



NORWEGIAN MINISTRY
OF AGRICULTURE AND FOOD

Report

Informal International Consultation on Farmers' Rights, 18 - 20 September 2007, Lusaka, Zambia

Co-hosted by the Ministry of Agriculture and Food and the Fridtjof Nansen Institute, Norway, and the Zambia Agriculture Research Institute of the Ministry of Agriculture, Food and Fisheries





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Acronyms and Abbreviations

ABS	Access and Benefit Sharing
CBD	Convention on Biological Diversity
CBDC	Community Biodiversity Development and Conservation Programme
FAO	Food and Agriculture Organisation of the United Nations
FR	Farmers' Rights
GB	Governing Body
GMO	Genetically Modified Organisms
GPA	The FAO Global Plan of Action on Plant Genetic Resources for Food and Agriculture
IGC	Intergovernmental Committee on genetic resources, traditional knowledge and folklore (under WIPO)
IGO	Intergovernmental organization
IPR	Intellectual Property Rights
IT	International Treaty on Plant Genetic Resources for Food and Agriculture
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
LI-BIRD	Local Initiatives for Biodiversity, Research and Development (in Pokhara, Nepal)
MDG	Millennium Development Goals
NGO	Non Governmental Organization
ODA	Official Development Assistance
OPVs	Open Pollinating Varieties
PB	Plant Breeder
PBR	Plant Breeders' Rights
PGR	Plant Genetic Resources (for Food and Agriculture)
PGRFA	Plant Genetic Resources for Food and Agriculture
PPB	Participatory Plant Breeding
PVP	Plant Variety Protection
TRIPS	WTO Agreement on Trade Related Aspects of Intellectual Property Rights
UPOV	Union for the Protection of New Varieties of Plants
VCU	Value for Cultivation and Use
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

Foreword by the organizers

The realization of Farmers' Rights is a cornerstone in the implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture, as it is a precondition for the conservation and sustainable use of these vital resources *in situ* as well as on-farm. According to Article 9 of the Treaty, the responsibility for implementing its provisions on Farmers' Rights lies with national governments. At the First Session of the Governing Body of the Treaty in Madrid, June 2006, Norway proposed that a follow-up to Article 9 on Farmers' Rights be considered by the Bureau of the Governing Body for possible inclusion at the Second Session. This proposal was widely supported. At its meeting in November 2006, the Bureau decided to include the implementation of Article 9 as an item on the provisional agenda for the Second Session of the Governing Body to the Treaty. To prepare for the discussions under this agenda item, Norway took the initiative to conduct an informal international consultation. The consultation took place in Lusaka, Zambia, 18–20 September 2007 and was co-hosted by the Zambia Agricultural Research Institute, Ministry of Agriculture, Food and Fisheries, Zambia; the Ministry of Agriculture and Food, Norway; and the Fridtjof Nansen Institute, Norway.

The informal international consultation gathered 27 participants from 20 countries and most regions of the world. They all participated in their personal capacities, coming from various backgrounds, including ministries of agriculture, gene banks, research institutions, farmers' organizations and non-governmental organizations. The consultation consisted of six sessions, each starting with brief introductions by some of the participants, with the main emphasis on the discussions. First came a discussion of the contents of Farmers' Rights, seeking to establish a common ground of understanding. Following from this, farmers' contributions to the conservation and sustainable use of genetic resources were highlighted and discussed. In this context the participant group visited a nearby farming community, to learn about farmers' experiences and reflections as related to Farmers' Rights. The next topic addressed the current state of realization of Farmers' Rights and key issues in this regard. On this background, issues related to implementation of Farmers' Rights at the national level were discussed, with particular emphasis on how stakeholders can join forces and how resources can be pooled. Finally, considerable time was devoted to discussing what the Governing Body can do to promote the realization of Farmers' Rights.

One aim of the consultation was to identify key-issues of importance for the implementation of Farmers' Rights and to facilitate a process towards the realization of Farmer' Rights by the national governments, while acknowledging Farmers' Rights as vital for present food security and the future of our agricultural plant genetic heritage. On the basis of the discussions and by taking account of comments from the participants, Norway and Zambia prepared an input paper to be submitted to the Governing Body for consideration at its Second Session.

Co-chairs of the consultation were Mr Godfrey Mwila of the Zambia Agricultural Research Institute and Ms Grethe Helene Evjen of the Ministry of Agriculture, Norway. Ms Regine Andersen of the Fridtjof Nansen Institute, Norway, facilitated discussions. Ms Gunnvor Berge, Member of the Council of the Centre of Genetic Resources, Norway, and Associate Professor at Noragric, University of Life Sciences, Norway, has compiled this report together with Ms Regine Andersen.

The report starts out with a summary of results from the consultation (Part 1). Part 2 summarizes introductions and discussions under each topic dealt with during the consultation, and provides insight into the shared understandings, experiences and ideas on how to protect and promote Farmers' Rights. Part 3 is a collection of the papers presented at the consultation. The programme of the Lusaka Consultation and the list of participants can be found in the annex.

Acknowledgements

The organizers of the consultation would like to thank the participants at the informal international consultation on Farmers' Rights, all of them experts in their own right, who gave of their insights, experiences and time in order to exchange ideas and arrive at proposals for action to promote the realization of these vital rights for the conservation and sustainable use of plant genetic resources for food and agriculture. Your engagement is most appreciated.

We would like to extend particular thanks to Shikunu Village, and to their spokeswoman Ms. Loveness and her fellow farmers, who shared their knowledge with us and allowed us to come closer to the everyday realities of small scale farmers in Zambia. Our appreciation also goes to Mr Arthur Nkonde, Director of the Biodiversity Community Network in Zambia, who organized the visit.

The Zuba ni Moto Dance Ensemble and Kamoto Community Arts performed a fantastic theatre play on Farmers' Rights, prepared specifically for our gathering, and gave us the most beautiful glimpses of Zambia's rich cultural heritage in music and dance.

We would like to extend warm thanks to the Centre of Genetic Resources, Norway, for providing us with Ms. Gunnvor Berge as rapporteur during the consultation, and to Ms. Gunnvor Berge for her contributions to this report.

We are grateful to Ms Sharon N. Simbeye of the Biodiversity Community Network for excellent logistic arrangements while in Zambia and to Mr Claes Lykke Ragner of the Fridtjof Nansen Institute for all practical preparations.

The Development Fund of Norway provided travel funds for several participants. This enabled broad participation, and was much appreciated.

Lastly, we would like to thank the staff of Protea Hotel Lusaka Safari Lodge, for their extraordinary friendliness and helpfulness. The facilities and services provided the best conditions for work.

Oslo and Lusaka, 12 October 2007

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Part 1: Summary of results from the consultation

1.1 Background

The realization of Farmers' Rights is critical to ensuring the conservation and sustainable use of plant genetic resources for food and agriculture. This diversity is particularly essential for traditional small-scale farming, on which large numbers of people all over the world and in particular in developing countries depend for their livelihood. According to Article 9 of the International Treaty on Plant Genetic Resources for Food and Agriculture, the implementation and realization of Farmers' Rights rests with the national governments. Measures for the realization of Farmers' Rights suggested under Article 9 include protection of traditional knowledge, equitable benefit-sharing, participation in decision-making, and the right to save, use, exchange and sell farm-saved seeds and propagating material. So far, studies and findings show that at the national level there has been only limited documented experience with, capacity regarding and understanding of the modalities for implementation of provisions regarding Farmers' Rights. Thus, at the international level there is a need for the Governing Body to offer advice or assistance regarding the implementation of Article 9, as well as other provisions of the Treaty where Farmers' Rights may play an important role.

An informal international consultation on Farmers' Rights was held in Lusaka, Zambia, from 18 to 20 September 2007, jointly organized and co-hosted by the Ministry of Agriculture and Food and the Fridtjof Nansen Institute, both from Norway; and the Zambia Agriculture Research Institute of the Ministry of Agriculture, Food and Fisheries. The main objective was to contribute towards preparing the agenda item on Farmers' Rights for the Second Session of the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture, scheduled for October/November 2007 in Rome, Italy. Then intention was to achieve this by providing practical suggestions on what the Governing Body could do to support the implementation of Farmers' Rights at the national level, and by identifying shared views related to the understanding of Farmers' Rights, including actions required to raise awareness on the importance and relevance of Farmers' Rights.

A total of twenty-seven participants, invited in their personal capacities and drawn from governments, NGOs, international organizations, research institutions and other private and public institutions, from twenty countries of different regions and with various backgrounds and expertise, took part in the discussion.

The consultation dealt with a range of topics related to Farmers' Rights, including the following:

- i) The history of Farmers' Rights, and differing perceptions on their content, as well as the identification of elements of a common understanding of what Farmers' Rights entail and why they matter.
- ii) A better understanding of farmers' contribution to the conservation and sustainable use of crop genetic resources and farmers' roles in *in situ* and on-farm conservation, in plant development and improvement, as well as farmers' contribution to maintaining the global genetic pool, and the preconditions for current and future contributions from farmers.
- iii) The state of realization of Farmers' Rights, including protection of farmers' traditional knowledge related to plant genetic resources for food and agriculture, their participation in benefit-sharing and decision-making and the rights of farmers to save, use, exchange and sell seeds and propagating materials, as well as other key issues in these areas.
- iv) Pooling resources for realizing Farmers' Rights at the national level, highlighting the role of farmers' organizations, NGOs, breeders and researchers, as well as possibilities for networking and cooperation.

- v) Views on what the Governing Body can do to assist and guide countries in realizing Farmers' Rights in terms of key issues that can be addressed in the Governing Body, as well as possible measures to be initiated by the Governing Body, and how a fruitful process in the Governing Body could be ensured.

Discussions were facilitated through presentations made by several experts among the participants, drawing on their experiences and perceptions on relevant topics.

