

Lagging behind in a tech-driven world

Bangladesh performs poorest among South Asian countries in WEF report

NO FRILLS



SYED MANSUR HASHIM

WORLD Economic Forum's report titled "Readiness for the Future of Production Assessment 2018" places Bangladesh as the poorest performer among its South Asian neighbours. This is a global ranking that

covers 100 countries where a lower score indicates better performance. Our nearest competitor in the South Asian region, India, came 30th while Sri Lanka ranked 66th and Pakistan came in at 74. According to the WEF report, "Development of intelligence, wearables, robotics and additive manufacturing are spurring the development of new production techniques, business models, and value chains that will fundamentally transform global production. These technologies are also driving new, more distributed and connected value chains."

What all this means of course is that as we factor in higher technology-driven manufacturing techniques, the era of low-cost manufacturing export (for countries like Bangladesh) as a means of growth is at risk. The report takes into account 59 indicators across the "drivers of production" and "structure of production" components. "Drivers" deal with things like artificial intelligence, robotics, etc., while "structure" comprises technology that overcomes challenges previously thought insurmountable and that unlocks the human potential in the arts, innovation, minimising environmental impact, increasing energy efficiency and reducing carbon emission. In the "drivers" category, we scored 80 and under "structure" it was 89 (both out of 100).

The report categorises nations in the following broad categories: Leading (strong current base, high level of readiness for future), High Potential (limited current base, high potential for future), Legacy (strong



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Bangladesh fell into the "nascent" category of the WEF report. Countries with a limited production base that exhibit a low level of readiness for the future through weak performance across the "drivers of production" component were grouped in this category.

current base, at risk for future) and Nascent (limited current base, low level of readiness for the future). Today, 25 countries from Europe, North America and East Asia comprise the leading countries that account for 75 percent of global manufacturing value added (MVA) and they are in a position to best reap the windfall of these changes in technology that will start transforming the manufacturing process in our lifetimes.

However, as the report points out, 70 percent of all robot sales take place in China, Germany, Japan, Republic of Korea and the United States. The advent of industrial robots is nothing new. What is new is that more and more robots and robotics are playing a major role in the production process. This means that nations that are in a position to invest in

these high-tech production processes will have an edge on others. Bangladesh is not alone in the "nascent country" category. Ninety percent of all countries in Latin America, the Middle East, Africa and Eurasia fall into the same category.

What we must remember is that the path to transforming the production workplace will differ from nation to nation. It will be impossible for a country like Bangladesh that has abundant cheap labour to make the leap to high-end manufacturing processes and nor should we aim to do so. We should prioritise where our strengths lie and strive to make ourselves the best we can be when it comes to low-wage investment destination for foreign direct investment. There is little room for complacency since improving production

efficiency is now the name of the game in the global context. Transformation for us should be to begin concentrating on where we scored least.

As part of the report, countries were assessed in sub-categories and their performance in each of these sub-categories was given a score out of 10 (the higher the score, the better they fared). For instance, human capital is considered a driver of production and we scored 3.4 out of 10. Not an enviable position to be in. A mere one out of five people is involved in knowledge-intensive employment—which says something about our education system. Our universities scored 1 out of 10 (which put Bangladesh at 62nd position out of 100, or in the bottom half of global rankings); our vocational

training quality stands at 3.2 (out of 10); we scored 2.8 (out of 10) on "critical thinking in teaching"; and the quality of math and science education stood at 3.2 (out of 7). All this points to something being fundamentally wrong with the way we are teaching our children, who will one day be members of the workforce. It's grand to have high rates of pass rates at secondary and higher secondary school level. But how can we expect quality workers when our educational institutions score so poorly?

When we look at technology and innovation, the country has done marvellously well in mobile-cellular telephone subscriptions, with nearly 80 percent of the population owning a cell phone and 65 percent of Bangladesh comes under cellular network coverage. Technology adoption at firm level is 4.2 (out of 10) which is not bad, but then a massive lack of awareness comes into the picture when we see half the firms have taken no cyber security measures in an increasingly connected cyber world. We have fallen behind on scientific and technical publications (2.9 out of 10) which means "science" as a field of study is now looked down upon in our education system and with the gradual demise of studying science, our applications for patents have gone down to 0.04 per million population and we scored 87 out of 100 as a country.

These are serious issues and transformation for the better can only come from sound policymaking at the top. What path Bangladesh will take to improve its rankings will depend on policymakers' sincerity to effect change where it is needed most. The areas highlighted above are just some of the more fundamental areas where attention is needed. At the end of the day, we have to decide whether we wish to take steps to move out of the "nascent" category by initiating change (which is always painful in the short-term) so that the country is better positioned economically in the near term.

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For a level playing field

Ensuring equity in higher education in Bangladesh



SHAMSUL ARIFEEEN KHAN MAMUN

IT would not be an exaggeration to say that the cost of attending a public university in Bangladesh is quite low compared to that of a private university. The reason can primarily be attributed to government grants to the public

universities in the country. Unlike developed countries like the US or Canada, the government does not provide any financial support to the private universities, although the role of private universities in higher education is very substantial in Bangladesh.

