### BANGLADESH AND WATER

# A complicated relationship

WILLEM VAN DEURSEN and MYISHA AHMAD

ID you ever consider that water management may not always improve livelihoods? For a long time, we thought better water management will indeed make a better country of Bangladesh. And maybe you are thinking the same. And of course, it is true up to a certain level. But we sometimes seem to forget that our goal should not be to manage water issues better in Bangladesh. Rather it should be to enhance living conditions for people. And this simple truth turns our desire for improved water management into just one of the multiple means. There is a greater, further reaching goal beyond that.

Why is this important, you may ask? Well, we think, strict focus on only water management is blurring the perspective on the overall greater objective: improving livelihoods of people.

Nature has handed Bangladesh (also the home country of one of the authors, The Netherlands) with, let's say, a very peculiar share of all the forces there could be. Water is everywhere, flooding and cyclones and storms. This abundance of water seems to classify Bangladesh as one of the most uninhabitable places on earth. The misery doesn't seem to end here though. An old folk song goes: "Lalon morey jol pipashai, kaasse thakte nadi Meghna (Lalon suffers from thirst of water whilst river Meghna flows nearby)". Water here is either too much or too less. Now, take a step back, think again. The truth is far more nuanced, far more subtle, far more interesting. Bengalis proudly introduce their country as "Nodi-Matrik Bangladesh"—a word that compares the mighty rivers (Nodi) to a Mother (Mata), signifying the strong and gentle, unrelenting and yielding, protecting and releasing, demanding and unassuming power of mother's love. This largest delta of the world is a very fertile place, with a climate that is favourable for vegetation and thus for agriculture. And this very environment has enabled numerous Bengalis to carve out a living in the "most uninhabitable place on earth". Thousands of years. Millions of people. So, there must be something good here. There must be something very valuable here. Nodi-Matrik Bangladesh. Think again...

Let's step back to reality and rethink the

purpose of water management. Why do we manage the water after all? Fact is, water management is only worth the effort we spend on it, if and only if, it ensures improvement of the life situation of the people. Only if it offers better changes for the children of these people, empowers people, makes life a little less marginalised.

The question we are raising is not whether water management could ultimately benefit the people. It undoubtedly does. We are rather concerned whether the current practice of large-scale top-down infrastructure-oriented management is the most effective way to address the water issues. And we think the answer to that question is negative. The current practice largely focuses on infrastructural approaches forcing engineering on people without properly understanding the needs and situation of the community. Such approaches seem to be willing to sacrifice functioning, well adapted livelihoods for optimised monocultures of agricultural production. This

optimised agricultural production is obtained by interventions that can be summarised as Flood Control Drainage and Irrigation (FCDI) projects, which basically aims to optimise yields by obtaining full control over the hydrologic system. Some substantial projects of the past can be highlighted, such as the Flood Action Plan of the 1990s, the Coastal Embankment Projects, the larger irrigation and river barrages projects. All of these examples are spectacular in their failure. There are, however, other projects, just as spectacular—but this time in their successes. The most prominent one to highlight is of course the hugely successful Flood and Cyclone Forecasting and Cyclone Shelter programmes, but also projects, such as rehabilitations of wetlands and local small-scale adaptations such as the (century old concepts of) floating farming.

We would like to point out the difference between the two approaches—"fighting the natural system to make it behave" versus "adapting people's livelihoods to learn how

to survive and live with the system". These two schemes direct to very different ways of water management. Most lessons from the past show that the first approach of trying to control the system has little chance of success and carries huge consequences disrupting social and environmental processes. We prefer the second approach. Although a little less ambitious, it has a larger success rate and lower impact from social and environmental disruption. This poses importance to serious efforts of involving local people, their knowledge and experience, in the strategic planning. And thus effectively abandon the perspective in which we aim for huge infrastructures to totally control the

Water management strategy in Bangladesh at present is fragmented and public participation in water projects is an utmost necessity. A united effort of water experts and the general public (local communities, farmers) through information sharing, diffusion of new technology and shared governance is required,

practicing not just top-down approach but also prioritising bottom up perspective. It is high time we shift the perception from singlefocused management action towards a less standardised and more reflexive process. Thus, enhancing stakeholders' capacity to adapt to complexities and uncertainties of future climate challenges, viewing water management not as a conventional or prescriptive system, rather as an evolving learning process. Water management is too important to leave it to just the water managers.

