Short Communication

Revision of Cambodia's National Biodiversity Strategy & Action Plan to integrate conservation and sustainable use of biological resources into national decision making

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Cambodia became a signatory and acceded to the United Nations Convention on Biological Diversity (CBD) in 1995 (CBD, 2017a), under which the country is obligated to develop and adopt a National Biodiversity Strategy & Action Plan (NBSAP). An NBSAP is the principal means of implementation of the CBD at a national level (CBD, 2017b). It reflects how Cambodia intends to fulfil the objectives of the CBD in light of its specific national circumstances, and sets out a sequence of steps to meet these goals. The present NBSAP for Cambodia includes the following vision for biodiversity: "Equitable economic prosperity and improved quality of life through sustainable use, protection and management of biological resources"; and a mission statement, namely "To use, protect and manage biodiversity for sustainable development in Cambodia" (MoE, 2016a).

The first NBSAP for Cambodia appeared in 2002 (MoE, 2002). Since then, knowledge of the country's natural history has expanded significantly. A combination of applied research, new species discoveries and far-ranging biodiversity conservation programmes have yielded a wealth of new information on the country's flora and fauna, and great progress has been made in developing national capacity and human resources for biodiversity conservation.

On 5th February 2016, The Royal Government of Cambodia approved the country's updated NBSAP (Fig. 1). To meet the complex and often changing challenges facing biodiversity and ecosystem conservation, the essence of a NBSAP is to create a policy requirement that integrates consideration of conservation and sustainable use of biological resources into national decision-making across all sectors of the national economy and policymaking framework.

In parallel to the NBSAP, the National Biodiversity Status Report (MoE, 2016b) was also updated for the first time since 2001. The status report provides a snapshot of the current status of biodiversity in Cambodia, and inventory lists of all species known in major groups (including 162 mammals, 601 birds, 173 reptiles, 72 amphibians, 1,357 fish, 3,113 plants and 671 invertebrates), plant and animal genetic resources, and ecosystem diversity. Verified species lists are now held by the Department of Biodiversity of the National Council for Sustainable Development (Ministry of Environment), and details are available through the National Clearing House Mechanism website (MoE, 2017b). The clearing house mechanism provides information services to facilitate implementation of the NBSAP, which in turn supports

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implementation of the global Strategic Plan for Biodiversity 2011–2020 (CBD, 2017b).

The newly updated NBSAP reflects how Cambodia intends to fulfil the three objectives of the CBD in light of its specific national circumstances and governmental reform, and identifies steps to meet these goals. The purpose of this article is to inform a wider audience of the significance and importance of Cambodia's NBSAP and to briefly outline the key thematic objectives which Cambodia aims to meet over the coming years.

Purpose of the NBSAP

The CBD is a binding agreement that obligates countries to ensure they are conserving biodiversity, which includes having effective national biodiversity planning. Cambodia's new NBSAP also constitutes a direct contribution to Aichi Biodiversity Target 17 under the CBD, which states that by 2015 each Party should have developed, adopted as a policy instrument, and commenced implementing an effective, participatory and updated NBSAP. Indeed, Cambodia was one of the few 150+ signatories to the convention to update its NBSAP prior to the 21st Conference of Parties in Paris, 2015.

Following extensive inter-ministerial meetings, national and sub-national consultations and technical review by national and international experts, the updated NBSAP now includes plans for the conservation and sustainable use of Cambodia's biological diversity. These plans are integrated with relevant sectoral and cross-sectoral programmes, related national policies and also provide significant contributions to national sustainable development goals.

Relevance to biodiversity stakeholders

The NBSAP provides a framework for action at all levels to ensure the productivity, diversity and integrity of natural systems and, as a result, Cambodia's ability as a nation to develop sustainably. It promotes the conservation of biodiversity and ecosystems, the sustainable use of biological resources and describes national contributions to international efforts to implement the CBD, including 20 Aichi Biodiversity Targets.

