

Beyond Acacia and Eucalyptus

Rethinking forest restoration in Bangladesh

While fast-growing exotic species can produce timber efficiently, they do not necessarily restore the ecological functions of natural forests. Natural forests support complex biodiversity, including mammals, birds, reptiles, insects, and micro-organisms, along with intricate soil systems and hydrological processes.

REZA KHAN

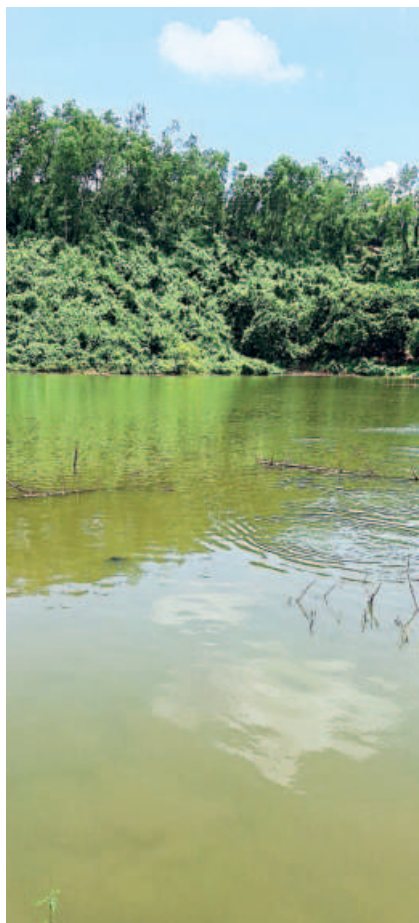
Bangladesh is part of one of the world's richest biodiversity regions, yet its natural forests continue to shrink and degrade. In response, plantation programmes using fast-growing exotic species such as Acacia and Eucalyptus are often promoted as quick solutions to restore tree cover and meet timber demand. But an important question remains: can monoculture plantations truly replace the ecological functions of natural forests? The answer to that question will shape the future of Bangladesh's forests and wildlife.

A legacy shaping forest management
Since the birth of Bangladesh in 1971, the country's forestry administration has largely been shaped by institutional traditions inherited from earlier periods. The forestry bureaucracy evolved from the colonial forestry system established under the British Empire between 1864 and 1947, continued through the Pakistan period (1947-1971), and eventually became the foundation of the modern Bangladesh Forest Department.

This historical legacy has profoundly influenced how forests have been managed over the past half-century. Colonial forestry systems were



An Acacia monoculture in Sherpur is failing to prevent landslides. (Taken on May 26, 2025). PHOTOS: DR. REZA KHAN



The pitiable condition of a Eucalyptus plantation inside Chhunati Wildlife Sanctuary, where a wetland has been converted into an illegal fish farm. (Taken on June 27, 2025).

primarily designed to secure timber resources for administrative and commercial purposes. As a result, forest management often focused on timber production rather than ecological restoration or biodiversity conservation. Although Bangladesh today recognises the importance of environmental sustainability, many elements of earlier management approaches continue to shape policies and practices.

Declining natural forests

Despite having legal authority over large areas designated as Reserved Forests and Protected Areas since the late nineteenth century, forest governance in Bangladesh has faced persistent challenges. Over the decades, natural forests have declined both in area and ecological quality. In many cases, forest lands have been converted into commercial plantations or gradually lost to encroachment, settlement expansion, and infrastructure development.

The condition of several protected areas illustrates this challenge. Chhunati Wildlife Sanctuary, declared in 1986 to protect forest ecosystems and wildlife habitats, has long been regarded as an important conservation site. Yet observations from researchers and conservationists indicate that parts of the sanctuary have suffered from degradation, encroachment, and changes in land use. These situations highlight the continuing difficulty of enforcing forest protection laws and maintaining ecological integrity in protected areas.

Such examples raise broader questions about the effectiveness of forest governance. Strengthening monitoring, enforcement, and long-term conservation planning remains essential if the country's remaining natural forests are to be preserved.

The rise of plantation forestry

Against this background, debates over plantation forestry have intensified. The Bangladesh Forest Department has historically promoted fast-growing exotic species such as Acacia auriculiformis and Eucalyptus camaldulensis in degraded forest areas. These species were widely introduced under social forestry and crop-sharing programmes, often supported by international development initiatives.

From a production perspective, such species offer certain advantages. They grow rapidly, provide fuelwood and timber within a relatively short time, and can quickly create visible green cover on degraded landscapes. For a country facing increasing demand for wood and energy resources, these characteristics have made them attractive options for plantation programmes.