We all have heard the story before, we all have paid lip service to participatory water management, and we all have said that this time it will be different. But it is time that we really need to start evaluating our previous projects and learn from the mistakes we made then. Otherwise we are condemned to repeat the same mistakes again. We should know better by now.

Bangladesh has made incredible steps in improving livelihoods of people. From becoming self-sufficient in rice production to realising huge economic growth through textile, jute, seafood, shipbuilding, pharmaceutical industries and so on—the success is impressive and overwhelming. But the future still holds some challenges. Most of them are related directly or indirectly to water. And there are major and minor water related projects in the planning pipeline. Combined they will cost a fortune. Bangladesh has to make some very wise decisions about these projects. Are they worth these hefty investments or are they just white elephants? Rhetorical plans, exorbitant real construction costs, but with "benefits" yet to be realised! Are these the most efficient projects, or are they overambitious, not well in-tune with the local situations and the local needs? And in the end, the very hard question is: which way is the most effective to improve the quality of life? "Nodi-Matrik Bangladesh" surely has some very hard thinking to do to find the wise answers.

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## The rise in plastic pollution during Covid-19 crisis

FARAH KABIR and ANHARA RABBANI

VER since the pandemic began this year, discountries across the globe have been virus through various preventive measures where protective gear also known as PPE are in high demand. On the contrary, this has dramatically increased the unsustainable use of plastic posing significant risk for the environment. Personal Protective Equipment (PPE) which includes masks, gloves and goggles have become indispensable plastic products for everyone currently witnessing the coronavirus pandemic. The global health crisis has given rise to the consumption of PPE at a staggering rate, which is considered a shield for combatting the virus. PPE is playing a key role in protecting people, especially the frontline workers, who are fighting day and night to cure millions of patients ever since the outbreak started. This has led to some tough questions for those of us who are continually advocating for environmental protection and sustainability— how are we going to manage the devastating impact of plastic waste generated due to Covid-19?

The worldwide lockdown during the pandemic initially led to positive change to the environment. Reduction in air travel and road transport brought significant drop in the daily CO2 emission level across the globe. However, an unsurmountable challenge has emerged as countries are stockpiling plastic products such as PPEs to prevent the spread of Covid-19 virus. Growing number of households have also been seen to hoard groceries which too come in single-use plastic packaging. According to the World Health Organisation, it is estimated that 89 million medical masks are needed globally every month while the coronavirus pandemic lasts,

together with 76 million examination gloves and 1.6 million goggles and face visors. An article in *The Economist* says that consumption of single-use plastic may have grown by 250-300 percent in the United States alone. A research report has forecasted a spike in the global disposable-mask market from an estimation of USD 800 million in 2019 to USD 166 billion in 2020. A crash in oil price has made it easier for industries to produce more plastic as petroleum, one of the main constituent of plastic composition, has become extremely affordable.

Ever since the outbreak of coronavirus, billions of gloves and protective masks are being disposed every day at a global scale. According to a report published by **Environment and Social Development** Organisation (ESDO), Bangladesh alone has generated around 14,500 tonnes of PPE and other hazardous plastic waste in March 2020. In order to curb the spread, healthcare workers are mandated to wear PPE and government has ordered people to wear a mask every time they go in public spaces. Few opted for masks made out of fabric, but its effectiveness remains highly questionable. As the consumption of these plastic products have become an everyday norm for us, uncontrolled disposal of these items is severely impacting the environment. Hazardous PPÉ wastes are piling up in landfills, seabeds and oceans, further adding to the existing plastic pollution and threatening the marine ecosystem. Used PPEs, especially medical waste from hospitals, are also creating health hazard for waste pickers who are responsible for collecting and transporting the waste to the storages. The lockdown period has given rise to online shopping and food delivery where most items come in unrecyclable plastic packaging, an

inevitable choice people are making at this

Scientists have been warning us about the impacts of plastic pollution for decades. Globally the production of plastic has quadrupled over the years and the scientific community is worried that if this growth continues, the entire plastic production

Plastic waste is considered one of the greatest environmental challenges that can have devastating impact on land, wildlife, oceans and human health. Ironically, the issue of plastic pollution has taken a back seat during the pandemic.