1.2 Rationale: Why Farmers' Rights?

The International Treaty on Plant Genetic Resources for Food and Agriculture recognizes the incalculable contributions – past, present and future – of farmers around the globe in conserving and developing plant genetic resources for food and agriculture as the basis of food and agriculture production in the world. This recognition constitutes the foundation of Farmers' Rights.

Examples abound of how farmers maintain and develop plant genetic diversity in traditional farming systems. In Nepal, farming communities have been improving the diversity of their crops by careful selection and breeding. In Peru, farmers have developed complex systems using crop diversity to adapt to climate variations. The vast majority of farmers in developing countries still maintain and develop agricultural biodiversity as a part of their traditional practices, as do a small minority of farmers in industrial countries. Due in part to the enormous transformations of agricultural systems world-wide, the possibilities for farmers to maintain this role are increasingly reduced.

In the context of the Treaty, Farmers' Rights are basically about enabling farmers to maintain, develop, and utilize plant genetic diversity, and about recognizing and rewarding them for their contribution to the global genetic pool and food security. Thus, the realization of Farmers' Rights is a cornerstone in implementation of the Treaty.

Furthermore, since 75 per cent of the world's poorest 1.2 billion people live in rural areas and depend on farming, it is self-evident that enabling farming communities to maintain, develop, and utilize crop diversity to meet their daily needs is critical for the achievement of the UN Millennium Goal on poverty and hunger eradication. Thus, Farmers' Rights are also central to the fight against poverty.

Diversity between and among crops is a means to spread the risk of crop failure due to pests and diseases or adverse climatic conditions such as drought. This is vital for communities living in marginal environments, in order to have plants that can adapt to difficult and changing conditions. Thus, maintaining diversity contributes to better livelihood.

1.3 List of suggestions for the Governing Body

The informal international consultation on Farmers' Rights discussed possible measures that the Governing Body could take. The result was the following list of potential actions, which had general support among the participants:

1. In recognition of the crucial role of Farmers' Rights in contributing to the continued availability of plant genetic resources for food and agriculture and implementation of the Treaty, the Contracting Parties should give priority to promoting Farmers' Rights at both the national and the international levels. The Governing Body should give priority to the implementation of Article 9 as well as to other provisions of the Treaty where Farmers' Rights will play an important role for their implementation – and through which Farmers' Rights can be realized – such as Articles 5 and 6.

2. The participation of farmers in the discussions and work of the Treaty is crucial for the realization of Farmers' Rights. Through its Secretariat, the Governing Body could facilitate the involvement of farmers' organizations in its work related to the realization of Farmers' Rights. This could be done through various measures, such as: (1) encourage parties to include representatives of farmers' organizations in their delegations and invite regional and international farmers' organizations to participate as observers; (2) encourage inputs prepared by farmers' organizations on their perspectives related to Farmers' Rights, to be compiled into working documents for the Governing Body; (3) organize consultations prior to sessions of the Governing Body to elicit farmers' perspectives on agenda items related to Farmers' Rights; (4) compile farmers' views on agenda items of Governing Body sessions through questionnaire surveys, to be made into working documents for the Governing Body; and (5) involve regional and international farmers' organizations in any working group on Farmers' Rights.
3. The Governing Body may encourage the Contracting Parties to submit reports on the realization of Farmers' Rights in their countries. For this purpose it should request the Secretariat to develop a reporting format and to monitor the reporting process. The Governing Body may consider country reports on the realization of Farmers' Rights at its regular sessions.
4. The Governing Body should guide and assist Contracting Parties in their implementation of Article 9 and related provisions.
5. The Governing Body could develop guidelines on the realization of Farmers' Rights at the national level, with particular emphasis on how Farmers' Rights can be realized through relevant provisions of the Treaty. It is recommended that this be done through an *ad hoc* Working Group, which could be converted into a permanent Working Group to support the Governing Body in assisting Contracting Parties in their realization of Farmers' Rights. The process should be transparent, participatory and inclusive.
6. The Governing Body should address the immediate importance of mobilizing funds within its funding strategy to facilitate implementation of the Treaty, with particular emphasis on the realization of Farmers' Rights. This could include the development of financial mechanisms to attract donors, and review of the voluntary payments system with a view to broadening the mandatory payment in the benefit-sharing mechanism in accordance with Article 13.2 d ii.
7. The Governing Body could organize documentation, sharing of experiences and highlighting good practices and challenges through an agreed reporting framework. The framework for an information management system could also be developed.
8. The Governing Body could organize a world forum on Farmers' Rights to create awareness on the importance of these rights and encourage the sharing of experiences on progress made and remaining challenges. Such a forum could be developed through a consultative process from the local, via the national and regional, and up to the international level.

1.4 Issues to be addressed

In addition, there was general consensus among participants on several additional important issues that could be addressed to realize Farmers' Rights:

1. Promoting awareness on the importance of Farmers' Rights and related issues as provided under the Treaty. In this context there is a need for recognition of the importance of cultural traditions in the conservation and sustainable use of plant genetic resources for food and agriculture within the traditional farming sector.

2. Taking measures to provide space for farmers' customary practices related to plant genetic resources for food and agriculture. In this context there is a need to consider how legal, commercial and technological measures that restrict customary use of plant genetic resources for food and agriculture can be assessed and amended in order to provide sufficient space for farmers' contributions to plant genetic diversity in agriculture.
3. Linking the realization of Farmers' Rights to the implementation of related Articles of the Treaty dealing with the conservation and sustainable use of Plant Genetic Resources for Food and Agriculture (Articles 5 and 6), with the implementation of the Global Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture (Article 14), with national commitments, international co-operation and technical assistance (Articles 7 and 8), and with benefit-sharing and the funding strategy (Articles 13 and 18).
4. Recognizing the diversity of seed production and distribution systems, ranging from very formal to very informal activities, in order to promote balanced policy and legal frameworks and cooperation between actors and activities: these are all important elements in the chain of seed production and supply.
5. Requesting national public institutions, through the respective Contracting Parties, and international gene banks to report back on what material has been provided to farmers, and how these institutions work to create awareness among farmers on what is available to them.
6. Collecting information on materials and associated knowledge obtained from farmers and used by private and public organizations in breeding processes, at the national and international levels.

Part 2: Summary of presentations and discussions

This part of the report provides a detailed summary of the presentations and discussions at the consultation. It is designed to give an overview of the background to Farmers' Rights, as well as of experiences with their realization, and ideas on how to promote these rights at the national and international levels.

At the opening ceremony of the consultation, Mr Moses Mwale of Zambia Agricultural Research Institute, gave the welcome address on behalf of the Director, and Ms Moosho M. Imakando, Programme Officer of the Embassy of Norway in Zambia welcomed the participants on behalf of the Ambassador. Both stressed the importance of Farmers' Rights for the conservation and sustainable use of plant genetic resources for food and agriculture. In her opening address, Ms Angela Hilmi, Senior Officer of the Secretariat of the International Treaty on Plant Genetic Resources for Food and Agriculture, highlighted central elements of Farmers' Rights, their importance for the implementation of the Treaty, and types of action that the Governing Body may initiate to promote compliance with its provisions, including those on Farmers' Rights.

Ms Grethe Evjen, Senior Adviser of the Ministry of Agriculture and Food, Norway, gave an introduction about the consultation, before Mr Godfrey Mwila, Principal Agricultural Research Officer of the Zambian Agricultural Research Institute under the Ministry of Agriculture, Food and Fisheries, Zambia, invited the participants to present themselves and exchange views on their hopes and expectations for the workshop. It was noted that participants hoped the consultation would provide substantial input to the Governing Body, that consensus could be reached on central aspects, and that common ground for necessary action could be developed. They hoped to share experiences and learn more about Farmers' Rights and how to promote them, and they wished to ensure that Farmers' Rights are addressed within the context of farmers' basic needs. Thanks not least to the active engagement of the participants, these expectations were all met in the course of the consultation.

2.1 Understanding Farmers' Rights

The first session was devoted to mapping different perceptions and identifying elements of a common ground of understanding regarding the contents of Farmers' Rights. As an introduction to the discussion, Ms Regine Andersen (Senior Research Fellow of the Fridtjof Nansen Institute in Norway) gave a presentation based on the findings from the Farmers' Rights Project, an international project aimed at supporting the implementation of Farmers' Rights under the Treaty¹. As part of the ensuing discussion, Mr Bert Visser (Director of the Centre for Genetic Resources, the Netherlands, CGN) presented a paper he had written together with Mr Niels Louwaars, Senior Policy Officer of the CGN. A summary of the two presentations is provided here, followed by a summary of the discussion.

Regine Andersen highlighted the crucial importance of Farmers' Rights for the conservation and sustainable use of plant genetic resources for food and agriculture in general and for poverty eradication in developing countries. She explained that the idea of Farmers' Rights emerged from the debate on intellectual property rights to plant genetic resources in the early 1980s, and how it was addressed in the FAO during the negotiations related to the 1983 International Undertaking on Plant Genetic Resources, the first documented mention being in 1986. Farmers' Rights were first recognized internationally by the FAO Conference in 1989 (Resolution 5/89) and are now part of the International Treaty. Article 9 is devoted to Farmers' Rights and recognizes the enormous

¹ For more information about the Farmers' Rights Project, see www.fni.no/farmers/main.html

contribution of farmers to genetic diversity. It goes on to state that the realization of Farmers' Rights is the responsibility of the countries. Certain measures are suggested, covering the protection of traditional knowledge, equitable benefit-sharing, participation in decision-making and the rights of farmers to save, use, exchange and sell farm saved seed. These are only suggestions and no definitions. Also other provisions are relevant for Farmers' Rights, among them Articles 13.3 and 18.5 on benefit-sharing and funding strategy, which stipulates that resources should flow primarily to farmers who contribute to the conservation and sustainable use of plant genetic resources.

