VALUE OF FOREST ECOSYSTEMS IN THE NATIONAL ECONOMY OF BANGLADESH: CHALLENGES AND PROSPECTS

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Forest ecosystem services (FES) are an important contributor to the local and national economy. The true value of FES is poorly reflected in the national economy of Bangladesh, because many services are non-traded and thereby a market value in financial terms is not readily available to be included in GDP calculations. It is imperative that the total value of the forest ecosystem is well understood to appreciate the effort to sustainably manage them. The objectives of this paper is to review the current status, gaps and challenges for evaluating the FES as a contributor to the national economy.

For this we reviewed, mentions of the forestry sector in the GDP analysis. Experts were consulted to list the major undervalued services from various forest ecosystems in Bangladesh and to identify the valuation tools and techniques appropriate for these services. Only the agricultural census from the Bangladesh Bureau of Statistics has information on the contribution of forest ecosystems to the country. According to the latest survey, direct forest services, mainly through traded timber, fuelwood, and bamboo contribute about 1.42 % to the national economy. Indirect services (provisioning and regulating) are largely absent from calculations. In Bangladesh it was identified that forests play a crucial role for ecosystem functioning through land stabilization, fertility enhancement, carbon sequestration, adaptation and resilience to climate change, regulation of water cycle and local climate, mitigation of impacts from storms and cyclones. Many of them quite recently recognized as unique to Bangladesh. Hence, economic evaluation of many of these services will require new, adaptive or mixed techniques.

Our assessment clearly shows a large gap in ecosystem services valuation effort in Bangladesh, and we identified that FES are most important to the country. This should help researchers, academia and professional institutes to prioritize their FES valuation efforts. We propose that a general framework should be developed to include non-traded ecosystem services into the national GDP calculations. Currently, only about 0.6% of the National GDP is invested in the forestry sector through various programs, including coastal forest plantation, conservation of Sundarbans, ecotourism and social forestry. This disproportionately lowers the services provided by the sector. With increasing demand for land and forest products from the growing population pressure, without adequate investment the sustainability of these services will be at risk. Awareness of forest ecosystem services should promote public sector investment towards managing the forest ecosystems of Bangladesh.