# BUSINESS

### Solar irrigation saves cost of farmers

BIDS study finds

STAR BUSINESS REPORT

Farmers can save up to 28 percent of their costs for each bigha of land if they use solar-powered pumps in place of diesel-run ones to irrigate croplands, a study finds.

The conventional irrigation system needs Tk 4,129 for each bigha of boro paddy field, which comes down to Tk 2,946 if solar pumps are used, according to a study of the Bangladesh Institute of Development Studies (BIDS)

The study paper was unveiled yesterday at the two-day BIDS Research Almanac 2019, organised by the research organisation at the Lakeshore Hotel to present findings of various researches.

The solar irrigation system also costs less than the diesel-run method during aman season, according to the study titled "Does renewable energy increase farmers' well-being? Evidence from solar irrigation interventions in Bangladesh". Solar pumps can cover wider areas, said

Monzur Hossain, senior research fellow of BIDS and co-author of the study.

He said higher number of farmers

opined that solar pumps brought them more water than diesel pumps did. Solar irrigation also helps reduce carbon

emission, he said. However, BIDS thinks the solar irrigation system needs to be made more

cost effective. Researchers surveyed 1,000 farm

households from five divisions mainly from southwest division Khulna and northwest division Rangpur.

Of the surveyed, half of the farm families irrigate their fields through solar pumps. Azreen Karim, BIDS research fellow and

co-author of the study, said adoption of solar irrigation pumps is largely driven by sponsor initiatives, village meetings and peer effects.

Sharmind Neelormi, associate professor of Jahangirnagar University, said availability of land to install solar irrigation pumps is

Two more papers were also presented at the session, chaired by AK Enamul Haque, professor of the Department of Economics at East West University.



There is a scarcity of land for installing solar irrigation pumps.

### Future of finance hinges on understanding of data



Mamun Rashid

It is being discussed in the corridors that the accounting or finance profession is going to be most impacted in the era of artificial intelligence and machine learning. We also know that the global job markets are likely to take a 360 degree shift with the advent of data driven economy.

Some opine finance professions will change, at the same time will reinvent itself with the help of technology driven solutions building

along with ACCA came up with an interesting report titled "Finance: a journey to the future?" This report explores the world of finance in the future, given the technological changes happening today. It further shows how people who intend to embark and be successful in their journey towards change will be impacted.

Creating the space to think more broadly about the needs of the business and financial operation in the future is essential. Skills, process, culture, technology and data are the five dimensions identified in this report underlying the evolution of finance.

The report was prepared with the aid of workshops, interviews and

by ACCA and PwC in a range of industries and geographies such as the United Kingdom, Republic of Ireland, China and more with senior professionals and those who have close involvement in developing the finance function strategy of tomorrow.

Six hypotheses were created from the 1,100 responses received in the study. These hypotheses represent the collective opinions that were expressed in initial conversations and were used to question and authenticate the likely comprehension of these future visions.

The outcome of the study shows various upcoming changes in the world of finance. Firstly, it was found that the impact of technological progress is different in China and Western European economies. For instance, China emphases on aggregation of enterprises around technology rather than directly by disruptive entrants into the market.

Moreover, an interesting find Global professional firm PwC was that developed economies such as the UK appeared less open to

as opposed to economies like China representing a progressive attitude.

The biggest barrier discovered was the change in mindset in leadership of the role of finance. The participants thought that this is may be due to the different perceptions of different generations.

Moreover, it was also found that there is a need to focus on the insight's agenda and access to information: both internally and externally.

The respondents believe that technological knowledge is key to establishing the future capability of finance. Technology is also not only about cost but also about how it can assist you to add value to the business.

Moreover, regarding job loss due to technological changes which is one of the biggest fears when we think about an automated future, the contributors said that the headcount reduction is a byproduct of tech, not the goal.