From the history and present perceptions on Farmers' Rights, two perspectives are prevalent: the ownership approach and the stewardship approach. The ownership approach stems from the debates under the Convention on Biological Diversity and can be seen as a reaction to the emergence of intellectual property rights. It refers to the right of farmers to be rewarded for genetic material obtained from their fields and used in commercial varieties as incentives for further maintenance of these resources. Access and benefit-sharing legislation and farmers' intellectual property rights are suggested as measures. The stewardship approach (the term refers to the maintenance and innovation of genetic resources) stems from perceptions from the early days of FAO negotiations where Farmers' Rights were discussed not as individual or community rights, but as the rights of entire peoples. This approach refers to the rights that farmers must be granted to enable them to continue as stewards and innovators of genetic diversity. The idea is that the legal space required for farmers to maintain this role must be upheld or expanded, and that farmers must be rewarded and supported for their contribution to the global genetic pool. It is probably possible to combine the two, but there is also a latent conflict between them. For the purpose of implementing of the International Treaty, the stewardship approach represents a guiding principle. Countries wishing to follow the ownership approach are advised to ensure that this is also in line with the stewardship approach.

Based on a broad international survey on Farmers' Rights, the lowest common denominator of shared understanding comprises three elements: (1) farmers' customary rights to save, use, develop, exchange, and sell plant genetic resources; (2) their legitimate rights to be rewarded for their contributions to the global genetic pool; (3) their rights to participate in decision-making on these issues. Following from these three 'minimum' elements, a long list of required action measures can be, including the following: assessing and amending legislation that restricts farmers' legal space; creating support mechanisms and scaling up support activities for farmers; creating awareness among farmers and decision-makers on the importance of farmers' participation in decision-making regarding Farmers' Rights.

Bert Visser noted that Farmers' Rights originate from differing motivations:

1. equity between the users in the North and the suppliers of genetic resources in the South;
2. codification of the "law of the land" regarding seed handling, which is necessary because of encroaching (intellectual property rights and seed) regulations;
3. making a contribution to the conservation of genetic resources;
4. balancing of intellectual property rights;
5. a moral right related to traditional knowledge pertaining to genetic resources.

A certain level of agreement may exist between many stakeholders and Contracting Parties to the Treaty on several interpretations of the concept of Farmers' Rights. Such consensus appears to include the following aspects:

1. Implementation and operationalization of Farmers' Rights is a national responsibility.
2. Farmers' rights should not be considered a form of intellectual property rights, but in stead represents a far broader concept of recognition of the contributions of farmers, protection of farmers' knowledge and seed systems, and involvement of farmers in decision-making, in addition to the right to benefit-sharing.

3. Farmers' rights in the context of the International Treaty are group rights in a wide sense, since they refer to the contributions of local and indigenous communities and farmers of all regions of the world, particularly those in the centres of origin and crop diversity, and since access and benefit-sharing have been de-linked in its Multilateral System.
4. Benefits shared in the context of the Multilateral System of the International Treaty should primarily, directly and indirectly, flow to farmers, who conserve and sustainably utilize plant genetic resources for food and agriculture.
5. Therefore, the Governing Body and the Contracting Parties have the responsibility to develop the funding mechanism of the International Treaty in such a way that it maximally reaches farmers, both as compensation and as a condition for continued contributions to the conservation and sustainable development of plant genetic resources for food and agriculture.

Although the International Treaty declares Farmers' Rights to be a national responsibility, the Governing Body still has a role to play in guiding the operationalization of these rights at the national level, given the current lack of experience and the many challenges still facing the implementation of farmers' rights. In particular, further study is needed on the negative effects of intellectual property rights and access and benefit-sharing regimes on local seed systems. Ways to mitigate and prevent such effects should be explored.

Discussion:

For farmers, their way of life is intrinsically linked to access to land, water, and other input factors such as labour, knowledge, and technology, in addition to seeds and other propagating material. This might be one of the reasons why it has been difficult to reach a common definition of Farmers' Rights that easily communicates with farmers and other relevant groups. Participants agreed, while it is important to recognize the broader context, it is important to focus on Farmers' Rights as set out in the International Treaty on Plant Genetic Resources for Food and Agriculture. That said, it is also important to embed the realization of Farmers' Rights in the realities and needs of farmers.

Participants at the consultation held varying views on the content of Farmers' Rights. However, also a common views were developed during the discussion. Participants felt that the emphasis on the implementation of Article 9 needed to be seen in context with the implementation of related provisions of the International Treaty which are central for the implementation of Farmers' Rights – and for which Farmers' Rights are crucial, in order to ensure their implementation. In particular, the interlinkages with the following Articles were emphasized:

- Article 5 on Conservation, Exploration, Collection, Characterization, Evaluation and Documentation of Plant Genetic Resources for Food and Agriculture
- Article 6 on Sustainable use of Plant Genetic Resources
- Article 7 on National Commitments and International Co-operation
- Article 8 on Technical Assistance
- Article 13 on Benefit-sharing in the Multilateral System
- Article 14 on the Global Plan of Action
- Article 18 on the Financial Resources

In addition it was suggested to explore with other international bodies, including human rights bodies and bodies working for indigenous peoples' rights, how to join forces for the implementation of Farmers' Rights.

There was broad consensus that the objective of Farmers' Rights is to maintain diversity for the benefit of farmers – and ultimately for the benefit of humanity. Furthermore, upholding and widening legal space for farmers to continue their contributions to the global genetic pool is vital to the implementation of the International Treaty as well as to food security in the world, and most urgently among the poor. For this purpose it is important to balance the formal and informal seed

sector in terms of legislation and policy, and in this context also to take into account the spectrum from very informal to very formal activities in terms of seed production and distribution systems. Farmers' Rights should be understood on the basis of farmers' practices. It was stressed that farmers' participation in decision-making on this topic – at all levels – is crucial.

2.2 Farmers' contribution to the conservation and sustainable use of crop genetic resources

The objectives of the Second Session were to highlight how, more exactly, farmers contribute to the conservation and sustainable use of plant genetic resources for food and agriculture, and to start the discussion of steps needed at the national level to ensure the continuation of this contribution.

Experiences from three regions were presented by Mr Alejandro Argumedo (Director of the Quechua-Aymara Association of Sustainable Livelihoods, Cuzco, Peru), Mr Pratap K. Shrestha (Executive Director, Local Initiatives for Biodiversity, Research and Development, LI-BIRD, Nepal) and Ms Wilhelmina, R. Pelegrina (Executive Director, SEARICE, the Philippines). These introductions were followed by preliminary discussions before the group visited a near-by village to learn from the farmers there about their own experiences.

Alejandro Argumedo gave an introduction on Andean farmers' contribution to potato diversity in the world, as well as to diversity in other crops. In Peru, farmers have developed complex, dynamic systems of farming, using crop diversity to adapt to recurrent changes in climate. This is due to the El Niño phenomenon, which has been known for hundreds of years, resulting in dynamic systems of crop adaptation to such change. Diversity maintenance creates resilience in these farming systems. Global change makes it increasingly important to maintain these systems, which are extremely valuable in light of the current rapid climate changes. As custodians of agricultural biodiversity, the maintenance of these vital resources depends crucially on farmers.

Argumedo highlighted that culture cannot be separated from the discussions on genetic diversity and the future. In his culture, potatoes are at the heart of everyday life, as in spiritual rituals. Genetic resources are more than food. However, with globalization, the situation for farmers is rapidly changing. New legislation, particularly trade laws, have impacted on small-scale communities and reduced collective rights, such as land rights, in turn affecting land use and genetic diversity in the fields. Collective land rights have functioned well for hundreds of years in Indian communities, but are now increasingly replaced by other types of laws. It is evident that trade agreements have given more power to very small elites. In recent years new technologies, including GMO, have come to represent a huge challenge for small-scale farmers seeking to maintain plant genetic diversity. It is thus particularly important to promote local economies based on diversity and to encourage customary uses of seeds, and as necessary amend legislation for this purpose. Farmers' Rights should basically be developed on this fundament. In Cuzco, erosion in potato varieties was a huge problem until recently. In the meanwhile farmers have repatriated approximately 300 potato varieties from the Cuzco Potato Park, and thus brought diversity back into the fields. This has led to a revival of traditional practices associated with the repatriated potato varieties as well as of cultural life. Thus the revived potato varieties add to diversity not only in terms of genetic resources, but in terms of culture and knowledge. This has in turn led to empowerment among farmers, not least due to the fact that many of the old varieties are now back in the hands and fields of farmers.

Pratap K. Shrestha presented a paper on experiences from Nepal. He told that some 80 percent of the people of Nepal depend on farming for their livelihoods, and that a majority of these cultivate and use a wide diversity of local crops and crop varieties. They are custodians and innovators of these resources which contribute to food security in the country. Shrestha showed beautiful pictures

from Nepal, illustrating the rich cultural and genetic diversity and the complex farming systems on which this all depends. Several measures have been initiated to implement Farmers' Rights in Nepal at farming community level. Shrestha explained how community-based mechanisms for the implementation of Farmers' Rights have been developed, involving the Nepal Agricultural Research Council, farming communities, Bioversity International, donor agencies and at the initiative of his own organization, LI-BIRD, including:

- developing community biodiversity registers for plant varieties as a mechanism for documentation and registration of community plant genetic resources and associated knowledge to establish Farmers' Rights to these resources, i.e. ownership, and access to and benefit sharing from the use of the genetic resources;
- promotion of community seed banks, established and managed by the farming communities themselves, as a mechanism to secure seeds within the hands of farmers, promote on-farm conservation and facilitate access and benefit sharing;
- models for community participation in decision-making on issues of on-farm conservation and utilisation of plant genetic resources, such as value addition, marketing, and participatory plant breeding, which have been an important instrument in the efforts to promote Farmers' Rights;
- promoting Participatory Plant Breeding (PPB) and farmers' breeding to broaden the genetic base, increase choices of plant varieties and establish Farmers' Rights over new varieties;
- some plant varieties resulting from this work have proven particularly successful, and have been formally registered, establishing ownership;
- using a value chain approach, for marketing of local plants and plant products, as a mechanism for creating economic incentives for on-farm conservation of community genetic resources;
- capacity building of farmers and farming communities by supporting rural institutions and involving all farmers of the community in the decision-making process;
- linking community actions on conservation and utilization of plant genetic resources with policy lobbying and change. For example LI-BIRD contributed in the formulation of National Agricultural Biodiversity Conservation Policy, and is contributing to the review of the Plant Variety Protection and Farmers Right Bill and the Access and Benefit-Sharing Bill ensuring provisions for Farmers Rights;
- establishing a Community Biodiversity Fund for the realization of Farmers' Rights.

