How crucial is nature for our prosperity?

specific projects, it also envisages concerted

is reportedly the first planning document in

entities from the country and beyond.

efforts from a wide range of public and private

Fourth, the Mujib Climate Prosperity Plan



THE Government of Bangladesh has recently drafted the Mujib Climate Prosperity Plan Decade 2030 In the 26th United Nations Climate Change Conference (COP26), held in Glasgow, Scotland in November this year,

Bangladesh showcased this draft plan, which is now available on its website (www.mujibplan. com) for public comments. For four reasons, I think this plan is different from other medium- and long-term plans Bangladesh prepared over the past decade or so.

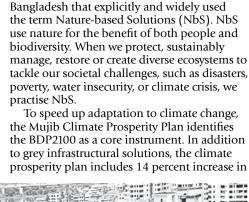
First, the Mujib Climate Prosperity Plan proposes a new development philosophy for Bangladesh. It emphasises that the development pathways should not only transform a country to be resilient to a wide range of crises, such as climate change and pandemic—a nation should also be more ambitious and visionary, and take the path of

Second, Bangladesh's development strategies and action plans formulated so far are focused on itself only. Bangladesh is the current president (2020-2022) of the Climate Vulnerable Forum (CVF), a platform of 48 countries. Although the Mujib Climate Prosperity Plan is for Bangladesh, it shows how the CVF member countries in Africa, Asia, the Caribbean, Latin America, and Oceania could also take a similar path to prosperity. The plan, therefore, can be a legacy of Bangladesh's current CVF presidency.

Third, the Mujib Climate Prosperity Plan is organised and written differently than other investment plans prepared in Bangladesh. In 2009, for example, the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) estimated that USD 5 billion would be needed in the first five years of its implementation. The Bangladesh Country Investment Plan for Environment, Forestry and Climate Change (EFCC CIP) reckoned in 2016 a need for USD 11.7 billion by 2021 to tackle climate change and pollution, and to improve natural resource management and environmental

governance. Meanwhile, the Bangladesh Delta Plan 2100 (BDP2100) may need USD 37 billion by 2040 to implement 80 projects in order to make Bangladesh a resilient delta.

Primarily focusing on the climate crisis, the Mujib Climate Prosperity Plan-a collaborative effort of 10 national and international agencies—goes beyond building climate resilience. We see six broad visions for change, which are called "key points" in the document: 1) Accelerated adaptation; 2) Just transition of labour and future-proofing of industry with technology transfer; 3) Increasing public revenue to spend on the most vulnerable; 4) Comprehensive climate and disaster risk financing and management; 5) Leveraging 21st century technologies for well-being; and 6) Maximised renewable





When we talk about the prosperity of our nation, we cannot separate our society and economy from the nature we are embedded in.

tree coverage, restoration of degraded forests in Chittagong Hill Tracts and haor (wetland) ecosystems, reduction and elimination of deforestation and forest degradation, afforestation in newly accreted *char* lands and coastline, and ecological restoration of rivers around Dhaka city as key measures. To develop climate-resilient and nature-based agricultural and fisheries supply and value chains, the plan mentioned mangrove-

The Biodiversity Conservation Fund has still not been established under Article 36 of the Bangladesh Biodiversity Act, 2017, even though it has been four years since the act was enacted.

shrimp culture, seaweed cultivation, floating gardening, aqua-geoponics, and vertical farming. These could only be called NbS if both human and biodiversity benefits are

Under the prosperity plan's resilient wellbeing programme, projects like "My Village, My Town" also includes floating vegetable gardens—a centuries-old NbS practised in Bangladesh. The plan also recognises that, by adopting locally-led adaptation principles, such projects could enhance plant and animal diversity, conserve genetic resources, protect wildlife habitats, and improve the quality of ecosystems engaging local poor households. Creating new jobs and ensuring just transition by upskilling the labour force are key aspects of the Mujib Climate Prosperity Plan. By recognising the potentials of NbS in generating employment and diversifying livelihoods, the plan has included forest and biodiversity conservation as a part of future just transition projects.