According to the University Grants Commission Report, in 2017, the total number of private universities reached 85.

Needless to say, this increase in the number of universities is due to the rising demand for university education in the country. But unfortunately, students attending private universities are paying too much, i.e. out-of-pocket expenditure, in return for benefits, i.e. income in the future. In contrast, students attending public universities are paying too little in return for benefits.

According to Bangladesh Bureau of Statistics (BBS), in Bangladesh parents' out-of-pocket expenditure for educations is known as "private cost" which is a sum of (i) admission/session/registration fees, (ii) tuition fees, (iii) examination fees, (iv) costs for coaching, books, pens, uniform, convenience, lunch, etc., as described by the BBS. Further to the BBS estimate, the per capita private cost for education in a public university is Tk 31,614 per annum; in contrast, the per capita private cost for education in a private university is Tk

51,608 per annum. So, the students attending a private university should have been paying approximately Tk 20,000 per annum in out-of-pocket expenditures. The difference will be further aggravated if accommodation costs are added to the given out-of-pocket expenditures. In addition, there is an opportunity cost for attending university to obtain a degree which is equal for both public and private university attendance.

Now, let's look into the flow of benefit, i.e. the average entry level monthly salary of a graduate and postgraduate from a public or private university who entered the job market (or labour market) between 2011 and 2012. According to the BBS's estimate, the monthly wage is Tk 10,560 for a bachelor's degree holder and Tk 11,311 for a postgraduate degree holder. If it is assumed that a graduate works for 30 years over the period of his/her lifetime and receives income at an incremental rate of 10 percent per annum, then the estimated benefit (or income) of a university graduate and a postgraduate will be equal to Tk 12.46 million and Tk 13.35 million respectively. The figures of benefit are the same for both public and private university graduates.

A private university graduate expends more than a public university graduate but the return or benefit is the same—and an inequity is observed here. This inequity arises because of the difference in "Net Benefit" which is equal to income (or benefit) minus cost. This Net Benefit is discounted at a rate of six percent in order to find the Net Present Value of the Net Benefit and it was found to be Tk 3.21 million and Tk 3.13 million for a public and private university graduate respectively. And it is this difference in benefit that can be attributed to inequity in higher education in Bangladesh.

In order to eliminate this inequity, the government needs to provide private universi-



PHOTO: STAR

Although private university students in the country pay more out of their pocket compared to public university students, the return on their investment is the same—pointing towards inequities in higher education.

ties with grants so that the cost of higher education in private universities becomes relatively low and affordable. This will also help increase access to private universities for students of poor socioeconomic background.

Education is an investment. The investment takes place in two domains—public and private. While public investment in education is done by the government through budgetary

allocations, revenue budget expenditure and development budget expenditure, private investment in education is done by households or parents in order to send their children to university. Public and private universities and households paying out of their pocket supplement one other when higher education in the country is concerned. Because of this supplementary role, the gov-

ernment's engagement to a greater extent is needed in order to ease the burden on households and to ensure equity in higher education in Bangladesh.

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A WORD **A DAY**



[F]ATALISM
NOUN

The doctrine that certain events are fated to happen, no matter what. Fatalism differs from determinism.

CROSSWORD BY THOMAS JOSEPH

- ACROSS**
- 1 Cell feature
 - 5 Declare
 - 10 Lake near buffalo
 - 11 More sore
 - 12 Writer Uris
 - 13 Wall Street worker
 - 14 Colbert's gig
 - 16 "Well done!"
 - 20 Air traffic aids
 - 23 Sense of self
 - 24 Glorify
 - 25 Map ratio
 - 27 M a x i m u m amount
 - 28 Sandy spots
 - 29 Miniature movie
 - 32 USO offering
- DOWN**
- 1 Front desk feature
 - 2 Region
 - 3 Uprising
 - 4 Mali neighbour
 - 5 Boston entree
 - 6 Liquefies
 - 7 Assist
 - 8 Kicker's aid
 - 9 Miscalculate
 - 11 Friend of Porthos and Aramis
 - 15 Database option
 - 17 Get news
 - 18 Lusty look
 - 19 Troubles
 - 20 Bring in the crop
 - 21 Car bar
 - 22 Secluded valley
 - 25 Not barefoot
 - 26 European primrose
 - 28 Some carpets
 - 30 Likely
 - 31 Airs
 - 33 Tortoise's rival
 - 34 Track shape



YESTERDAY'S ANSWER

SLAP HEAP
LINED RAMBO
ELITE ONAIR
DIM BADSIDE
SEASIDE LED
SLOTH ASS
USERS
CAP REPRO
SOP BEDSIDE
TOPSIDE SIS
ALLOT AMESS
MIENS LATTE
POTS TOSS

BEETLE BAILEY



BY MORT WALKER



BABY BLUES



BY KIRKMAN & SCOTT

