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## Do Technological and Policy Developments Further the Conservation and Use of Genetic Resources?

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### Abstract

Over the past decade substantial progress has been made in the development of a political framework for the conservation and sustainable utilization of agrobiodiversity. The conclusion of the Convention on Biological Diversity (in 1992) and, more recently in 2001, the International Treaty on Plant Genetic Resources for Food and Agriculture have been key developments, both addressing the urgent need for long-term conservation of threatened genetic resources world-wide. At the same time advances in molecular genetics and information technologies have been dramatic. Both areas are very relevant to conservation and the sustainable utilization of these resources.

Coinciding with the aforementioned developments the world experienced the impact of the globalization of economies and a drastic shift in the property rights regime, in particular the use of patents to protect biological inventions/discoveries. The impact of globalization can be observed on the one hand in a drastically reduced number of private plant breeding companies, and an increased importance of genetically modified (GM) varieties in food production for the major crops, on the other. The implications for conservation of the use of GM varieties are yet to be studied and policies are still to be developed to promote reliable *in situ* and *ex situ* conservation efforts.

The above-mentioned developments coincided with the degree of governmental support to agricultural research, including activities such as pre-breeding and conservation, particularly in developing countries. At the same time these countries also lack the financial resources to exploit the locally available genetic diversity. Moreover, the technologies and the required human resources are similarly lacking and thus, the benefits of these technological developments do not reach the main guardians of agrobiodiversity, i.e. the farmers. This, in turn, does not provide them with any real incentive to contribute towards conservation activities.

In the above context this paper will study the need and the conditions for strategic partnerships between developing countries, the private sector and national and international agricultural research institutions, to achieve both reliable, efficient long-term conservation efforts and sustainable utilization activities for the benefit of all. The role of genebanks and of the Global Conservation Trust will be given special attention.

**Keywords:** Conservation, genebanks, genetic resources, partnerships, policy framework, technologies, utilization