For a highly ambitious transition to renewable energy, the prosperity plan proposes "Mujib Bongoposagor Independence Giga Array," a USD 7.2 billion hybrid renewable energy (wind) adaptation infrastructure project, which would undertake mangrove plantation along the coasts and raise funds through blue bonds to protect marine life. The plan also aims to establish a "National Carbon Finance Coordination

Hub" to attract finance from voluntary carbon market to conserve and sustainably manage forests, and to undertake afforestation, reforestation, mangrove revegetation, and coastal ecosystem protection and management, as a means of adaptation and reduction of losses and damages from climate

Just before Covid-19 hit the world, in November 2019, the Bangladesh Parliament unanimously adopted a resolution on "planetary emergency." There, not only climate change, but also biodiversity loss at an unprecedented rate was identified as one of the crises needing urgent actions. But we see limited attention and funding to conserve our nature. For example, the Biodiversity Conservation Fund has still not been established under Article 36 of the Bangladesh Biodiversity Act, 2017, even though it has been four years since the act was enacted.

Mainstreaming NbS into our development strategies and plans can simultaneously address climate change and biodiversity loss, and can overcome our inertia to conserve biodiversity. Therefore, it is encouraging to see that NbS has been mentioned throughout the Mujib Climate Prosperity Plan. But the final version of the Mujib Climate Prosperity Plan should go farther. Listing down NbS actions that could be taken under different thematic areas is not enough; the plan should also embrace NbS as a fundamental principle. In this way, NbS can truly be mainstreamed into the prosperity plan, contributing to resilient economic growth, locally-led adaptation, innovative financing, human well-being, and resilient energy system, thus helping Bangladesh achieve the envisaged prosperity outcomes by 2030.

When we talk about the prosperity of our nation, we cannot separate our society and economy from the nature we are embedded in. By placing NbS in the heart of the Mujib Climate Prosperity Plan, Bangladesh can give the world not only the prosperity pathways, but also the ways to tackle the dual crises of climate change and biodiversity emergency.

Dr Haseeb Md Irfanullah is an independent consultant working on environment, climate change, and research systems. His Twitter handle is @hmirfanullah

Time to make digital identity a nationwide reality



N this digital age, we frequently perform various transactions online. While doing so, how are we identifying ourselves, or verifying that we are the authorised persons for said transactions?When we request for any service through a

government web portal, how do we prove ourselves as legal citizens? If we need to justify purpose while purchasing a product online, how do we do that? Every interaction we perform online requires trust and safety. It needs to be ensured that individuals can interact safely online while concurrently blocking harmful activities by perpetrators.

At present, while availing most of the online services in Bangladesh, we use password-based single sign-in or multifactor authentication schemes. For two-factor authentication, an extra step of verification is performed by sending an SMS or a call to the registered mobile phone numbers. However, these identification processes may become inadequate soon to deal with rapidly increasing fraud and security threats in cyberspace. That is where cutting-edge digital identification solutions come into play.

As digital economies keep expanding, the use of digital identification has increased globally. According to a report by MarketsandMarkets, the global market of identity verification is expected to grow from USD 8.6 billion in 2021 to USD 18.6 billion by 2026. While North America currently holds the largest share of this market, the Asia Pacific region will experience the most growth. Another recent study by Juniper indicated a 467 percent increase in the usage of digital identity between 2021 and 2025.

The use of the digital versions of documents such as national ID cards, passports, government-issued ID cards, etc for online transactions grew even more because of the Covid-19 pandemic. There are

several ways of verifying someone's identity digitally—such as through biometrics, which enables automated recognition of individuals through certain physiological features like facial image, fingerprint, iris scanning, voice scanning, etc. Another emerging technology for digital identification is blockchain, which uses distributed ledger databases that are accessible via a highly secured cryptographic channel. By dint of its unique benefits—e.g. security, trust and transparency—blockchain is expected to facilitate revolutionary transformation for identity management. For instance, in Jordan's Azraq refugee camp, the United Nations World Food Programme (WFP) has been using blockchain and biometrics to help Syrian refugees purchase groceries using a voucher system. Blockchainbased identification is currently being deployed in the refugee camps of Kenya as well. These instances are proof that inclusive digital IDs can significantly empower poor and vulnerable people as well.

energy, energy efficiency, and power and

transportation sector resilience. The plan

expects USD 83.55 billion investment over the

next decade to achieve these targets. A delay

in investing in the proposed infrastructural

and adaptive measures may result in losses

GDP (or USD 30 billion per year) by 2030.

to be responsible for implementing some

Although the plan expects particular ministries

of minimum 4.9 percent of the country's

Recently, we learnt of several incidents where confidential data from the NID database were leaked by dishonest officials. This demonstrates the need for adequate protection and security measures to safeguard identity data.



In the future, digital identification will be key to providing most services in Bangladesh.