These efforts have proven to increase access to good seed and propagating material, add value to plant varieties, improve the marketing potential, empower farmers and farming communities to participate in the decision making process, bring policy changes as well as to ensure recognition of the contribution of farmers to food security.

Wilhelmina R. Pelegrina presented a paper on experiences from Bhutan, Lao-PDR, Thailand, Philippines and Vietnam where SEARICE has carried out extensive work to support and promote the realization of Farmers' Rights. Her presentation provided insights into the differing framework conditions for the realization of Farmers' Rights in countries as diverse as these, particularly in terms of political systems and histories. Nevertheless, many features are common. For example, farmers' systems for the conservation and sustainable use of plant genetic resources are in constant development, driven by environmental challenges, consumer preferences, cultural motivation and not least the farmers' own expertise. This is the foundation for farmers' contributions to the global genetic pool, and thus an important basis from which to derive Farmers' Rights.

Pelegrina gave a range of examples of farmers who maintained and developed large numbers of plant varieties in their fields in the various countries. She stressed that farmers are often breeders and innovators of plant genetic diversity. In this context she spoke of the comprehensive participatory

plant breeding efforts carried out by SEARICE, which have borne considerable fruits. For example, farmers in North Cotabato, the Philippines, have developed 120 varieties of rice of local adaptation and preferences, which are considered to perform better than the commercial varieties offered to the farmers. In the Mekong Delta, similar efforts are carried out to strengthen farmers' seed systems, and esteemed by local government authorities as an important mitigating measure to counter the potential negative effects of trade liberalization for the rice industry. Pelegrina also highlighted that the legal space for farmers' customary practices in the countries where SEARICE is working is rapidly decreasing. She stressed how important it is to safeguard and extend legal space by reviewing current national seed laws, biosafety regulations and other laws and regulations in order to protect farmers' customary rights to save, use, exchange and sell seeds.

Sugiono Moeljopawiro (Senior Staff Scientist, Indonesian Centre for Agricultural Biotechnology and Genetic Resources Research and Development, Ministry of Agriculture, Indonesia) had prepared a presentation for the ensuing discussion, and focused on the relations between farmers and breeders. In Indonesia, a balance has been sought between the formal and informal seed sector by allowing differing criteria for variety release. For the formal sector, DUS-criteria are used (Distinct, Uniform and Stable); for the informal sector, VCU-criteria are used (Value for Cultivation and Use). Furthermore, legislation stipulates that professional breeders must apply for access to land races and farmers' varieties, and must ensure arrangements for equitable benefit-sharing before such varieties are used in commercial varieties. On the other hand, farmers are not allowed to share seeds of protected plant varieties, although they can use farm-saved seed on their own holdings. As a result of these and other measures, improved local varieties have been released by farmers, and breeders have increased the rate of variety release, Moeljopawiro explained. To date, some 280 land races and local varieties have been released.

Leontino Taveira (Advisor, Ministry of Agriculture, Livestock and Food Supply, Brazil) followed up on this and explained the situation in Brazil, where varieties can be released for sale if they are registered in the National Cultivar Registry. This can be obtained by simply filling out a form, and paying a 75 dollars fee (no further payments are required ever again) and presenting the form to the National Register Service. There is one more requirement for the twenty most important crop species: to present the results of Value for Cultivation and Use – VCU trials. VCU trials normally consist of a simple description of the main morphological characteristics of the plant, as well as other relevant traits, such as pest resistance, disease tolerance, productivity and any other relevant information that there may be. Such trials are as simple as any other agricultural experiment that compares the applicant variety with a couple of other well known varieties and could therefore be easily carried out by any extension service agronomist.

Once there is commercial interest in official certification of the varieties, a certification procedures can be established for the purpose. But still, even species without the possibility to be certified can be commercialized simply by having a Technical Responsible, usually an agronomist, guaranteeing that the seed complies with the existing levels of seed purity and quality. Brazilian farmers can freely exchange seed within their traditional context as established in the Brazilian seed law. Taveira suggested that the Governing Body could stimulate countries to explore their existing legal space in order to provide for the registry of traditional varieties and thus enabling such varieties to be legally and formally commercialized. This would enable farmers to have an extra income by producing seeds.

Visit to Shikunu village

The whole participant group went to visit a farming community near by, the Shikunu village, to learn about the villagers' experiences and views on issues related to cultivation, seeds and Farmers' Rights. There was a warm welcome with dance and song.

Village spokeswoman Ms Loveness enumerated all the species grown in the village and explained the general features of agriculture in the area, where lack of water is the greatest problem. In recent decades, there has been less rainfall, and ground water is decreasing. The farmers produce most of their seeds themselves, but add hybrid seeds of maize from the market if they can afford to do so. The advantage of the hybrid seeds is that the plants need a shorter maturing period than do the local varieties. Thus, if the rains are short, the crops from hybrid seeds may have better prospects. However, these crops have little resistance to pests and diseases, whereas the local varieties are much stronger. Also the seeds from local crops can be stored better for the next season. For these reasons, the farmers seek to grow own varieties as well as commercial ones – in order to spread risks. They are careful not to interbreed local varieties with commercial ones, as they do not want the positive properties of the local varieties to be diminished by modern varieties.

Loveness explained how the farmers select seeds for the next season and what qualities they look for. Size is important. The seeds are mixed with ashes and stored in baskets to protect them from pests and diseases. Ashes are also used as pesticides. She told about conservation farming practices, where seeds are sown in manured soil and watered by hand in order to ensure the next generation of plants. Seed exchange is crucial in the farming community. The farmers exchange seeds among themselves and with farmers from nearby and more distant villages. Most of the production is for own consumption. If there is a surplus, some of it is also sold at the nearby market.

Extension services had previously functioned well but were now close to non-existent. The farmers missed this support and requested influence on decisions related to agriculture. They appreciate help from NGOs.

On a direct question on how they feel about Farmers' Rights as a concept emphasizing plant genetic resources rather than other concerns, they answered that they are happy with the concept because if these rights are realized, they will have a positive impact on their livelihood. They emphasized that this could help improve their seeds and empower farmers, which are considered important factors for progress. They also stressed that the seeds issue is interrelated with other issues, such as lack of water, land rights, need for different types of livestock (they had lost many animals due to previous a disease), difficult seed storage conditions and health issues, such as HIV.

Discussion

A central rationale for Farmers' Rights is the vital contributions of farmers as conservers, breeders and users of crop diversity. Participants stressed the importance of documenting in detail how farmers contribute to uphold genetic diversity and to adding value to local varieties of crops. Such documentation would be central in demonstrating the crucial importance of Farmers' Rights for farmers' further contributions to the global genetic pool.

Many participants stressed the strong link between farming societies, their culture and traditions, and their plant varieties and the local agro-ecology. Various proposals were offered for how national or local governments could support or build on traditional knowledge in the implementation of Farmer's Rights at the local level. Ideally, farmers' varieties and associated knowledge should be documented and seeds stored in gene banks, in order to ensure that these valuable resources do not become extinct. However, several participants expressed concern about the legal situation of the traditional knowledge, including local varieties in light of such documentation and collection. There is widespread concern that local communities should not lose control of their plant genetic resources.

The dilemma between sharing traditional knowledge to avoid extinction – and protecting it from misappropriation –. However, some activities were suggested, :

- supporting farmers in registering their varieties as a measure to establish prior art related to intellectual property rights
- helping to turn registers into legal documents, while not implying that they thereby become intellectual property rights
- preventing the spread of legal, commercial and technological measures that restrict customary use of seeds and other propagating material.

Opinions differed as to whether the distinction between formal and informal sector was useful with respect to the implementation of Farmers' Rights. Some argued that it ought to be an objective to formalize all seed use and exchange, whether by farmers or by seed companies. Other stressed that the Governing Body should balance the interests of formal and informal sector in terms of policy, and to link the two sectors. It was also pointed out that there is a broad spectrum between the most formal and informal activities within the seed sector, and that a more diversified picture would be useful. Participants were concerned about farmers' 'legal space', to use the term coined by Regine Andersen in the first session: It is urgent to ensure that the rights of farmers to continue their customary practices of saving, using, exchanging and selling their seeds are upheld and expanded.

2.3 Realization of Farmers' Rights: status and key issues

The objectives of the Third Session were to provide an overview over the state of realization of Farmers' Rights and derive key issues to be addressed in order to make further progress. Ms Regine Andersen (Senior Research Fellow at the Fridtjof Nansen Institute) presented highlights from an international stakeholder survey on Farmers' Rights with an overview over the state of their realization – as well as barriers and options. Three ensuing presentations addressed key issues related to the four measures suggested in Article 9 for the realization of Farmers' Rights. Ms Maria Mayer de Scurrah (President of Grupo Yanapay, Peru) gave a presentation on key issues regarding the protection of farmers' traditional knowledge (Art. 9.2.a), based on experiences from Peru. Mr Bert Visser (Director, Centre for Genetic Resources, Netherlands, CGN) highlighted key issues regarding equitable benefit-sharing (Art. 9.2.b), Mr S. Bala Ravi (Senior Advisor, M.S. Swaminathan Research Foundation, India) spoke on key issues regarding farmers' participation in decision-making (Art. 9.2.c) and the rights that farmers have to save, use, exchange and sell seeds and propagating material (Art. 9.3). Finally, Mr Arthur Nkonde (Director, Biodiversity Community Network, Zambia) provided a civil society perspective from Zambia and Southern Africa on the realization of Farmers' Rights. On the basis of these introductions, the participants discussed issues which could be addressed in the Governing Body.