Furthermore, the participants suggested that organisations reduce their transaction processing activities using tech by optimising processes. Lastly, the study also

surveys conducted cooperatively change with a conservative outlook found that there is a need to rethink traditional cycles, which is often based on historic labour-intensive methods and non-integrated systems and substitute them with agile real time processes.

The utmost emphasis among finance specialists in the future will be understanding the data, playing a dynamic role in decision-making at the top. It is believed that the most concerning threat to finance professionals is the threat to grasp opportunities in a different way. They will have very little effect on defining the course of the finance function and their part within it.

However, utilising technology such as machine learning to improve forecasting abilities will allow the finance professionals to continue to play an important role in the decision-making.

There was great emphasis put onto the importance of 'leadership' in the report. To reach the true potential, strong leadership is essential in finance to realise the need to evolve from the traditional methods to a more robust and efficient system.

future-focused finance team must have top down alignment with sponsorship, purpose, empowered change teams and advance to a collaborative environment whilst embracing frequent change naturally.

Lastly, this development requires broadening the skills base and the finance community of tomorrow must encourage deep and relevant knowledge across the firm. No doubt technology will play a decisive role here.

The writer is a partner at PwC. This article is the excerpt of a dialogue on "The business partner of the future" jointly organised by ACCA, PwC and

### China's factory activity surprises UK manufacturers with fastest expansion in 3yrs

HINA'S factory activity improvement in November, with growth picking up to a near three-year high, a private sector survey showed on Monday, reinforcing upbeat government data released over the weekend.

But analysts remain concerned about deflationary risks in the sector, unconvinced that the worst is over yet for Chinese manufacturers. They say the subindexes of both surveys painted a picture of patchy recovery that will be difficult to sustain.

"The improvement last month was driven by different factors across the two manufacturing indices, making it hard to pinpoint the reason for the apparent uptick industrial activity," Julian Evans-Pritchard, Senior China Economist, wrote in a note on Monday

"We doubt this marks the start of a decisive rebound in activity, he said.

The Caixin/Markit manufacturing Purchasing Managers' Index (PMI) index rose to 51.8 in November from 51.7 in the previous month, marking the fastest expansion since December 2016, when it was 51.9. The 50mark separates expansion from

contraction on a monthly basis. Economists polled by Reuters had expected a dip to 51.4.

The survey and a similarly strong official PMI helped push Asian shares higher on Monday with China's bluechips rising as much as 0.68 percent before paring gains.

Total new orders and factory production remained at buoyant levels in November, although they both eased slightly from record

highs in the previous month, when they grew the fastest in over six years and nearly three years, respectively.

Larry Hu, Chief China economist at Macquarie Group, cautioned that the improvement could be hit as many one-off tailwinds wear off, such as better sentiment on trade deal and warm weather. Business confidence slipped and companies were reluctant to replenish their



REUTERS/FILE

Workers direct a crane lifting ductile iron pipes for export at a port in Lianyungang, China.

uncertain outlook for demand and the prolonged China-US trade war, the survey showed.

China's official factory activity gauge on Saturday also surprised, returning to growth for the first time in seven months as domestic demand picked up in response to stimulus measures. But gains were slight and export orders sluggish.

The official survey focuses more on heavy industry than Caixin's, which is believed to include firms that are more export oriented. The two surveys also cover different geographical areas.

The Caixin survey showed subindex for new export orders came in at 51, marginally below that in October, when it was the highest since February 2018.

Resilience in the sector led to a notable recovery in the labor market in the month, with companies adding workers for the first time in eight months.

However, profit margins remained under pressure, with input costs continuing to rise while output charges fell, suggesting some firms are still cutting their prices due to fierce competition for sales.

While growth is likely to stabilize in November, the overall downtrend will continue in months ahead," Hu told Reuters.

## cut jobs at fastest rate since 2012

REUTERS, London

■ RITISH manufacturers cut jobs last month at the fastest rate since 2012, a survey showed on Monday, as pressures from Brexit and a global trade slowdown caused the sector's longest decline since the financial crisis.

