

Biodiversity: A common heritage

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NBA does not allow free access and sharing of genetic resources. The alienation of biodiversity from the common heritage of humanity would adversely affect global food security, biodiversity research, investment and international relations. Another argument is that the livelihoods of farmers and indigenous communities in the developing countries are innately linked to biodiversity, making them more vulnerable to restrictions on access to the global plant genetic resource.

Every country in the world uses exotic genetic material to enhance the productivity of its crops and livestock as the genetic limits of the native stock can be overcome only by incorporating genes from such material. State ownership over biodiversity, however, ignores the world's interdependence on genetic resources and the evolutionary history of crop plants. Cultivated plants have originated in different parts of the world, so nations are in a complex network of plant genetic interdependence.

No region can afford to isolate itself, or be isolated, from access to plant germplasm of other regions. This bondage is growing ever stronger, due to increasing loss of agricultural biodiversity and climate change. The International Treaty on Plant Genetic Resources for Food and Agriculture, albeit legally non-binding, reflects appreciation of the world's interdependence on genetic resources.

Dr Rajan gives a logical assessment when he said, "There is no denying the fact that India so far has contributed precious little in terms of inventions in biotechnology and genetic engineering that has made any impact in the field. Yet the country is self-sufficient in important commercial technologies in this area. Many a company in India is engaged in research and development of vaccines and diagnostic tools. Public sector in India is capable of producing transgenic crops and cloned animals. We have just uncouthly adapted the ideas and technologies from the developed countries, mostly available in the public domain. Those who cry hoarse over appropriation of age-old traditional knowledge, forget about the gains they are making out of public knowledge produced by others, though legally."

"All revolutions-green, white and blue-that salvaged India from hunger and made it self-sufficient in food would have been

impossible without exotic genetic resources. Even today Indian farmers introduce and domesticate foreign plants and animals for commercial utilization. In fact 60 percent of modern rice varieties released in India have exotic progenitors; in the case of industrial crops it is 92 percent. Such transfusion is essential to maintain productivity and mitigate eventualities like pest and disease epidemics. But with the introduction of Biological Diversity Act, 2002, which restricts availability of genetic resources from India to the rest of the world, we have sent an unsolicited invitation for equal and opposite reactions. We stand to lose the moral authority to use exotic biological materials without the formal permission and benefit sharing with the respective countries of origin," added Dr Rajan.

The historic treatment of biological resources as a common heritage has benefited humans. Countries have gained more than their individual contribution from germplasm exchanges through the Consultative Group on International Agricultural Research. The international seed treaty on major food crops, which came into force in 2004, was a major step in this direction.

Dr Ram Kaundinya representing the agriculture focus group of ABLE on behalf of industry confirmed its commitment towards comprehensive stewardship of biotechnology and sustainable agriculture, as it gets leveraged for a long term benefit of society. "However member companies in their individual capacities are expected to believe in an approach that carefully considers the wishes of the society, environment protection, increased productivity , general improvement in the quality of life as biotech products are developed seeks to conserve and protect natural resource bio-diversity and consider concerns of local communities on the selection, design, production and introduction of products and publicly advocate positions consistent with their commitment," he added.