However, the ecological implications of large-scale monoculture plantations remain widely debated. While fast-growing exotic species can produce timber efficiently, they do not necessarily restore the ecological functions of natural forests. Natural forests support complex biodiversity, including mammals, birds, reptiles, insects, and micro-organisms, along with intricate soil systems and hydrological

processes. Recreating these ecological relationships through single-species plantations is extremely difficult.

Bangladesh is also a signatory to several international environmental agreements that emphasise biodiversity conservation and ecosystem restoration. These commitments further highlight the need to evaluate plantation policies carefully in relation to long-term ecological sustainability.

Lessons from regional experience

Recent discussions within the forestry community reflect differing perspectives on this issue. Some officials argue that Bangladesh should reconsider restrictions on planting species such as Acacia and Eucalyptus, citing examples from neighbouring countries like India, where these species are cultivated widely for timber and pulp production.

However, developments within India itself illustrate a more nuanced approach. In the southern state of Kerala, forestry policy has increasingly recognised ecological concerns associated with monoculture plantations. The state's forestry programmes now emphasise sustainable plantation management, agroforestry, ecological restoration, and biodiversity conservation.

According to the Kerala Forest Department, efforts are being made to integrate traditional practices with modern techniques in order to enhance productivity while conserving ecosystem services. In several areas, policies have also encouraged

the gradual restoration of exotic plantations into more natural forest ecosystems that support biodiversity, water regulation, carbon storage, and wildlife habitats.

These developments demonstrate that plantation forestry and ecological restoration need not be mutually exclusive, but they require careful planning and clear conservation priorities.

Restoring indigenous forest ecosystems

Many conservationists and environmental researchers emphasise that restoring degraded forests ultimately requires rebuilding indigenous ecological communities. Native tree species have evolved within local ecosystems over thousands of years and therefore support complex interactions with wildlife, soil organisms, and surrounding vegetation.

In Bangladesh's tropical and subtropical forests, indigenous species such as Sal and diverse mixed-evergreen trees provide habitat and food resources for a wide range of wildlife. These forests also play critical roles in stabilising soils, regulating water systems, and maintaining microclimates that support biodiversity.

Planting native species in restoration programmes can therefore help to re-establish ecological processes that monoculture plantations often fail to replicate. While this approach may take longer to produce visible results than fast-growing exotic plantations, it contributes more effectively to long-term ecosystem recovery.

A balanced way forward

A balanced approach may offer the most practical path forward. Fast-growing plantation species could still play a role in designated production forests or community forestry areas, where timber supply and fuelwood production are primary objectives. Such plantations may help reduce pressure on remaining natural forests.

However, in degraded natural forests, wildlife sanctuaries, and biodiversity-rich landscapes, restoration strategies based on indigenous species and ecological principles are likely to produce more sustainable outcomes.

The larger issue, however, goes beyond the choice between exotic and native species. Bangladesh's forest future ultimately depends on strengthening governance systems, improving monitoring and enforcement, preventing illegal land occupation, and adopting science-based restoration strategies.

Dr Reza Khan is a wildlife biologist and conservationist with over four decades of experience in wildlife research, zoo management, and biodiversity conservation in Bangladesh and the United Arab Emirates.

Ten languages lost, countless stories gone

SAMAR M SOREN, CHARU HAQUE

Khidirpur village in Godagari, Rajshahi, bakes under the midday sun as dry, dusty winds blow through. But something even more parched than the land is the language once spoken here. Bhumij, an ancient language from the Austro-Asiatic Kol-Munda family, now survives in only four families, with just a handful of words left. Bhumij is not the only language that has disappeared. Studies show that at least ten languages—Birhor, Kherwar, Rajwar, Turi, Hodi, Ho, Bhil, Banai and Dalu—have already vanished from Bangladesh.

On the outskirts of the village, we spoke with Ranjit Bhumij, now in his sixties. Though time has left its marks on him, his memories of his mother tongue still remain. With a faint smile, he managed to exchange a few words in his native language. However, speaking was becoming increasingly difficult, as his words mixed with Bangla and Sadri, causing his mother tongue to slowly fade away.

Bhumij is an old language from the Austro-Asiatic Kol-Munda family, with deep roots in the subcontinent's history. Linguist George Abraham Grierson, in his famous survey, described how this language spread and noted its unique features in northern Bengal. Once, Bhumij was closely tied to the land, forests and daily life. Now, it survives only in the memories of four families in Khidirpur. Ranjit Bhumij recalls that in the 1980s, several Bhumij families still lived here. But social and economic pressures from larger communities forced many to leave. Those who stayed gradually lost their language.