Regine Andersen's presentation showed that despite the huge challenges ahead, efforts are already underway with regard to all measures addressed in the provisions on Farmers' Rights in the International Treaty (Articles 9.2 and 9.3). This indicates that there is already an opportunity for learning and for deriving models and success stories. The international survey highlighted that Farmers' Rights are an issue of central importance in countries where the majority of the population lives in rural areas and bases their livelihood on farming – and particularly so when farming systems are based on traditional varieties, as in most developing countries. In Northern countries, Farmers' Rights concern a much smaller segment of the population. The following is a brief overview over the state of realization of Farmers' Rights according to the measures suggested in Article 9:

- Many countries of the South have taken into account the protection of farmers' traditional knowledge relevant to Plant Genetic Resources for Food and Agriculture in laws pertaining to the protection of biological diversity in general, in regulations on access to genetic resources, or in laws pertaining to indigenous peoples. Whereas such legislation is more

related to the ownership approach to Farmers' Rights (see first presentation of Regine Andersen above), there are also several measures which fall under the stewardship approach. These are typically about documentation, maintenance of the knowledge and activities related to gene banking.

- In the South there are many examples of policies on benefit-sharing, normally provided for in various forms of legislation, most notably laws and regulations on access to biological resources. All the same, so far there have been no examples of direct benefit-sharing between purported 'owners' and buyers of plant genetic resources for food and agriculture, as a result of such legislation. Farmers generally participate more or less in the sharing of *non-monetary* benefits (indirect benefits), such as access to seeds, participatory plant breeding, conservation activities, and enhanced utilization of farmers' varieties. The survey shows that – for many reasons – benefit-sharing is more promising when taking the farming communities that actually contribute to the maintenance of plant genetic diversity as points of departure, rather than when seeking to identify farming communities who have developed particular varieties of plants that are used in commercial breeding.
- Participation of farmers in decision-making processes seems to be marginal in the South and more common in the North. However, farmers in the North claim that their influence has been decreasing, due to their countries' commitments to international agreements.
- Farmers' customary practices of saving, using, exchanging and selling seeds are increasingly affected by regulations on plant breeders' rights and on the certification of seeds for sale. Restrictions are strictest in the North, coming quite fast in Asia and Latin America and are least strict in Africa. In countries in the South there are generally wider exemptions for farmers in regulations of plant breeders' rights than in the North.

The international stakeholder survey highlights key barriers to the realization of Farmers' Rights: lack of awareness among farmers and authorities; political and economic barriers due to the current agricultural paradigm which is not conducive to sustainable management of plant genetic resources; poor, weak or contradictory legislation; external pressures on government policies; NGOs not being sufficiently attentive to Farmers' Rights, or not creative and active enough. Capacity-building was highlighted as central means to overcome these barriers. Several suggestions were made as to what the Governing Body can do to assist and guide countries in their realization of Farmers' Rights.

Maria Mayer de Scurrah gave a presentation on the issue of traditional knowledge related to plant genetic diversity. As her point of departure, she circulated a beautiful and impressive catalogue of potato varieties which combines modern technology (molecular information on each plant) with indigenous knowledge. The federation of Andean communities of Huancavelica has signed a clause of "Informed Consent", by which the farmers have agreed to put their varieties in a catalogue, knowing that this then makes the knowledge "public". This is a legal clause and people find it very important, and that it complies with the law that protects indigenous knowledge. Once in the catalogue, a variety cannot be appropriated by third parties. Cataloguing in this way is a highly promising way to protect traditional knowledge from extinction and ensure its further use. Using diversity, she stressed, is the key to ensuring the maintenance of traditional knowledge.

Experiences from Peru show that farmers' varieties can be superior to certified propagating material. During Farmer Field School demonstrations of certified propagating material, farmers' material has often proved to be equally good or better than the certified material. However, the seed laws of Peru prohibit the sales of non-certified seed and propagating material, and the requirements for certification are mostly not applicable to indigenous varieties. Thus, in practice it is not allowed to sell such propagating material on a commercial basis. So even though it is illegal to call indigenous seed for "seed", according to the seed law, this shows that Peruvian farmers' knowledge of seed production is better than the formal "science based seed system", Scurrah stressed. This is further demonstrated by farmers keeping old improved varieties that have disappeared in the formal system.

Scurrah furthermore showed a movie from a seed fair where farmers displayed 300 varieties of potatoes and distinguished between them.

Due to the ongoing genetic erosion, and with it, the erosion of traditional knowledge, it is vital that traditional knowledge is protected against extinction. An important way to ensure this would be to allow such farmers' varieties to be registered for commercial sale. This is not possible in Peru now, due to strict registration rules and the genetic heterogeneity of most farmer varieties. However, as the interest for coloured potato chips recently increased, exceptions were made for relevant coloured potatoes, and 50 varieties were admitted in the registry. It was made clear that this was a one-time exception, and should not become the rule.

Scurrah's proposal is that communities should register their own varieties, and submit completed registries to the authorities. For this effort, they should receive payment per variety and registration, thus rewarding the cultural preservation and shared knowledge. A fund for such a purpose could be established through the mining revenues of Peru. Such a system would ensure benefit-sharing and the recognition of farmers' contributions at the same time.

Bert Visser highlighted various types of benefit-sharing, monetary as well as non-monetary. For farmers, it is likely that – at least in the context of the Multilateral System of the Treaty – non-monetary benefit-sharing will be most important. He also distinguished between direct and indirect forms of benefit-sharing. Direct benefit-sharing might be realized by direct co-operation between farmers and users of germplasm, e.g. in the context of characterization or multiplication of germplasm. Indirect benefit-sharing might take the form of technology transfer to developing country public sector institutes aiming at improving farmers' varieties or livelihoods. Some quick gains can be imagined, as through the improvement of seed supply systems or the provision of local storage facilities, whereas long-term investments will be needed for other improvements, like more drought-tolerant crops stemming from breeding programmes.

The Treaty distinguishes three areas of benefit-sharing:

- Exchange of information, which may involve catalogues and inventories, information on technologies, and results of research relevant to plant genetic resources. This will normally not reach farmers directly, but the development of community registers of biodiversity and related knowledge in close collaboration with local communities, documenting their knowledge of plants and animals can help local communities to conserve their biological resources and facilitate community participation in access and benefit-sharing partnerships.
- Access to and transfer of technology, including access to materials and access to relevant technologies for the characterization, evaluation and utilization of plant genetic resources. This type of benefit-sharing can benefit farmers both directly and indirectly. In particular, access to proper breeding materials and well-adapted varieties often represents a bottle-neck for improving livelihoods in small-scale agriculture. Technology transfer may aim at new better-yielding varieties, new crops and varieties with different market opportunities, varieties with improved resistances, cleaned-up varieties free from viruses, and restoration of traditional varieties that have been lost or destroyed.
- Capacity-building, which may include programmes for scientific and technical research, education, and training in conservation and sustainable use of plant genetic resources, and for developing and strengthening relevant facilities. Participatory approaches, such as participatory variety selection and participatory plant breeding fall in this category and may directly benefit farmers.

Capacity-building involves hardware and software, infrastructure and knowledge. It represents a very open form of enhancing options for development, increasing the potential for future adoption of new technologies. Capacity-building is probably the most sustainable form of benefit-sharing.

Training is a central element of almost all capacity-building arrangements. Benefit-sharing arrangements should promote a structural and long-lasting relationship between stakeholders with the aim of increasing their impact on conservation and sustainable use of plant genetic resources. Promoting the effective use of new breeding products and production methods by farmers often requires a strengthening of extension services and non-governmental organizations and an attitude open to participatory approaches, to enable the optimal combination of communal knowledge with innovations from the formal sector.

The following measures might constitute early and readily achieved improvements to facilitate non-monetary benefit-sharing:

- the development of a Focal Point for Good Practices, also for direct co-operation with farmer communities.
- active provision of all relevant information to agencies wishing to contribute to benefit-sharing with farmers through non-monetary contributions.
- the strengthening of national capacities for needs assessments regarding the conservation and utilization of plant genetic resources.

Benefit-sharing with farmers can be considered a major goal of the Funding Strategy of the Treaty. Article 18.5 of the Treaty provides guidance as to the beneficiaries of the Funding Strategy, stating that “priority will be given to the implementation of agreed plans and programmes for farmers in developing countries, especially in least developed countries, and countries with economies in transition, who conserve and sustainably utilize plant genetic resources for food and agriculture”. In supporting efforts at *in situ* management, the Governing Body may consider as priority areas to scale up current support for farmers and local communities through novel approaches, and - in addition - to take into account the importance of creating or enhancing markets for the products of local diversity. Active support for the maintenance of associated local and indigenous knowledge should be included. Support measures for *in situ* management should focus in particular on those crops that are poorly represented in genebank collections, and that experience a decreasing social status and minor attention in breeding and selection programmes. Against this background, the Ad Hoc Advisory Committee on the Funding Strategy of the Treaty has identified a limited number of priorities for which the funds under direct control of the Governing Body should be used for, i.e. on-farm management and conservation of plant genetic resources, as well as capacity development.