Digitalising identification in Bangladesh

Digital identification has been on the agenda of the Bangladesh government's endeavours for Digital Bangladesh. In December 2015, Dhaka hosted the "Government Discussion Forum on Electronic Identity," Asia's largest meeting of government and private agencies regarding electronic ID. In December 2019, Bangladesh launched a digital identity programme with ID2020 Alliance, a global consortium aiming to maximise adoption and benefits of digital identity. Consequently, in April 2021, an RFP for healthcare digital ID was issued by Bangladesh government in partnership with ID2020 and Gavi, the Vaccine Alliance. This programme aims to provide biometric-linked digital IDs to infants when they receive routine immunisations. Another project was announced by the Bangladesh government in June 2021, which will provide unique digital IDs to students of Classes 6-12 via integrated education information management system. In September 2021, the Bangladesh

Bureau of Statistics (BBS) announced that it was planning to collect demographic and biometric data of all citizens, which will be stored in the National Population Register (NPR), and each citizen would be assigned a 16-digit digital identification number.

Challenges and potentials

Several experts and forums agree that digital identity can be a game-changer in a country like Bangladesh. It can help ensure basic services for the marginalised communities as the country continually deals with challenges such as seasonal migration, natural disasters, refugee crisis, etc. We can take inspiration from the successful deployment of digital identification in other countries, particularly in different parts of Africa.

Simultaneously, we need to address the relevant challenges. So far in Bangladesh, we have observed different endeavours for digital identification in different domains, such as education and healthcare. A coherent framework and regulations will better ensure

sustainable implementation of digital ID solutions across various domains. However, a consolidated framework or regulation should not restrict the diversity in technical solutions. We have a highly promising ICT industry that made an annual export of over USD 1 billion in 2019. While we need the experience and expertise of foreign companies to roll out digital IDs, we also need to keep promoting and encouraging innovative solutions locally.

For any new technology, mass-level adoption is always a challenge. While people in North America or Europe are well-habituated to validate their identities to avail certain services or products, this is still a novel concept for many in Bangladesh. However, the adoption will be quite faster for our tech-enthusiast younger generations.

Building trust and confidence among people is also very important. Recently, some digital identity initiatives for Rohingya refugees raised controversy, with allegations that these data were collected from the refugees and later shared with the Myanmar government without their informed consent. So, following basic ethical guidelines is extremely crucial.

And there always remains the risk of data vulnerability due to technological as well as human glitches. Recently, we learnt of several incidents where confidential data from the NID database were leaked by dishonest officials. This, again, demonstrates the need for adequate protection and security measures to safeguard identity data.

The UN Sustainable Development Goals (SDGs) aim to provide legal identity for every person in the world by the year 2030. Digital identity will be a major catalyst to achieve that goal. It can play a pivotal role in a developing country like Bangladesh, which is looking towards a prosperous digital future. Therefore, it is high time for us to properly utilise the potential of digital identification.

Azfar Adib is a senior member of the Institute of Electrical and Electronic Engineers (IEEE) and a PhD student in Concordia University, Canada.

QUOTABLE Ouote



DH LAWRENCE (1885 - 1930)**English** writer

Do not allow to slip away from you freedoms the people who came before you won with such hard knocks.

CROSSWORD BY THOMAS JOSEPH

ACROSS 1 Kitchen work 5 Custom 10 Convoy trucks 12 Without aid 13 Tea party guest 14 Hinds' mates 15 Lumber unit 16 Stretch of years 18 Catching aid 19 Mason of movies 21 Quite 22 Gumshoe's specialty

24 Provinces

25 Crossing the

Berlin Wall, e.g.

29 Course activity 7 Malay island 30 Besides 32 Band blaster 9 Irritable 33 Old hand 34 Army address 17 Indy auto 35 Marlins' home 20 Personnel 37 Future seed 21 Drop in 39 Follow 23 Arm art 40 Tender areas 25 Game piece

DOWN 1 Sacred song 2 Do a musketeer's job

6 Imitating

41 Hotel units

42 Ties the knot

3 Asylum seeker 4 Snap 5 "How droll!"

8 Hospital worker 11 "Now listen!"

26 Border city 27 "Yeah, right!" 28 Executed perfectly 29 Joystick wielder

31 Lock 36 Silent

33 Diner desserts 38 Swear

MONDAY'S **ANSWERS** C A M P S A T A L E R A R E R SOPUP OBESE ALDER TRADING HAM E G O DEMOPENNY A R T L E O

B R E E D T R A M

I T N E W I R A KINAWA DIEGO ERROR WRITE FOR US. SEND US YOUR OPINION PIECES TO dsopinion@gmail.com. INEP Т





BY KIRKMAN & SCOTT

