Bhutan’s Challenges in Biodiversity Informatics

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Abstract

Access to reliable and updated data and information on the status of biodiversity for effective conservation and sustainable use has been one of the major challenges in Bhutan. The current scenario of inaccessibility is due to the fact that biodiversity inventories and documentation are carried out within the context of individual projects and institutions, guided by their specific objectives and collection standards, often in isolation. More critical is the fact that these data hardly get shared nor are they easily accessible, resulting in either duplication of efforts or underutilization of the existing data. It has been duly noted that despite the global recognition of Bhutan’s protected areas system and its conservation achievements, information on the existing biodiversity of these protected areas is not easily accessible. There is also inadequate information on the critical biodiverse areas of the country, making it difficult to make informed decisions for either initiating developmental activities or prioritizing the area for conservation. These gaps are acknowledged and discussed in national documents (NBSAP 2014). In order to provide easy access to comprehensive biodiversity data and information of the country and to ensure the judicious use of our scarce resources, there is a compelling need to establish a coordination mechanism for sharing data on a common platform, not only to overcome the existing gaps but also to enable consolidation and analysis of the data in order to generate information for broader use such as conservation planning or education.

Thus in 1994, Bhutan, along with the South-South Cooperation (PSC 2009), which included Benin and Costa Rica, initiated a basic biodiversity information system in each country, funded by the Kingdom of Netherlands. In 2008, the National Biodiversity Centre (NBC) developed a web-based biodiversity portal, which was subsequently upgraded to...
the status of a national biodiversity information clearing house in 2010. However, because of the vastness and variety of biodiversity data, it was not feasible for a single agency to collect as well as curate these vast data. Thus, in early 2013, the Centre proposed the formation of a consortium to manage biodiversity data through a strengthened and an improved version of a web-based portal. In addition, this initiative to form a consortium amongst different biodiversity stakeholders, was also to address the issue of duplicative efforts in developing and managing isolated information systems and databases. The Bhutan Biodiversity Portal (www.biodiversity.bt) was launched on 17th December 2013. Currently, the observation data has crossed 63,000 of all taxa owing mostly to the efforts of a mass campaign across the country. However, one of the major challenges is the availability of active taxonomic curators especially for the understudied taxonomic groups such as invertebrates. In addition, some users prefer social media over the portal due to its user-friendliness.

Keywords

Bhutan, Bhutan Biodiversity Portal, biodiversity, data

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Author contributions

All authors contributed equally.
Conflicts of interest

Authors declare no conflict of interest.

References