S. Bala Ravi started out by stating that there are two fundamental requirements for the realization of Farmers’ Rights at national and international levels: (1) the right to save, use, exchange and sell farm-saved seeds and other propagating material; and (2) the right to participate in decision making regarding the use of plant genetic resources for food and agriculture. In light of the commercial agriculture, which drives the rapid genetic erosion world-wide, these rights are vital to create balance between the formal and informal seed sector and thus ensure the conservation and sustainable use of plant genetic resources. Not the least, it is crucial to ensure food security among the rural poor. Bala Ravi highlighted that farmers’ participation in decision making also means participation in decisions on benefit sharing. He expressed concern that the stewardship approach to Farmers’ Rights would not sufficiently address this element of participation. Farmers’ Rights should not only be group rights, but also individual rights to farmer breeders, who either collectively or individually improve, by innovation, cultivate and conserve genetic resources. He thus advocated an ownership approach where farmers, on equitable and fair deals, are entitled for intellectual property rights to their varieties as much as these rights are awarded to breeders.

On this backdrop, Bala Ravi presented the salient features of Farmers’ Rights provided in the Indian Protection of Plant Varieties and Farmers’ Rights Act of 2001, which is the first of its kind in the world in respect of Farmers’ Rights. The Farmers’ Rights in this Act arise from recognition of the fact that farmers are cultivators, conservers and breeders. The three direct rights provided in this act

are plant breeders' rights, Farmers' Rights and researchers' rights. The legal scope of Farmers' Rights and Researcher's Rights is different from the exception to farmers and breeders provided under the UPOV Convention. Intellectual property protection through registration is given for farmers' varieties (to farmer individuals, groups or communities), extant varieties and for new varieties of plants. The extant varieties including varieties currently in commerce, in common knowledge and farmers' varieties are given one time opportunity for registration, which is within a period of three years from the date of notification of the species for registration. For commercial varieties DUS-criteria are used (distinct, uniform and stable), whereas relaxed DUS-criteria are being considered for extant farmers' varieties. All new varieties also have to satisfy novelty requirements. A farmers' variety is a variety which has been traditionally cultivated and evolved by the farmers in their fields, or which is a land race or wild relative, about which the farmers possess common knowledge. Farmers are granted nine rights under the act: (1) the right to save, use, sow, re-sow, exchange, share or sell farm produced seed, including the seed of registered varieties (as long as they are not sold with their brand); (2) the right to share benefits when farmers' varieties are used for the breeding of new commercial varieties; (3) The right to farmers and communities to receive reward and recognition for conserving plant genetic resources (since 2007, the Protection of Plant Varieties and Farmers' Rights Authority has institutionalized a Genome Saviour Award); (4) the right to get adequate supply of seed of registered varieties at reasonable prices; (5) the right to claim compensation for seeds of registered varieties that do not perform according to the agronomic superiority of the seed claimed by breeders; (6) the right to register farmer's varieties including new varieties developed by farmers; (7) in the event of an essentially derived variety developed from a farmer's variety, it is not allowed to commercialize this variety without consent from the concerned farmer or farming community; (8) exemption to farmers from paying all fees related to administrative and judicial proceedings under the Act; and (9) judicial protection to farmers against innocent infringement of the Act.

The Indian Act provides the first comprehensive example of how Farmers' Rights to customary uses of seeds and participation in decision making can be realized in practice. Bala Ravi concluded that strong Farmers' Rights are necessary in developing countries, particularly in those having rich agrobiodiversity. The Indian act also provides for a National Gene Fund to support conservation of agrobiodiversity.

Arthur Nkonde started out by explaining the process leading up to the 34th OAU summit, held in Ouagadougou (Burkina Faso), in July 1998, at which the *African Model Law on the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Genetic Resources* was endorsed and recommended for the development of national policies and legislation. Civil society organizations were active in this process, as well as promoting the adoption of regulations at the national level afterwards, using the African Model Law *inter alia* for the realization of Farmers' Rights. Civil society organizations engaged in the area of Farmers' Rights have found that capacity-building is a key to progress. Capacity-building is particularly needed in the following areas:

- national policy and legal framework relevant for Farmers' Rights
- national programmes on plant genetic resources
- the role of civil society organizations (including farmers organizations)
- farmer participatory research and extension (on-farm)
- education and public awareness
- training and skills development among farmers
- network support services (information, inputs, market channels, etc.),
- ensuring financial support to agriculture (the famous 10% of national budgets)

In view of the threat of genetic erosion and loss of related traditional knowledge, a key challenge for civil society organizations, particularly with reference to the *Community Biodiversity Development and Conservation* (CBDC) programme, is to continue to sensitize, train and strengthen participatory plant-breeding activities among resource-poor farmers to ensure the diversity of *ecologically-adapted* crop landraces (farmers' varieties), as in past generations. Farmers' Rights empower marginalized resource-poor farmers as main actors in local farming systems. If national Farmers' Rights policy and legal frameworks are to be effective, a necessary precondition is building capacity to support farmer organizations, government agencies, policy-makers, NGOs and private sector with regard to technical information, skills, methods and national processes.

Discussion

The ensuing discussion dealt with many aspects raised in the introductions. An important question was why countries have not developed regulations better adapted to their situations. When seed legislation in countries excludes traditional varieties from registering and thus from the official market, it is not beneficial to farmers in the country nor to the maintenance of agricultural biodiversity. Some participants claimed that the access and benefit-sharing systems derived from the Convention of Biological Diversity are also based on Western law, and not on customary practices among farmers.

Participants were impressed by the catalogue of potato varieties from the Andes that was circulated by Maria Scurrah de Mayer. However, concern was also voiced as to whether this information was now available also to commercial users – without benefit-sharing arrangements for farmers. Legal protection had been secured, Scurrah explained. Participants agreed on the importance of this documentation work, but also expressed regret that it should be necessary to be so cautious with such activities due to the fear of misappropriation. This fear basically hampers conservation work aimed at enhancing farmers' varieties and strengthening their seed systems –which is crucial to the future of our plant genetic heritage. On this background, opinions differed as to whether the idea of community registering is an appropriate approach. These differences were acknowledged and appreciated.

Funding was seen as a key issue for the realization of Farmers' Rights. It was suggested that the relations between Articles 9, 13 (Benefit-sharing under the Multilateral System) and 18 (Funding Strategy) be explored with a view to their potential for supporting the realization of Farmers' Rights. This could be an issue which the Governing Body might wish to examine further.

Participants highlighted the importance of clarifying what Article 9.3 actually contains, as its formulation on the rights that farmers have to save, use, exchange and sell seeds and propagating material are somewhat vague.

On the basis of this and further discussion, a list of key issues of importance for the realization of Farmers' Rights was developed – with a view to topics relevant for discussion in the Governing Body.

Key issues related to the protection of traditional knowledge (Article 9.2.a):

- The Governing Body should encourage the recognition of farmers' varieties through legislation that promote farmers conservation, sustainable use, improvement and exchange of such varieties.
- The Governing Body should encourage the development of a national framework on information management systems for traditional knowledge, according to the needs and priorities in the countries.
- The Governing Body should initiate the collecting of information on materials and associated knowledge obtained from farmers and used by private and public organizations in breeding processes at national and international levels.

- The Governing Body should request national public institutions through the respective Contracting Parties, and international gene banks to report back on what material has been provided to farmers and how they work towards creating awareness among farmers on what is available for them.

Key issues related to benefit-sharing related to Farmers' Rights (Article 9.2.b):

- The Governing Body may wish to establish a Focal Point for Good Practices.
- The Governing Body may wish to establish a Clearing House Mechanism to facilitate contributions from donors wishing to contribute to farmers' management of genetic resources.
- The Governing Body may wish to explore the possibilities of creating a linkage between Art. 9 and the Multilateral System (Art 13) as well as the Funding Strategy (Art 18) on benefits to flow to farmers.
- The Governing Body should identify key priority actions from the FAO Global Plan of Action relevant for the realization of Farmers' Rights, and prioritize action in these contexts.
- The Governing Body should recognize the importance of capacity-building as part of benefit-sharing.
- The Governing Body should take actual experiences with benefit-sharing (define good practices) as point of departure for developing guidance on benefit-sharing.
- The Governing Body should encourage awareness-raising and capacity-building on the content of Farmers' Rights.
- The Governing Body should encourage capacity-building on Farmers' Rights at the regional, sub-regional and national levels, including *inter alia* the conservation and sustainable use of PGRFA as well as related research.
- The Governing Body should encourage the strengthening of national capacities for needs assessments

Key issues related to the participation of farmers in relevant decision-making (Article 9.2.c):

- The Governing Body should ensure that farmers are involved in its work on Farmers' Rights.
- A Working Group on Farmers' Rights should involve farmers and provide for exchange of experiences.
- The Governing Body should encourage participation of farmers in decision-making processes at the national and international levels.

Key issues related to farmers' customary practices with seeds and propagating material (Article 9.3)

- The Governing Body should address the need to uphold and develop legal space for farmers' customary practices of using, improving, exchanging and selling seeds and to monitor development in this regard.
- In order to do so, it may wish to study and evaluate (1) how policies, legislation and technologies impact on local seed systems that in turn influence the current and future contributions of small-scale agriculture to the conservation and sustainable development of plant genetic resources; (2) how negative impacts can be mitigated or avoided by adjustment of policies, laws or implementing regulations; and (3) which international initiatives may facilitate such corrective measures. The results of such a study could be presented to the Contracting Parties, in order to facilitate implementation of Farmers' Rights at the national level.
- In these efforts, the Governing Body should recognise the diversity of seed production and distribution systems along the spectrum from very formal to very informal activities in order to promote balanced policy and legal frameworks and cooperation between different actors and activities, which are all important elements in the seed production and supply chain.

