



PHOTO: AFP

Protecting our biodiversity

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As we start 2017 we have many encouraging numbers to be proud of. The country has been sustaining GDP growth at 6.3 percent for the last five years. Per capita income (USD 1,314) is more than twice of that of 2008. Less than 13 percent of us are now extreme poor, half as many than 2005. Child mortality has declined to 4.8 percent. Primary school retention rate is 80 percent. Digitisation has changed the face of our service systems with 67 million internet subscribers— a situation beyond our imagination even a few years ago.

Like our other natural resources, biodiversity is playing a crucial role in our economic development and achieving human wellbeing. Besides keeping our air breathable, biodiversity serves us with food, water supply, medicines, clothes, shelters, and of course the newspapers on which we are reading this article (unless you are using a smartphone!). It is, however, difficult to understand and measure all contributions of biodiversity to our lives given, on the one hand, the multifaceted nature of these contributions and, on the other, the complex relationships between the natural ecosystems and the ones we have modified. It is possible, for example, to reckon the contribution of Hilsha to our national economy. But the value of the 130 fish species of Tanguar Haor – a dynamic, globally

important wetland in Sunamganj – in our lives is difficult to fathom.

As the number of types of fish of Tanguar Haor indicates, Bangladesh is biologically very diverse. Its geographical location, deltaic structure, and subtropical climate have made it a home of about 4,200 plant species (from angiosperms to mosses) in its evergreen, semi-evergreen and deciduous forests on the hills and plain lands; in mangroves; and in numerous rivers and wetlands. Our natural and man-made ecosystems also harbour 133 species of mammal, 711 species of bird, 173 species of reptile, 64 species of amphibian, 653 species of freshwater fish, and 4,500 species of insect, including 185 crustacean and 323 butterfly species. These numbers are just amazing since we are talking about a country where on average 1,100 people live in every square kilometre.

To protect Bangladesh's rich biodiversity, many initiatives have long been taken, especially in the recent decade. Many biodiversity-rich areas have been declared as National Parks, Wildlife Sanctuaries, Ecologically Critically Areas, Eco-Parks, Safari Parks and Botanical Gardens protected by the laws. A total of 51 such protected sites, including 37 Protected Areas, now cover almost four percent of the country. In 2014, Bangladesh declared "Swatch of No-Ground" in the Bay of Bengal, the first Marine Protected Area of the country. This together with the "Middle Ground and South Patches" of the Bay now constitute more than 2

percent of the total marine area of Bangladesh under protection. Species conservation has also received significant push in the last few years. Bengal Tiger, Asian Elephant, dolphins, primates, vultures, gharial, different globally threatened bird and turtle species are, to name a few, major groups. These

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initiatives are now not only restricted to Bangladesh, but linked with regional and global ventures.

Another major development of the last couple of decades is the engagement of local people in protecting the natural ecosystems they depend on for their lives and livelihoods. This

approach is known as co-management. It aims at making conservation work in the forests, mangroves and wetlands by ensuring inclusive natural resource governance. Monitoring the changes in biodiversity status of these areas further helps us to understand the effectiveness of conservation actions.

Since the early 1960s, IUCN has been estimating the status of global biodiversity by calculating the extinction risk of thousands of species. IUCN regularly produces the Red List of threatened species of the world, of regions, and of selected countries. The latest animal Red List of Bangladesh (IUCN Bangladesh 2015; www.iucnredlistbd.org), has listed 390 species as threatened in Bangladesh – almost 25 percent of 1,619 species assessed. From the earlier IUCN Red List of 2000, we knew that we had lost 13 wildlife species from Bangladesh in the last 100 years. Fifteen years on, the latest Red List of Bangladesh alarms us that another 18 species have joined the Regionally Extinct list. This extensive exercise involving 160 Bangladeshi biologists, however, could not assess 278 animal species due to lack of sufficient data on them. Further, Bangladesh has only progressed less than five percent in preparing a complete Red List for plants. These facts highlight the knowledge gap in conservation status of our biodiversity.

We often talk about population pressure as the key reason for biodiversity loss. Human actions are indeed degrading and fragmenting

habitats, changing land use patterns, and modifying hydrological systems on a large, landscape scale. Over-exploitation of resources, pollutions, and introduction of invasive species by us are also posing direct threats to our biodiversity and undermining the conservation measures. As our economy grows, industrialisation and energy consumption increases, and urbanisation expands, we do see our institutional and legal systems continue promoting unsustainable resource exploitation. We also see our economic policies and systems, inadequate awareness level, and inequality in the ownership and benefit sharing of biological resources, as indirect threats to biodiversity of this land.

This situation further puts us in a larger dilemma – how to balance our aspiration to become a middle-income country by 2021 and conserving our biodiversity from over-exploitation, pollution and destruction. We need land to grow food, need dwellings to live, need roads to commute, and need power stations to provide energy. But the question is whether we should build these in a place where elephants have roamed for generations, where Garjan trees breathe for hundreds of years. Or should we leave such areas untouched altogether? Or should we do some activities in a controlled manner, using best available technologies to minimise the negative impacts of development on Nature?

The Vision 2021 envisions environmentally sustainable development.