## NATIONAL BIODIVERSITY STRATEGY AND ACTION PLAN - INDIA

## NATURAL TERRESTRIAL ECOSYSTEMS Thematic Concept Note<sup>1</sup>

Natural terrestrial ecosystems include forests, deserts, grasslands, mountains, coasts, each of them with their own biodiversity and patterns of utilisation of its components. Among them, the forest domain is the largest in terms of spread, and in terms of species and ecosystemic diversity. India has an amazing diversity of such ecosystems, both in terms of broad classification (such as forests, deserts, etc.) and in terms of the specific biomes and micro-ecosystems within these broad heads (such as moist deciduous forests, wet evergreen forests, and so on).

While these ecosystems have historically supported plant and animal (including human) populations, their ability to do this has been severely eroded over the last few centuries and in particular the last few decades. Human activities of various kinds have either destroyed many of these ecosystems or greatly altered them.

The Working Group should:

- 1. Assess the current understanding of the diversity and spread of various kinds of terrestrial ecosystems in India, and gaps in this understanding.
- 2. Review the current status of these ecosystems: present spread and quality in relation to historical times.
- 3. Identify human uses and values of terrestrial ecosystems, including physical, socio-cultural and other values.
- 4. Identify major threats to the spread and quality of various kinds of terrestrial ecosystems, including diversion for various developmental and industrial uses, pollution, introduction of exotics, and so on (this could include gap analysis, or the degree of interconnectedness of existing patches of forest/terrestrial eco-systems).
- 5. Review current official and community management practices and their implications / impacts on terrestrial diversity and quality.
- 6. Assess current conservation attempts, including protected areas, heritage sites, legal measures, community based conservation and so on; and gaps in these attempts.
- 7. Explore long-term benefits of investments by the corporate (private and public) sector in R&D and conservation/sustainable use related activities. This would include assessing alternatives to siting practices among others.
- 8. Identify measures (short and long-term) needed for conservation and sustainable use of terrestrial ecosystems, including integration of people's livelihoods and conservation, gender & equity sensitive community participation, and integrated management with surrounding land and water uses.
- 9. Prioritise these measures in terms of their importance and immediacy.
- 10.Identify the resources (human, economic, institutional) needed for carrying out these measures.
- 11.Delineate steps to develop collaborative biodiversity conservation strategies with neighbouring countries that share similar or cross-boundary ecoregions (in collaboration with the WGs on Wild Biodiversity and Aquatic Ecosystems);

<sup>&</sup>lt;sup>1</sup> This note was prepared by Ravi Chellam, Member, TPCG, with inputs from other members of the TPCG.

- 12..Explore the establishment of cross-boundary emergency response mechanisms, where not already existing, to address emergency threats to biodiversity, such as forest fires.
- 13.Explore possibilities of generating financial and resource support for neighbouring countries for biodiversity goals of common interest (e.g. for management of shared ecosystems and technical development).
- 14. Assess the viability and appropriate institutional arrangements for integrating sustainable livelihoods for resource dependent women & men in conservation strategies to increase their stakes in sustainable conservation.
- 15. Analyse biodiversity related initiatives in other countries which India could learn from.

There will be a large amount of overlap between this thematic review, and the WGs working on Wild Biodiversity, Aquatic Ecosystems, Policies, Laws, Institutions and Planning, and Access, Benefit-Sharing and Intellectual Property Rights. Interaction with these and other NBSAP WGs would be essential, to avoid duplication, and synergise the work.

Several other themes of the NBSAP may also feed into this. For example, economics and biodiversity; access, benefit-sharing and IPRs; livelihood and lifestyles; education and training; technology; policies, laws and planning (on the assumption that all these thematic working groups include terrestrial ecosystems in their deliberations).