

NATIONAL BIODIVERSITY STRATEGY AND ACTION PLAN - INDIA

TECHNOLOGY, INDUSTRY AND BIODIVERSITY THEMATIC CONCEPT NOTE¹

Technological (including biotechnological) and industrial developments have an impact on biodiversity conservation and use. While various kinds of technology have contributed to the conservation or enhancement of biodiversity, others have had an adverse effect. Industrialisation over the last few centuries in particular, with its thrust towards exploiting biological resources as raw material by overruling local community management systems more attuned to sustainable use, or its 'side-effects' such as effluents, has been destructive of biodiversity. The worldwide emphasis today is to develop environmentally and socially sound technology, which means the development/application/use of technology, and industrial processes, that do not cause irreversible damage to the environment, and are socially equitable.

The thematic group on technology, industry and biodiversity should deal with the following:

- Assessment of the impact of various kinds of technological and industrial developments on biodiversity (including a brief historical assessment also covering changes in institutional arrangements accompanying technological change);
- Comparison of 'traditional' and 'modern' technologies vis-à-vis biodiversity concerns;
- In particular, assessment of the impact of conventional and new biotechnologies on conservation and sustainable/equitable use of biodiversity;
- Identification of areas where technologies are required for biodiversity conservation and sustainable use, and of the environmentally sound technologies that can help achieve these aims including the institutional changes required for the same; Creation of new models of corporate(private and public) sector development that use such technologies which take into account long-term costs and benefits and their equitable distribution of biodiversity conservation and sustainable use.
- Status of such technologies and of R&D in their development;
- Status of capabilities of the government, corporate, NGO, and community institutions for technology development in the identified areas;
- Capacity building requirements for indigenous technology development in the aforesaid areas;
- Assessment of existing technology transfer mechanisms and recommendations to make them more effective (both within the country and internationally) from the conservation and sustainable gender sensitive and equitable use point of view;
- Identification of measures needed to ensure that technologies (including biotechnologies) with potentially adverse impacts on biodiversity are not developed, and where they already exist, are strictly regulated to avoid any harmful consequences;
- Assessment of impact of international agreements on the above issues;
- Delineation of measures (short and long term) needed to harmonise biodiversity concerns in a gender and equity sensitive manner with industrial and technological processes, including better linkages amongst various industrial sectors, science and technology institutions (traditional and modern), local communities and innovators, activists, and others;
- Prioritisation of all the above measures in terms of their importance and immediacy;
- Identification of the resources (human, institutional, and economic) needed to carry out these measures.

Identification of ways and means of sharing knowledge and skills with neighbouring and other countries, including technical and scientific cooperation, exchange of indigenous knowledge keeping

¹ This note was prepared by C. Renuka, ex-TPCG Member, with inputs from other members of the TPCG.

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in mind ethical concerns, and training assistance. A special focus would be on how to avoid duplication of efforts and achieve optimisation of resources (especially at the regional level).