will make up to 15 percent of total global emission by 2050. Plastic waste is considered one of the greatest environmental challenges that can have devastating impact on land, wildlife, oceans and human health. Ironically, the issue of plastic pollution has taken a back seat during the pandemic. What we are using now to fight the global public health crisis, is contributing to a bigger crisis. The year 2020 was noted to be the year for climate and environment action, where countries are said to be gearing up to take

a comprehensive and coordinated effort in addressing climate change. Adopting circular economy was considered a catalyst for accelerating implementation of the global agenda 2030 and became a key interest of focus for government, development agencies and corporations. Number of industries had started recycling initiatives to show their commitment in protecting the planet. However, due to the economic downturn caused by the pandemic, government and corporations are finding it hard to live up to their commitment of sustainable practices, as it has become critical for both parties to revive the economy at any cost. Ecological sustainability is being given the least priority as countries are racing to revive their economy. Many recycling businesses have been reported to close down because of fear of contracting the virus from plastic waste, lack of staff member and high overhead cost.

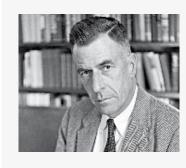
The global pandemic has highlighted crucial gaps in our structural system among which plastic pollution has lingered for ages. Managing this unprecedented level of plastic waste will be a challenge for countries, especially developing nations like Bangladesh who has poor, unregulated waste management system that can further trigger health risk for workers from informal sector. The current pandemic situation has made it difficult for us to make a conscious choice due to not having an alternative solution. What we require is to make informed planning at different level and timescale. During the recovery period it's imperative that government consider ecological sustainability as a key priority in disaster preparedness. This also means investment in efficient waste management system and allocating resource for research and development. We must look into a post-pandemic recovery through the lens of

environmental sustainability and resilience, where green initiatives are integrated within the economic stimulus package to create a win-win situation for both economic revival and sustainable development of the country. Most importantly, a shift in behaviour is needed where every citizen makes conscious choice of avoiding the use of unrecyclable plastic products in everyday life to protect the

The current crisis requires urgent government action to prevent long term environmental risk and health hazards. At this point it is critical that the government, along with experts and development actors, establish a practical guideline on the usage and disposal of PPE for medical facilities, factories, malls, shops and local bazaars. A strict monitoring mechanism and law enforcement engaging the local authorities are required to ensure that guidelines are been implemented at every facility. Media can play a crucial role in disseminating the guideline and creating public awareness. This can also become an employment opportunity for young people to engage in monitoring process of waste disposal at community level. It is important to ensure health and safety of workers involved in waste management where they are provided with PPE to protect themselves from virusrelated hazards. While a number of medical facilities are burning the used PPEs, its critical to ensure that these activities do not cause air borne hazards. Finally, we strongly urge for a specially trained taskforce to oversee nationwide management of Covid-19 related waste to prevent further degradation of the environment.

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#### QUOTABLE Ouote



**JOHN KENNETH GALBRAITH** (1908-2006) American economist.

It is a far, far better thing to have a firm anchor in nonsense than to put out on the troubled seas of thought.

#### **CROSSWORD** BY THOMAS JOSEPH

**ACROSS** 1 Auctions 6 Piercing tools 10 Swindler 11 Decrees 13 Entertain 14 Beginning 15 King, in France 16 Binary base 18 Tax-time helper: Abbr. 19 Breakfast choice

35 Sock part

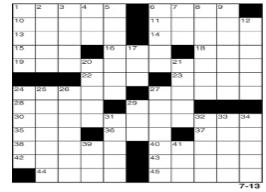
**DOWN** 22 Cry of insight 23 Detective's find 24 Eccentric 27 Cowboy wear 28 Pale tan 29 Enemy Holmes 30 Fast food side 7 Victory

36 Clumsy one 9 Increases 37 Buddy 12 Declares 38 Waned 17 Question of 40 Fill with joy identity 42 Worker's reward 20 Like a wet 43 Seth of blanket "Superbad" 21 Orange shade 24 More adept 44 Golf pegs 45 Used up 25 Circus performer 26 Store giveaway 27 Strong-boxes

1 Neck wrap 29 Govt. agcy. since 2 Knight wear 1934 31 Does some 3 Comic Anderson 4 Dawn goddess 5 Not detailed 6 Underway, to

programming 32 Mirror sight 33 Consumed 34 Fragrance 39 Language suffix 8 Milan opera house 41 Cut off

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#### YESTERDAY'S ANSWERS



#### **BEETLE BAILEY** LT. FUZZ IS SNOOPING AROUND



#### **BABY BLUES**



