
	IDING INFO							
10	Budget and source of funds			Development Budget.				
11		ent partner (if applicable)	(	Global Fund.				
		NFORMATION						
12	Project/programme code (if applicable)							
	<del></del>	ct/programme name (if applicable)			National Malaria Elimination Program.			
13	EOI closing date and time			November 09, 2020 Time: 5:00pm				
14		ng date and time		November 10, 2020 Time: 12:00 Noon				
		FOR APPLICANT						
15				s per ToR.				
16 Experience, resources & delivery The interested applicants adve					· ·			
	capacity re	equired		nall have to submit the following documents with their oplication.				
47	011 1.1	" " " " " " " " " " " " " " " " " " " "	app					
17		ails (if applicable)	<b></b>	at an annua and				
18		n with foreign firms is		t encour		(		
40	Ref No.	Phasing of services	_	cation	Indicative start da		n	
19	Lot-1	1		haka		Dec-20		
20	Lot-2		0	)haka		Dec-20		
		IT ENTITY DETAILS		D( D	- Ob - b - il - F d i			
21	Name of the	e of the official inviting EOI			Prof. Dr. Shahnila Ferdousi.			
22	-			Director, DC & Line Director, CDC, DGHS.				
23	Address of the official inviting EOI			National Malaria Elimination & ATD Control Program				
				Office, House # 240, Lane-17, New DOHS, Mohakhali,				
24	Contact	details of the 2000	711	Dhaka.				
24	Contact official inv	details of the 29889 iting EOI	0/44	mpac_o	dghs@yahoo.com.			
1								

26/11/2020 Prof. Dr. Shahnila Ferdousi

Director, DC & Line Director, CDC DGHS, Mohakhali, Dhaka-1212 Tel: 9880948