The IHS Markit/CIPS manufacturing Purchasing Managers' Index (PMI) sank to 48.9 in November from 49.6 in October, a slightly smaller decline than an initial flash estimate of 48.3.

But the PMI stuck below the 50 level that divides growth from contraction for a seventh consecutive month, the longest such run since 2009, as the country headed for an early election on Dec. 12 intended to end a parliamentary logjam over Brexit.

"November saw UK manufacturers squeezed between a rock and hard place, as the uncertainty created by a further delay to Brexit was accompanied by growing paralysis ahead of the forthcoming general election," IHS Markit economist Rob Dobson said.

Britain's economy has slowed since the referendum decision in June 2016 to leave the European Union, with manufacturing especially hard hit due to concerns about disruption to supply chains, on top of pressures from the US-China trade war.

Britain faced the risk of leaving the EU without a transition deal on Oct. 31, prompting many manufacturers to build up emergency stocks of raw materials, before a last-minute delay until Jan. 31 In November, factories reduced stocks at

the fastest rate since June 2018, weighing on overall demand, the PMI showed. The PMI's employment component

sank to 46.8 from 47.1, representing the biggest loss of jobs since 2012, though less of a fall than in the flash estimate. Although the unemployment rate is

its lowest since 1975, official figures have shown that British employers in the third quarter cut jobs by the most for any quarter in the past four years. Monday's data suggest this risks continuing. Manufacturing makes up around 10

percent of Britain's economy. In the third quarter output in the sector fell by 1.4 percent from a year earlier, while growth in the economy as a whole slowed to 1.0 percent, its weakest since 2010.

Earlier on Monday, the Confederation of British Industry forecast economic growth of 1.2 percent for 2020 and 1.8 percent in 2021, assuming Britain leaves the EU with a Brexit transition deal on Jan. 31 and then strikes a deal to preserve tariff-free trade.

Trade association Make UK cut its forecast for manufacturing growth to 0.1 percent for 2019 and 0.3 percent for 2020, down from a previous forecast of 0.6

# India's manufacturing growth picks up in November

NDIA'S manufacturing activity picked up in November as new orders and output rose at a faster pace, a survey showed on Monday, although factories were less optimistic about the future, shedding jobs for the first time

since March last year. That is likely to raise concerns any economic recovery could be delayed or remain below potential. Official data showed India's economy expanded at its weakest pace in more than six years in the

quarter to end-September. With the Indian economy needing to grow around 8 percent

each year to create enough jobs for millions of youth joining the labour force, Prime Minister Narendra Modi's government will be pressured to take further steps.

The Nikkei Manufacturing Purchasing Managers' Index, compiled by IHS Markit, rose to 51.2 last month from 50.6 in October, confounding expectations in a Reuters poll for a decline to

While the headline PMI has held above the 50-mark that separates growth from contraction for over two years, continued weakness in forward-looking indicators suggests factories were bracing for

challenging times ahead.

That is largely because the global economy continues to decelerate and as real progress in the disruptive US-China trade war remains elusive.

While a measure of demand the new orders sub-index - rose to 52.0 from 51.3 in October, a subindex measuring hiring by Indian factories went below the breakeven point for the first time since March

"Rates of expansion in factory orders, production and exports remained far away from those recorded at the start of 2019, with subdued underlying demand

largely blamed for this," noted Pollyanna De Lima, principal economist at IHS Markit.

"Some level of uncertainty regarding the economy was evident by a subdued degree of business optimism. Also, companies shed jobs for the first time in over a year-and-a-half and there was another round of reduction in input buying.

PMI data also showed a lack of inflationary pressures in November, which should support expectations for the Reserve Bank of India to cut its repo rate for the sixth time in a row at its Dec. 3-5 meeting.



REUTERS/FILE

A general view of the factory floor at Camira Fabrics in Huddersfield, Britain.