



A development process that doesn't factor in measures to protect the environment is ultimately detrimental to people's well-being.

FILE PHOTO: RASHED SHUMON

## Polluted development

### Profits for few, losses for all



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Environmental awareness is often depicted as a luxury only suitable for the elite or celebrities who can go a long way to protect a few pandas or blue whales. But from the perspective of marginalised people – especially that of their lives, livelihoods, and culture. When the inhabitants of the Himalayan region in India formed the "Chipko" or tree-hugging movement to protect the forests of Uttar Pradesh, or when men, women and children formed human barricades known as "empates" to prevent bulldozers from tearing down trees in the Amazon, or when people rose up in Bangladesh's Phulbari to protect water bodies and agricultural land in the area, they were all part of the same struggle to protect life-livelihood-culture.

Bangladesh's ongoing development model is insensitive towards the importance of a healthy environment in the livelihoods and culture of people. And it is mainly built on low wages and high environmental pollution. Just as labour, the environment, too, seems cheap in our country. Here, labour and environment can be exploited for the sake of profits, the consequence of which is severe pollution and damage to people's lives and livelihoods. Under this development model, some groups may benefit financially in the short term, but in the long term, it appears as a big obstacle in the path of growth and development for all.

The Shitalakkhya, Turag, and Balu rivers around Dhaka city are dying due to the pollution caused by untreated industrial waste that is dumped into these rivers by the numerous factories located on their banks. Present data tell us how tens of thousands of cubic metres of untreated liquid industrial waste are dumped in the Buriganga River alone every day. Given that treating one cubic metre of liquid waste costs around Tk 30, the factories choose to not treat this waste and instead find it easier to dump it into our life-giving rivers year after year.

This practice may earn factory owners some short-term financial gains, but for everyone else, the loss is devastating in the long term. Fish production decreases in these rivers' polluted water, which affects the livelihoods of fishermen. Soil is contaminated due to water pollution, leading to reduced crop production in the dry seasons. The groundwater table also gets polluted, which contaminates our food production and water. Gazipur can be cited as an example of this kind of polluted development: over the past decade, many industries have been set up in Gazipur destroying a large amount of forests and wetlands. Only 556 out of 2,220 factories in the industrial

district of Gazipur have effluent treatment plants. Of these, fewer than one percent use or maintain treatment plants.

To understand the consequences of such cost-saving practices and who has to pay for it, one can look at the pollution of Belai Beel, spanning a 40 sq-km area across Gazipur Sadar, Kapasia, Kaliganj, and Sreepur upazilas. Liquid effluents from factories in these areas are polluting the water of Turag, Chilai and Balu rivers, and through the canals polluting the Belai Beel. Whereas during the 90s, the average yield of paddy per bigha in the area was 24-25 maunds, due to pollution, the average yield of paddy per bigha has reduced to only 13-14 maunds. Even five to six years ago, a group of fishermen used to catch 35-40 kg of fish every night, but due to pollution, it has come down to only 7-8 kg. Because of this, many fishermen have been forced to leave their profession and become day labourers. Thus, the present and future of millions of people are being damaged because of the pollution of our rivers, canals and rivers, which is happening for the profit maximisation of only a few

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hundred factory owners.

Let's take a look at the state of air pollution. According to the World Air Quality Report of Switzerland-based organisation IQAir, Bangladesh's air quality remained the worst in the world for four years in a row. The average annual airborne particles, referred to in the report as PM 2.5, was 76.9 micrograms per cubic metre in Bangladesh, which was 15 times the limit set by the World Health Organization (WHO). With an annual average PM 2.5 concentration of 78.1 micrograms per cubic metre, Dhaka ranked the second most polluted capital in the world, only behind New Delhi.

The main sources of air pollution are emissions from unfit vehicles, fumes from factories and brick kilns, and dust from construction activities. Although thousands of vehicle and factory owners or contractors benefit financially by driving unfit vehicles, operating factories and brick kilns without emission control, and carrying out construction work and transporting and storing construction materials without proper dust control measures, people across the country are suffering physically, mentally,

and financially because of different diseases catalysed by air pollution.

