

## PAY-AS-YOU-GO IRRIGATION AIMS TO CUT WATER USE IN BANGLADESH

**FENI, Bangladesh:** Elias Ali has been picking weeds and waste for hours from his paddy field in southeastern Bangladesh, preparing it for irrigation. Every week, he walks half a kilometer to collect the water he needs from private pumps.

Ali and fellow farmers currently pay 4,000 taka (\$51) each per year to middlemen in exchange for irrigation on their one-acre plots in Feni district. But water frequently seeps out of the earthen canals that supply the pumps, wasting significant amounts, Ali said.

"The waste increases our costs, as pump owners also charge us for water that's leaked," he told the Thomson Reuters Foundation. "When we experience a loss in crop production due to floods or droughts, we can no longer afford the high price of irrigation, which fuels tension between pump owners and farmers," he said.

Water is a precious commodity in Bangladesh - abundant during the monsoon from June to October, but scarce in the dry season from November to March. Abul Hye Bhuiyan, a farmer and president of the Pathannagar Water Management Group, said many farmers simply cannot cultivate crops in the dry season due to the high cost of irrigation.

Sometimes they have no choice but to sell stored crops to pay for water, Ali said. But Bhuiyan and Ali are hopeful. The Bangladesh government plans to install water meters across the Muhuri Project, a 60,258-hectare irrigation area supplied by the Feni, Muhuri and Milenia rivers, to reflect farmers' water costs more accurately.

The scheme is part of the Irrigation Management Improvement Project, a government-led initiative to modernize irrigation systems, including the Muhuri Project, from 2015 to 2019. The scheme has financial support from the Asian Development Bank and the Bangladesh Water Development Board.

About 800 water meters will be installed, as well as new water pumps, with water supplied through underground pipelines. Farmers will receive rechargeable smart cards they can use to pay for their water use, instead of paying a fixed cost to middlemen.

Humayyun Kabir, extension overseer at the Water Development Board, said around 2,000 hectares (4,942 acres) of land would be brought under the irrigation scheme initially, with some 80 pumps due to be installed by 2017. He expects middlemen to gradually remove their own pumps. The board estimates the renovation will be finished by 2019, when all 60,238 hectares will be equipped with meters and pumps.

### Better value for money

Before launching the initiative, the board surveyed about 800 local farmers who own land in the project area. They expressed enthusiasm at the meter idea, said Md Kohinoor Alam, executive engineer at the board.

Bangladesh Water Resources Minister Anisul Islam Mahmud said imposing a price on water would encourage farmers to become more economical in using it. Bhuiyan said paying for the exact amount of water they use "will encourage farmers to think about how they could produce crops using less water".

That is particularly important in a country where water scarcity increases every dry season, explained Abu Taher Khondoker, former director general of the country's Water Resources Planning Organization.

The Water Development Board's Kabir estimated that once the meter system is operational, farmers will pay only 2,000-2,500 taka per acre of land for irrigation, instead of 4,000 now. "They will no longer be at the mercy of middlemen unfairly increasing costs," he added. The board expects the new scheme to benefit about 80,000 families. All farmers owning land in the Muhuri Project will be enrolled automatically, though they can opt out. Minister Mahmud said that if the water meter scheme proved viable, it would be replicated elsewhere, such as in the Ganges-Kobadak Irrigation and Teesta Barrage projects. —Reuters



**KANDAHAR:** Afghan refugee families board a truck as they return to Afghanistan through the Pakistan border crossing at Spin Boldak. —AFP

## CLASHES AS TALEBAN EDGES CLOSER TO HELMAND CAPITAL FEARS THE CITY COULD FALL

**KANDAHAR:** Fighting raged yesterday in Helmand after Afghanistan rushed military reinforcements to beat back Taliban insurgents advancing on the besieged capital of the southern poppy-growing province, as officials downplayed fears the city could fall. Afghan forces fought back insurgents after they stormed Nawa district, just south of Lashkar Gah city, late Wednesday, raising alarm that the provincial capital was at risk.

But US and Afghan officials insist that they will not allow another urban centre to be captured, after the Taliban briefly overran northern Kunduz city last September in their biggest victory in 15 years of war. "The security situation in Lashkar Gah is under our control," said defense ministry spokesman Dawlat Waziri. "We have retaken control of Nawa. Fighting is still going on in the outskirts but we are making progress with clearance operations," he said, adding that dozens of Taliban were killed in the fight. Fierce battles in recent days across Helmand, seen as the focal point of the insurgency, has sent thousands of people fleeing to Lashkar Gah, sparking a humanitarian crisis as officials report food and water short-

ages. The United States has stepped up air strikes supporting Afghan forces on the ground, highlighting the intensity of the battle in Helmand. The turmoil convulsing the long-contested province, blighted by a huge opium harvest that helps fund the insurgency, underscores a rapidly unravelling security situation in Afghanistan.

### 'We will die of hunger'

Around 30,000 people have been displaced in Helmand in recent weeks, local officials said, with many of those fleeing to Lashkar Gah forced to abandon their lentil, maize and cotton crops during the lucrative harvest season. "We left everything behind in Nawa-our house, our grape and maize harvests. We fled with 15 members of my family to Lashkar Gah, fearing for our lives," Mohammad Ali, 40, told AFP in a camp in the provincial capital. "For the last three days we have been surviving on bread and water. We will die of hunger." The residents of Lashkar Gah said the city was practically besieged, with roads from neighboring districts heavily mined by the insurgents.

Doctors Without Borders (MSF) said it had downscaled its team in Lashkar

Gah, with some non-medical staff relocated from the city. "In Helmand, #Afghanistan, we're still running Boost hospital... as fighting nears," the international medical charity tweeted on Wednesday. "We've shared coordinates of our 300 bed hospital to approaching warring parties in Helmand." The Taliban effectively control or contest 10 of the 14 districts in Helmand, the deadliest province for British and US forces in Afghanistan over the past decade.

NATO officially ended its combat mission in December 2014, but US forces were granted greater powers in June to strike at the insurgents as President Barack Obama vowed a more aggressive campaign. Washington has deployed several hundred troops in Helmand in recent months.

Northern Kunduz was the first city to fall to the insurgents last September, in a stinging blow to Afghan forces who have struggled to rein in the Taliban since the NATO combat mission ended. The fighting in Helmand comes as Afghan troops are stretched on multiple fronts across Afghanistan-including eastern Nangarhar province where the Islamic State group is making inroads. — AFP