In addition it is important to explore linkages between the provisions of the International Treaty with a view to how Farmers' Rights can be implemented through other legally binding provisions, and how they can be implemented through Farmers' Rights. In particular:

- The relation between Article 9 and Articles 5 to 6 needs to be clarified
- It is important to identify key priority action areas from the Global Plan of Action with regard to conservation, capacity building and other measures.
- The Governing Body should establish a Working Group to clarify operational linkages between Articles 9.2(a) and 12
- The relation between Art. 9.3 and 12.3(e) should be clarified
- The Governing Body should address how to strengthen exchange of seeds (relation between Articles 9, 10 and 11).

2.4 Pooling resources for Farmers' Rights at the national level

The Fourth Session was devoted to the national realization of Farmers' Rights, and focused particularly on how to get stakeholders to join forces and pool their resources together. Topics included the role and contribution of NGOs; the role and contribution of breeders and researchers; possibilities for networking and pooling resources; and support measures from the North to the South, including development co-operation. Two introductions were given as basis for the discussions. Mr Andrew Mushita (Director, Community Technology Development Trust, CTD) gave a broad-based presentation on national level measures needed to realize Farmers' Rights, and Mr Tor Skudal (Programme Co-ordinator, Development Fund Norway) emphasized the role and contribution of NGOs, of breeders and researchers, possibilities for networking and the potentials for development co-operation.

Andrew Mushita stressed that developing countries and African governments in particular, should be pro-active in analysing and identifying short and long-term policy needs, gaps and priorities regarding the conservation and sustainable use of plant genetic resources. Ideally, policy priority needs should be developed within the context of signed and ratified international instruments such like the Convention on Biological Diversity, the FAO Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture and the International Treaty on Plant Genetic Resources for Food and Agriculture. Farmer's Rights should be formalized through national policy and legislative frameworks, institutionalized at the national level and implemented through specific local and national strategic action plans.

Farmer's Rights have been accepted by various regional and multilateral instruments, among them the Convention on Biological Diversity, the FAO-Global Plan of Action, OAU-African Model Law and the International Treaty on Plant Genetic Resources for Food and Agriculture. However, implementation has been left to the discretion of governments, and they often have limited technical capacity, expertise and resources. The process of formalizing Farmer's Rights should be facilitated through various strategies such as:

- national consultative processes leading towards the development of national policies and legislation designed to protect Farmer's Rights;
- amendment of existing national seed laws to incorporate Farmer's Rights;
- developing regulations to existing Agricultural Acts;
- regional rationalization and harmonization of Farmer's Rights policies and legislation;

- promoting national and regional networks for Plant Genetic Resources for Food and Agriculture;
- developing comprehensive information systems for plant genetic resources and monitoring the erosion of plant genetic resources;
- promoting public awareness on the value of plant genetic resources.

It is critical to adopt an inclusive and participatory approach involving all stakeholders in the process of national development of the required policies and legislative frameworks for Farmer's Rights. In this regard, several steps need to be taken into account in connection with pooling national resources towards the establishment of Farmer's Rights:

- establishing a National Co-ordinating Committee with representatives from key public, private and civil society organizations;
- undertaking sector-specific consultations related to issues of Farmers' Rights (agriculture, environment, scientists, policy-makers, local authorities, farmers' organizations, civil society, women's organizations, traditional practitioners and their leaders);
- developing a White Paper on Farmer's Rights, receiving comments, and consulting regional countries to ensure synergy, rationalization and harmonization;
- finalizing a Farmer's Rights policy and legislation

It is important to have appropriate and competent national institutions responsible for pooling resources towards the implementation of Farmer's Rights, such as:

- village/community-based agro-biodiversity management committees;
- district level agro-biodiversity management structures;
- National Biodiversity Authorities;
- National Registrar of Farmers' Rights and related officers.

Co-ordination is vital, for example through:

- building national networks of farmers and improving institutional and sectoral linkages;
- co-ordinating national priority setting related to on-farm agro-biodiversity conservation and sustainable use, access to farmers' varieties and benefit-sharing mechanisms;
- creating Farmers' Rights information management systems and data-bases.

Finally, a central challenge is to develop national strategic action plans for the implementation of Farmer's Rights, which can create:

- appropriate incentive measures for the conservation and sustainable use of plant genetic resources by farmers;
- comprehensive and elaborate inventory of plant genetic resources in the hands of farmers;
- affordable, viable and acceptable alternatives for livelihood survival beyond the existing national resource base.

Tor Skudal focused on participatory plant breeding and the farmer field school approach to managing plant genetic resources as ways of operationalizing Farmers' Rights. He stressed how extremely important it for development cooperation to take an active role in supporting such efforts.

Participatory plant breeding and farmer field schools are two central instruments to empower farmers. They serve to build confidence among farmers in terms of valuing their own knowledge,

taking an active role and responsibility in the development process and engaging with various actors in lobbying for their rights. Empowerment takes place at a range of levels:

- technological empowerment – farmers gain confidence in their own skills and knowledge and are able to build on these skills.
- economic empowerment – farmers’ livelihoods are strengthened.
- social/political empowerment – farmers working together in groups gain confidence to engage with extension services, government officials, etc., to ensure their rights and access to services they need.

Participatory plant breeding and farmers’ field schools have further advantages with regard to Farmers’ Rights:

1. They promote traditional knowledge through use – by recognizing it and giving it value – because it is acknowledged as an important and necessary contribution to the breeding process.
2. They promote participation. At a minimum, farmers participate in the breeding process, setting the goals for the breeding process and making sure that their needs are addressed.
3. They address benefit-sharing – farmers benefit from transfer of knowledge. At the end of the day, the farmers also get better seeds.
4. They promote the use of, and access to, plant genetic resources. Farmers participate actively in the entire breeding cycle and can freely use and exchange these seeds.

Participatory plant breeding and farmer field schools are in this sense also good ways to pool resources, both horizontally and vertically. By the latter is meant getting different stakeholders – e.g. farmers, breeders, extension workers, local government officials, donors – to work towards a common goal.

Skudal noted that, as was pointed out in several contributions earlier, participatory plant breeding and farmer field schools are important means to combat poverty, particularly since 75 percent of the 1.2 billion poorest people in the world depend on plant genetic diversity for their livelihoods. Thus, it should be crucial for development co-operation agencies to support such measures. Supporting Farmers’ Rights in this sense is a strategic approach for the Norwegian Development Fund in its efforts to promote development in rural areas – and to achieve the Millennium Development Goal 1 (*‘eradicate extreme poverty and hunger’*). It is particularly important to support projects that take an active approach in including all relevant stakeholders in the implementation process. Neither the Development Fund nor NGOs can scale up nationally – only governments can do this. If governments recognize that the farmer field school approach to managing plant genetic resources is filling important gaps, they will also be recognizing the principles of Farmers’ Rights.

For development co-operation agencies to engage in the promotion of Farmers’ Rights, a first important step is awareness-raising and information. It must be made clear that *in situ* conservation and sustainable use of plant genetic resources are vital to ensure food security in this age of climate change – to demonstrate the importance of Farmers’ Rights as a way to adapt food production to climate change. It could also be relevant to find out how much financial support gene-bank conservation and on-farm management receive respectively, as an argument to boost the marginal share for *in situ* on-farm conservation and sustainable use of plant genetic resources.

Discussion

The international stakeholder survey presented earlier showed that in all countries, stakeholders were able to identify other stakeholders with whom they could join forces in working for the realization of Farmers' Rights. There is probably a substantial potential for pooling resources in this sense.

The problem of legitimacy was discussed. Who are the groups, or people, who can legitimately represent farmers? This is difficult to know, and farmers' organizations do not always represent the farmers themselves. Another problem with involving farmers' organization is that they are often not so much involved in seed issues, but tend to focus on other issues important for farmers, like land rights, access to water etc. How can Farmers' Rights be communicated in such a way that farmers' unions recognize them as relevant?

Various problems with development co-operation were also highlighted, particularly the often very short time-horizon of many projects. Developing Farmers' Rights from below requires both time and patience. It is particularly important to anchor initiatives in national frameworks, or else they will soon die after the NGO and/or the donor leaves the area.

What matters is to scale up successful activities from the local level and to the national level. Also a national action plan could be developed on that background.

Participants agreed that current national and global trends in farming challenge, in various ways, traditional farmers' contributions to plant genetic diversity and to sustainable livelihoods. Several factors were presented as possible ways of upholding and strengthening Farmers' Rights at the national level:

- recognizing the need to protect a diverse resource base, including the diverse plant genetic resources sustaining economic growth;
- maintaining or creating a legal space allowing farmers to continue their seed-related practices, including the right to produce and reproduce, save, exchange and sale in non-branded form;
- promoting a local economy based on diversity, including systems for exchange and distribution of seeds;
- promoting conservation of local genetic resources through value addition and market promotion;
- generating and promoting international market access for niche products from local genetic resources;
- repatriating original and old varieties from gene banks;
- supporting farmers' organizations and recognizing their legal entity;
- promoting use of farmers' knowledge and skills in scientific technology and knowledge;
- providing technical assistance and capacity-building for conservation;
- promoting access- and benefit-sharing programmes for increased production, employment and income focusing on benefits to farmers;
- promoting access to new plant varieties for private and non-commercial use, and developing of new varieties;
- facilitating access and exchange of plant genetic resources through the Multilateral System;
- supporting farmers' organizations capacity to manage access and negotiate for benefit-sharing, and generating funds
- including participatory/farmer plant breeding as part of the national breeding strategy in order to complement institutional plant breeding;
- promoting the establishment of simple registrations procedures for seed varieties (without fee) of value for cultivation and use;

- introducing province- and national-level awards for farmer crop breeding and production, as a way of increasing the recognition of farmers' role in conservation and sustainable use of Plant Genetic Resources for Food and Agriculture;
- controlling and restricting GMOs and their products that affect agro-biodiversity, environment and human health;
- providing for participation of farmers in discussions of the Governing Body;
- carrying out country needs assessments;
- reporting on the implementation of Farmers Rights to the Governing Body;
- developing capacities at the national and local levels to realize Farmers' Rights.