Instead of mitigating this crisis, the government is taking steps to legitimise air pollution. According to a report published in *The Daily Star*, the Department of Environment (DoE) recently allowed 400 mg of sulphur dioxide and nitrogen oxides and 100 mg of particulate matter per cubic metre for coal-fired plants launched before 2020, and allowed 200 mg of sulphur dioxide and nitrogen oxides and 50 mg of particulate matter per cubic metre for those launched after 2020. In comparison, the emission standards set in Japan and China, who have invested in coal-fired plants in Cox's Bazar and Chattogram, are far more stringent: Japan's standards for PM 2.5, sulphur dioxide and nitrogen oxides per cubic metre are just 5 mg, 28 mg and 40 mg, respectively. In China, the limits are 10 mg, 35 mg, and 50 mg, respectively.

It is the general people who have to pay for the government's negligence in controlling air pollution for the benefit of local and foreign investors. Due to air pollution, people suffer from cardiovascular and respiratory diseases, asthma, bronchitis, pneumonia, lung cancer, strokes and heart attacks at a higher rate. According to a 2022 World Bank study, for each percent increase in PM 2.5 levels above the WHO-recommended level, an individual's risk of developing shortness of breath increases by 12.8 percent, coughing by 12.5 percent, and respiratory tract infection by 8.1 percent. As the PM 2.5 concentration in our air far exceeds

the WHO-recommended level, a large number of people are suffering from these diseases, resulting in an average of 78,000-88,000 people dying prematurely every year.

Due to air pollution, people are suffering from mental illness too. Air pollutants enter the body through inhalation and eventually damage the nervous system, which in the long run can cause depression and anxiety. A one percent increase in PM 2.5 concentration above the WHO-recommended level increases a person's risk of developing depression by 20 percent. In addition, according to the report, the amount of financial loss due to air pollution is 3.9-4.4 percent of our GDP.

Therefore, raising voices against environmental pollution is not an elitist stunt; rather, staying silent against environmental pollution is serving the interests of the elite who are making profits from pollution. A model of economic development that only emphasises financial growth while neglecting the environmental aspect works in the interests of a few, while harming most people. It is, therefore, important to reject this type of environmentally destructive economic development model.

## Digital literacy is key to building a Smart Bangladesh



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Somewhere in medieval Europe, a despondent monk is staring at a bound book on the table. The door opens and a helpdesk person appears. What is our monk's problem? Well, the book is a disruptive technology replacing scrolls and, utterly confused, the monk has no idea how to open and read it. The support person opens it at the first page and explains how the reader can read it and turn over the next page and so on till the end. Our monk manages to learn the trick and is saved from being left out.

This, of course, is an imaginary story from the time when paper-made books came out as

become a subject of mainstream discussions, and shifted towards a plurality of literacies that includes elements of cognitive and practical skills. And it has huge implications on education, work, and society.

Today's workplace needs are evolving at such a fast pace that no education system can keep up with it. Digital skills enable us to perform today's jobs, but digital literacy is required to satisfy the ever-changing demands of the future. The relationship between the two are like that between data and information. We may be data-rich, but information-poor – unless we know how to skim useful information from data. That does

information. The traditional ways of education are unable to keep pace with the increasing demands for digital literacy, emphasising the need for a learning mindset that is ready to embrace a life-long journey of continually improving our skills.

Only with such a mindset can we cater to the present and future industry needs. But that requires a strong foundation in digital literacy. The time when a given skill set could take us to our retirement is long gone. Now, we need to continually reinvent ourselves to remain relevant in the industry – a mindset that must take root during one's student life.

There are a few key traits that we should acquire as students to become digital citizens. We should be empowered learners with the drive to remain updated, be curious, and continuously adapt. We should know how to promote open and responsible collaboration in the digital world for effective knowledge transfer. We must acquire the skill to "cut through" a sea of big data and noise to find out the pertinent



VISUAL: TEENI AND TUNI

new technology to disrupt the conventional ways of reading, writing, and transferring knowledge. Before paper, monks had to depend on long scrolls, often made of sheepskin. As paper and printing became commonplace, the literacy rate shot up, vastly improving the knowledge transfer process.

These days, we have digital technologies that are disrupting everything we have long taken for granted. That includes how we learn, live, collaborate, think, work, and socialise. The American Library Association (ALA) defines it as "the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills."