Khidirpur's story is just one part of a bigger picture. The Barind region, along with greater Mymensingh, was once home to many languages. Birhor, Kherwar, Bhumij, Rajwar, Turi, Hodi, Ho, Banai, Bhil and Dalu each had their own traditions shaped by their environment. The Birhor lived in forests, Rajwar communities settled in small, remote



The Rajwar community in a social discussion, Chaitanyapur, Godagari, Rajshahi.

PHOTOS: SAMAR M SOREN

areas, and Kherwar groups lived on the plains. Each contributed to the region's rich cultural and linguistic landscape. But over time, migration, policy changes and the rise of dominant languages caused these languages to fade.

Sadri was once the common language in the region during colonial times, but later Bangla took its place through schools and government policies. As a result, people first replaced their mother tongues with Sadri, and then Sadri itself faded as Bangla became dominant. In just a few generations, whole languages disappeared. While the names of their speakers remain, the languages are forgotten. Many of these languages were never written down or recorded. They faded quietly, leaving no official trace. Once people stopped speaking them, they became part of history.

Over the years, several initiatives have attempted to address this crisis. The International Mother Language Institute

Act of 2010 was established to safeguard endangered languages and promote linguistic diversity. In 2014, a comprehensive language survey was conducted, raising hopes for concrete action. However, the survey's findings remain only partially published, leaving policymakers, advocates and communities without reliable data on which languages or groups are endangered or extinct. This lack of transparency has further complicated efforts to protect linguistic heritage. Moreover, many researchers and language activists report inconsistencies with observations from the field, deepening the uncertainty around the true state of language diversity in Bangladesh.

A collaborative initiative by Friends of Endangered Ethnic Languages (FEEL) and the Language Resource Hub found that languages such as Bhumij, Birhor, Kherwar, Hodi and Dalu have no written records. There are no dictionaries, audio or video recordings, or archives for them. The few words left in

languages like Hodi and Bhumij exist only in the memories of their last speakers. As these languages disappeared from families and communities, no one tried to save them. Without plans to pass them on, they vanished completely. Now, efforts to document them are mostly about piecing together lost history, not bringing the languages back. In the end, a language lives on only if people keep speaking it.

When a language disappears, it is not just words that are lost. The wisdom, traditions and community ties connected to it also vanish. Every language holds stories, healing methods, ways of seeing the world and shared beliefs. Language shapes how we think. When it fades, it changes not only our speech but also how we understand the world.

When Bhumij disappears, Barind loses an



The Bhumij community, Madhaipur, Godagari, Rajshahi.

important part of its cultural identity. The end of Birhor erases memories of a forest-dwelling, nomadic life. Losing Kherwar breaks a linguistic tradition in northern Bengal, and the silence of Rajwar dims a unique social identity from the border plains. The loss of Turi silences a local labour community, and Banai's extinction removes a key part of northern Bengal's culture. The vanishing of Bhil threatens the roots of one of the oldest communities in the region. The loss of Ho

silences another ethnic group, and Dalu's disappearance cuts historical ties near the Garo Hills. Hodi survives in only thirty-three words, a fragile remnant of a once lively culture.

It is alarming that these ten languages have vanished before our very eyes. The 2019 government gazette lists Bhumij, Birhor, Kherwar, Rajwar, Turi, Hodi, Ho, Bhil, Banai and Dalu as small ethnic groups. Yet, their languages remain unrecognised and undocumented, fading away in silence. These languages have vanished not only from daily life but also from academic research, policy discussions and official records.

Ranjit Bhumij's hesitant words show that language holds centuries of history. It carries a community's thoughts, stories and identity. When people stop speaking their language, silence spreads. Words are forgotten, sentences become shorter, and each new generation speaks less. Over time, silence fills homes, playgrounds and gatherings, replacing the conversations that once filled these spaces.

When a language vanishes, we must ask whether its worth lies solely in the number of speakers or in the unique culture and meaning it embodies. Without urgent intervention from governments, educators and researchers, more languages will persist only in the memories of a handful of individuals, like Ranjit Bhumij or Liton Debson of Hodi. In such cases, only the language's name remains, while its rich cultural legacy disappears. Preserving a language is a tribute to our past and a promise to future generations. When a language is lost, our perspective on the world narrows. To ensure a richer, more inclusive understanding for all, we must act to prevent this loss.

Samar M Soren and Charu Haque are researchers and language activists.