The NBSAP lists priority actions to be undertaken by the various ministries, departments and agencies during the implementation phase. A series of strategic objectives and priority actions are presented under 24 themes, including: Protection of Natural Resources (Protected areas, Threatened species, *Ex situ* Conservation); Animal

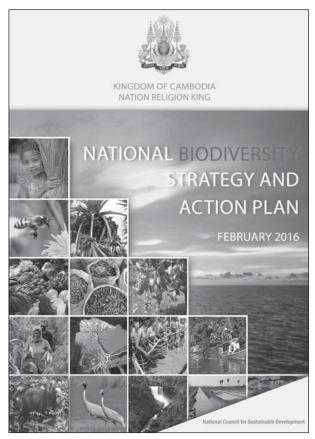


Fig. 1 Cambodia's updated National Biodiversity Strategy and Action Plan.

Wildlife Resources; Freshwater Fisheries and Aquaculture; Coastal and Marine Resources; Forest and Wild Plant Resources; Agriculture and Animal Production; Energy Resources; Mineral Resources; Industry, Technology and Services (Manufacturing, Biotechnology and Biosafety, Tourism); Environmental Security; Land Use Planning; Water Resources; Climate Change and Biodiversity; Community Participation; Awareness, Education, Research Coordination and Development; Legislation and Institutional Structures; and Quality of Life and Poverty Reduction (MoE, 2016a).

Priority actions adopted by the government are grouped into three broad categories: i) Actions promoting awareness and building the capacity of government staff and local communities; ii) Actions promoting community-based natural resource management; and, iii) Actions aimed at clarifying ministerial jurisdictions, reducing responsibility overlap and promoting interministerial coordination and collaboration in a sustainable development perspective (MoE, 2016a).

Monitoring and evaluation

Implementation of the NBSAP is an ongoing, continuous and cyclical process. Proposed mechanisms for implementation are identified in the NBSAP, such as coordination of national and international elements of the strategy through a permanent Inter-ministerial Biodiversity Steering Committee (IBSC) and National Secretariat for Biodiversity. However, as with any policy initiative, rigorous monitoring and evaluation must accompany implementation to measure progress towards overall goals. Long-term success will be determined by the degree to which all parts of society adopt the NBSAP vision and principles and contribute to achieving its goals.

The IBSC is charged with monitoring, evaluation and reporting of progress towards NBSAP targets. Reporting can take place annually and also as a part of national reports to the CBD, the next of which is due in 2018. While 20 biodiversity targets have been adopted, baseline information still needs to be collected to allow accurate reporting and with this in mind, the IBSC will focus its efforts on: i) Developing a strategy for obtaining information from various NGOs and government departments; ii) Strengthening technical skills of nationals on management, collection and processing of data; and, iii) Ensuring complementarity of NBSAP monitoring and evaluation efforts with other national monitoring activities to avoid duplication of effort.

Ultimately, conservation of biodiversity and sustainable use of biological resources will require the support and participation of individual citizens, local communities, urban and regional governments, conservation groups, business and industry, and educational and research institutions. In addition to regular reporting requirements and biennial revision of the NBSAP, an actions and indicators matrix has been developed to support evaluation of effectiveness and can be found in Appendix I of the full document.

Looking forward

The strategic objectives (indicators) and associated priority actions under each NBSAP theme serve as a valuable planning tool and guide for conservation practitioners, policymakers and stakeholders alike. Indeed, the NBSAP provides a national mandate for the establishment of numerous new priority initiatives, as well as continuation and enhancement of many existing long-term conservation activities.

It should remain a priority of the Royal Government of Cambodia, development partners and NGOs to revise the NBSAP periodically, ideally every two years, to ensure that biodiversity data are current and that action plans remain appropriate as threats and challenges to biodiversity protection evolve over time. In particular, the recent environmental reforms in 2016, such as the proclamation of numerous new protected areas, should be a priority to include in future NBSAPs. The complete text of Cambodia's NBSAP can be found online at https://www.cbd.int/doc/world/kh/kh-nbsap-v2-en.pdf.

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