First coined by technology writer Paul Gilster in 1997, the term "digital literacy" follows on from visual literacy (using non-textual symbols and images to convey messages, such as hieroglyph); technological literacy (the ability to use a particular technology or technologies); computer literacy (using personal computers, which developed in the 1980s); and information literacy (finding, evaluating, using and sharing information). With the advent of the Fourth Industrial Revolution (4IR), and the increased availability of various disruptive digital technologies – especially autonomous algorithms, machine learning, robotics, and artificial intelligence – digital literacy has

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not mean that we must master all the software out there, but that we should be confident and keen to try new technologies and move ahead. At the same time, we should have the flexibility and adaptability to learn new processes. There is a global shortage of digitally literate workforce, and more work roles need digital skills than ever before.

A RAND Corporation study shows that employers are actively seeking workers with digital skills to survive in an increasingly digitalised

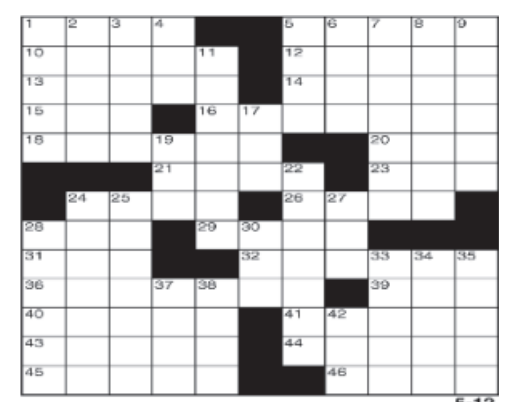
information. We should be problem solvers to constantly explore the potential for workflow and process improvements exploring alternative ways with new technologies. We must think outside the box and not be bound by traditional problem-solving methods. We should strive to become knowledge constructors to synthesise data from different sources and transform information into usable formats.

At a wider level, digital literacy can foster more open, inclusive, and secure societies. When we interact with digital infrastructure, digital literacy makes us aware of the privacy and data risks as well as cybersecurity challenges. Besides, with better cognitive and critical thinking skills, we can analyse news based on source, bias, and agenda. We will know when technology is trying to manipulate our opinion. We can safeguard ourselves from misinformation and disinformation. We won't focus on the technology, but on the whole way of working and living in the digital landscape.

Bangladesh has adopted a vision for building a smart nation, because it doesn't want to be left behind but play a leading role in the digital world. For that to happen, a strong foundation in digital literacy is essential, which comes from a commensurate education system. Without digital literacy, we risk being left behind like the medieval monk, and the vision of building a smart Bangladesh might remain a pipe dream.

### CROSSWORD BY THOMAS JOSEPH

- ACROSS**
- 1 Dupes
  - 5 Cartoon genre
  - 10 Had a go at
  - 12 Element number 5
  - 13 Zellweger of "Chicago"
  - 14 Increase
  - 15 First numero
  - 16 Brit's wrench
  - 18 Fashion
  - 20 Ensign's answer
  - 21 Amorous archer
  - 23 "Aw, shucks!"
  - 24 Aid illegally
  - 26 Copied
  - 28 In the past
  - 29 Ump's call
  - 31 Chess pieces
  - 32 Leather worker
  - 36 Appointment book
  - 39 Brewpub order
  - 40 Mideast peninsula
  - 41 Words of surrender
  - 43 Open, in a way
  - 44 Rescued
  - 45 Rings
  - 46 Porgy's love
- DOWN**
- 1 Play, as a banjo
  - 2 Concert venue
  - 3 Western evergreen
  - 4 Spot
  - 5 "Waterloo"
  - singers
  - 6 Lunch time
  - 7 It began about 1000 B.C.
  - 8 Sauntered
  - 9 Main dish
  - 11 Barren areas
  - 17 NFL player
  - 19 Originally called
  - 22 Game quests
  - 24 Wrinkle
  - 25 Windfall
  - 27 Signing need
  - 28 Intensifies
  - 30 Put away
  - 33 Too trusting
  - 34 Pole workers
  - 35 Marsh plants
  - 37 Finger feature
  - 38 Wee bites
  - 42 Yak it up



### WEDNESDAY'S ANSWERS

B	A	R	M	A	N	S	P	A	S
E	X	H	A	L	E	H	I	L	L
G	E	O	D	E	S	H	I	S	P
M	A	M	A	C	R	A	S	S	
E	R	A	R	E	C	Y	C	L	E
T	I	C	E	M	U	H	I	E	
R	E	A	C	T	O	R	I	N	K
O	L	D	E	R		J	O	G	S
H	O	M	E	T	O	W	A	R	D
A	R	I	A	A	M	E	L	I	A
M	E	A	L	H	E	L	L	O	S

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