

International agreements and management of plant genetic resources

Little is known about the implementation of global agreements in the field of plant genetic resources for food and agriculture in developing countries. A project aims to help fill this void.

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Plant genetic resources for food and agriculture (PGRFA) constitute the foundation of plant breeding by providing the genetic traits required to develop new varieties and respond to crop pests and diseases as well as changing climate conditions. Without genetic renewal, yields will decrease and quality will deteriorate. Plant genetic diversity is also essential to traditional small-scale farming, on which some 1.4 billion people worldwide depend for their livelihood. As much as 75 percent of the world's poorest 1.2 billion people live in rural areas and rely on farming. Therefore, plant genetic diversity is of central relevance to the United Nations Millennium Development Goals, which aim at halving the number of people living below the poverty line from 2000 until 2015, and to the Right to Food.

However, the diversity of plant genetic resources is disappearing at an alarming rate. For several major crops, 80–90 percent losses of varieties over the past century have been reported. In addition, legal restrictions on access to genetic resources are emerging as obstacles to traditional farming as well as scientific research.

Management of PGRFA

If humanity is to be able to adapt to climate change and its consequences, it will require successful management of PGRFA. For that, it is important to focus on the conditions for successful implementation of three international agreements—Convention on Biological Diversity (CBD) with the Nagoya Protocol on Access and Benefit Sharing (NP), the United Nations Framework Convention on Climate Change (UNFCCC), and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)—relevant to the sustainable management of PGRFA.

The relationship between these three agreements contains the potential for synergies as well as turf struggles. Their normative directions are largely compatible but may in some contexts be conflicting, as a large number of institutions, all facing the challenge of effective coordination, are involved. Particularly challenging is the interplay between these agreements and the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) of the World Trade Organization, as countries

must balance demands for intellectual property rights (IPRs) with access and benefit sharing and farmer's rights, as addressed under the ITPGRFA.

Implementation challenges

A central challenge for the implementation of these three regimes is establishing functional ABS mechanisms. Without access, genetic resources cannot be put to use, and that would undermine food security and the possibilities of adapting food production to climate change. Lack of adequate benefit sharing also reduces the incentives for conservation and sustainable use of crop genetic resources.

The Multilateral System of Access and Benefit Sharing (MLS) under the ITPGRFA entered into force in 2007. The CBD entered into force in 1993, but the NP was adopted in 2010 and has not entered into force yet. It will enter into force 90 days after the 50th country has ratified it. The NP applies to all genetic resources (except human genetic resources), whereas the MLS applies to 35 major food crops and 29 forage plants. Thus, these treaties are quite different in coverage, design and

approach, which in turn give rise to questions regarding their interaction, and how they can best be implemented in harmony at the national level.

The MLS is effective in terms of providing access to genetic resources, and has generated some funds for benefit sharing. However, these funds have come from optional contributions, not as a result of the regulations on benefit sharing as such. Progress has been slow, and a review of the benefit sharing mechanism is on the agenda for the next session of the Governing Body in 2013. Further, the benefits under the MLS are dedicated to farmers who are conserving and sustainably using PGRFA. This is closely related to farmers' rights as addressed in the ITPGRFA, especially regarding the rights of farmers to participate equitably in the sharing of benefits arising from the use of PGRFA.

For the NP to be effective, it will need to overcome various hurdles that have plagued ABS governance since its inception. The first challenge will be to get the requisite number of signatories for the Protocol to enter into force. In addition, several key provisions of the Protocol will need to be developed further and implemented. Here, it is worth noting that the NP will be entering an already densely populated institutional environment. There exist many other international agreements that regulate or otherwise affect ABS governance, including the UNFCCC and the ITPGRFA.

This international legal and institutional complexity is mirrored at the national level, where there are heavy demands for coordination and integration between sector ministries. Moreover, biotechnological research and development, so essential to ABS governance, is increasingly undertaken in a globalized manner or by multinational corporations, often related to mitigation of and adaptation to climate change, giving rise to a global "bio-economy".

A new project

Considerable research has been carried out on the implementation of in-

Differences between the treaties raise questions about how they can be implemented in harmony.

ternational environmental agreements in industrialized countries, but less is known about the conditions for their implementation in developing countries. Therefore, the Fridtjof Nansen Institute (FNI), Norway, and South Asia Watch on Trade, Economics and Environment (SAWTEE), Kathmandu, have initiated a new project in Nepal and India to study how the three international agreements have been implemented in these countries, and what the effects have been so far. The overall objective of this new SAWTEE/FNI project is to contribute to our understanding of the mechanisms for, and barriers to, national implementation of the CBD, the NP and the ITPGRFA in the field of plant genetic resources for food and agriculture, in light of the UNFCCC and TRIPS.

More specifically, the project will seek to explain how the CBD and the ITPGRFA have been implemented in terms of ABS in India and Nepal, and to identify the prospects for further implementation in these countries, especially with regard to the interaction between the NP and the MLS in the context of the larger regime environment. In addition, the project will consider the coordination of such implementation efforts with existing and future measures to mitigate and adapt to climate change, seeking to identify the conflicts and synergies that may arise in implementing these treaties. A further point for discussion is the extent to which these findings may have relevance to other countries.

The choice of India and Nepal as the case countries has been made for the following reasons: India has been a pioneer in developing policies for the sustainable management of its crop genetic heritage, and has been very active in international negotiations on

access to and sharing of benefits from genetic resources. India has also been among the developing countries that have pointed out the potential negative implications of TRIPS. As a result, the country has been attempting to develop mitigating mechanisms within its IPR laws. India's implementation of these international agreements can therefore provide lessons for other countries. The new project will look at achievements within law and policy, the underlying conditions, and any challenges India has encountered in seeking to implement these three international agreements. A main project goal is to derive lessons from India's experiences that are of relevance for the further implementation of these agreements in India and elsewhere.

The other case country, Nepal, is a least-developed country that has already begun to feel the consequences of climate change. However, the country is also endowed with a rich heritage of PGRFA well-adapted to marginal environments. With associated traditional knowledge, much of it is highly relevant with regard to climate change. So, a few questions that are of relevance in this respect are: How has Nepal been coping with the challenges of climate change? What has been achieved in terms of implementing the ABS provisions of the three agreements, and what are the key challenges? The new project will seek to draw answers to these questions and derive lessons of relevance for further implementation in Nepal, as well as in other countries.

The empirical findings of the project will contribute to our understanding of how the objectives of the CBD-NP, UNFCCC and ITPGRFA can be transformed into practical policies at the national and sub-national levels. The project will also provide further insights into how overlapping international regimes influence the national implementation of environmental policies. ■

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