After the discussion, the Zuba ni Moto Dance Ensemble and Kamoto Community Arts performed a brilliant theatre play on Farmers' Rights, developed specifically for this occasion and provided participants with beautiful glimpses of the rich cultural heritage of Zambia in terms of music and dance.

2.5 What can the Governing Body do?

The Fifth Session focused on the kind of measures the Governing Body can undertake in order to guide and assist Contracting Parties to the International Treaty in their implementation of Farmers' Rights. A particular concern was how to ensure a fruitful process. The first two introductions were given by experienced negotiators and delegates to the Commission on Genetic Resources for Food and Agriculture and the International Treaty Ms Elizabeth Matos (President, National Committee on Genetic Resources, Angola) and Mr Eng Siang Lim (Honorary research Fellow, Bioversity International-APO, Malaysia). Thereafter, Mr Robert Lettington (Policy and Legal Specialist, Bioversity) gave a presentation from a legal perspective. Finally, Mr Francois Meienberg (Programme Director, Berne Declaration, Switzerland) and Mr Patrick Mulvany (Senior Policy Advisor, Practical Action, Great Britain) provided an introduction from an NGO-perspective. In the ensuing discussion, the emphasis was on clarifying various positions and identifying elements of joint perception regarding what the Governing Body can do.

Elizabeth Matos stressed that the Governing Body should bear in mind that the majority of its Contracting Parties are developing countries. The largest regional group consists of African countries that became Contracting Parties on the expectation that the International Treaty would support their efforts for the conservation and utilization of plant genetic resources for food and agriculture. She also stressed that continued non-recognition of Farmers' Rights will cause further erosion of agricultural biodiversity.

The Governing Body should, as a priority activity, support the implementation of the Farmers' Rights set out in Article 9 of the International Treaty. To ensure implementation, it can:

- Raise awareness among Contracting Parties that the need to conserve agro-biodiversity has never been more urgent than it is today, in the face of global climate change. In some regions, climate change is evolving so fast that adaptation of plant varieties to changing conditions is no longer possible, and access to varieties from other areas has become crucial.
- Recognize that genetic erosion is continuing at an alarming rate, caused principally by increased monoculture production and by restrictive practices.
- Raise awareness among Contracting Parties that Farmers' Rights is not a secondary issue in relation to the conservation of agro-biodiversity. Ensuring the rights of farmers to continue to save, use, conserve, breed, exchange, donate and sell their varieties is essential if they are to be able to conserve these vital resources, for themselves and for use by others.

- Raise awareness among decision-makers in developing-country Contracting Parties of the usefulness of the plant genetic resources contained in farmers' varieties as essential raw material for use in sustainable food production and in national breeding programmes.

The Governing Body should treat Farmers' Rights as a priority, because restrictive seed legislation combined with intellectual property rights are rapidly closing the legal space for the conservation and use of farmers' varieties. Note should be taken of the significant number of countries which have recently taken measures to re-draft or amend their earlier restrictive seed laws, and legally recognize Farmers' Rights, such as India, Brazil, Nepal and Namibia.

Elizabeth Matos referred to the many provisions of the International Treaty which are legally binding, and through which Farmers' Rights can be realized. She highlighted that the Contracting Parties, according to Article 5.2 shall, as appropriate, adopt measures to minimize, or if possible, eliminate, threats to plant genetic resources. Here she stressed that this should mean to amend restrictive seed laws, which are now probably the single biggest threat to the maintenance of agrobiodiversity. Other relevant Treaty Articles are 6.2 (a), (b) and (c) on the sustainable use of plant genetic diversity, and 12.3 (e) and (h) on access under the Multilateral System to material developed by farmers. Here she pointed out that it should be a priority activity for the Governing Body to provide assistance in the preparation of national legislation.

Also Article 13.2 (on exchange of information, technology transfer and capacity building) is relevant from a Farmers' Rights perspective, as well as Article 13.3 and 13.4 (on benefits and funding flowing primarily to farmers who sustainably conserve and utilize plant genetic resources). Article 13.5 is especially important, as it recognizes that the capacity to fully implement the Global Plan of Action, especially in developing countries and countries with economies in transition, will depend heavily on the effective implementation of the benefit-sharing Article (Art. 13) and on the Funding Strategy foreseen in Article 18. Elizabeth Matos emphasized: What can the International Treaty achieve if the Governing Body has no funds for its activities? This is particularly important in terms of encouraging farmers to place their plant varieties in the Multilateral System. One can hardly expect them to do so if there are no benefits to be seen. Moreover, there is support for the conservation of *ex situ* collections. This is clearly an essential task, but, Matos asked, how do we finance the other 16 points of the Global Plan of Action? It is vital for the Governing Body to address the situation in the Funding Strategy.

Eng Siang Lim proposed that guidelines be developed for national implementation of the International Treaty in terms of Farmers' Rights. A possible framework for such guidelines could take as its points of departure other provisions of the International Treaty and contain:

- measures for safeguarding, promoting and improving the contribution of farmers in the survey and inventory of PGRFA, according to Article 5.1 (a)
- measures for safeguarding, promoting and improving the contribution and participation of farmers in the collection of PGRFA and relevant associated information on those PGR that are under threat or are of potential use, according to Article 5.2 (b)
- provision of support to ensure continued contribution of farmers and local communities' efforts to manage and conserve on-farm their PGRFA, according to Article 5.2 (c)
- measures for safeguarding, promoting and improving the contribution of farmers in the documentation, characterization, and evaluation of PGRFA, according to Article 5.2 (e)
- elements of national policies that promote the development and maintenance of diverse farming systems that enhance the sustainable use of agricultural biological diversity and other natural resources, according to Article 6.2 (a)
- measures to safeguard, promote and improve the contribution of farmers in research and breeding efforts (participatory plant breeding), according to Articles 6.2 (b) and (c)

- elements of national policies to promote expanded use of local and locally adapted crops varieties and underutilized species by farmers, according to Article 6.2 (e)
- national policies to promote the wider use of diversity of varieties and species in on-farm management, conservation and sustainable use of PGRFA, according to Article 6.2 (f)
- policy and legal measures to adjust breeding strategies and regulations concerning variety release and seed distribution to ensure sustainable use, according to Article 6.2 (g)
- national measures to encourage farmers to include their plant genetic resources for food and agriculture in the Multilateral System of the Treaty, according to Article 11.4
- clarification of Article 12.3(e) which states that ‘Access to plant genetic resources for food and agriculture under development, including material being developed by farmers, shall be at the discretion of its developer, during the period of its development. What means ‘material being developed by farmers’? What means ‘discretion of its developer’? And what means ‘under development’? Is there such a thing as a final product?’
- elements of national legislation or standards to ensure access to plant genetic resources for food and agriculture *in situ* on-farm, according to Article 12.3 (h)
- establish links between Articles 9 (Farmers’ Rights), 13 (Benefit-Sharing under the Multilateral System) and 18 (Funding Strategy), in particular Articles 13.3 and 18.5 and national measures to ensure that benefits will flow directly and indirectly to farmers
- provisions for implementing Farmers’ Rights in plant variety protection regulations, access and benefit sharing regulations, seed laws and bio-safety legislations.

On this basis Eng Siang Lim proposed that an Expert Group be established to assist the Secretary of the Governing Body to develop initial draft guidelines for national implementation of Farmers’ Rights; and further that an Ad Hoc Working Group be established to discuss and finalize the guidelines for consideration of the Governing Body. If needed, a Working Group could be established to review progress of implementation.

Robert Lettington highlighted the following key issues that could be addressed by the Governing Body:

- There is a need for more research on goals and objectives, to develop them further as a means of developing indicative benchmarks.
- More thought must be given to descriptions of options for implementing Farmers’ Rights that include detailed consideration of how these options relate to particular goals and objectives and how they might be practically implemented in different circumstances. Particular attention needs to be paid to the realization of net benefits and the risks of perverse outcomes.
- Much greater emphasis needs to be given to the fact that Farmers’ Rights do not exist in the context of a zero-sum discourse, like the idea that they constitute a concept that exists purely in contrast to plant breeders’ rights. The rights of both farmers and plant breeders exist within a far broader and more complex discourse that includes many other interested groups and individuals with interrelated goals and objectives.
- More detailed consideration needs to be given to demonstrating the practical and relevant impact potential of various options for implementing Farmers’ Rights. To the degree possible, this should be based on empirical research moving beyond the tendency to consider the implementation of Farmers’ Rights in isolation.
- Explicit conceptual and practical links should be made between the implementation of Article 9 and other Articles of the Treaty, in particular paragraph 6.2(g). Through this, the Treaty could act as a catalyst for the review of seed regulatory systems based on rigid control in light of the understanding that such systems are diverse; including not only multinational companies and smallholder farmers but, to be healthy and resilient, a wide range of actors in-between the two poles.

In general terms the Governing Body should avoid direct action that could be perceived as endorsing any particular approach or as undermining the rather jealously guarded right of countries to independently address implementation issues. However, several countries could benefit from skilled assistance in the identification and analysis of practical options and in the implementation of conclusions from such a process. Particular activities that the Governing Body itself could consider should include:

- Invite research and the submission of views on different aspects of, and approaches to, Farmers' Rights as a means of sharing experience and stimulating debate on practical options
- Some sort of review of the implementation of Farmers' Rights should be established. This should focus not so much on prescriptive measures as on more subtle forms of inducement.

Finally, Lettington highlighted two factors that are important to ensure a fruitful process:

- Do not involve the Governing Body in trying to reach conclusions. Farmers' rights, and more importantly farmers, are unlikely to benefit from a process of politicization and rhetoric.
- Be consistently clear throughout that Farmers' Rights is not an absolute issue with clear rights and wrongs but, rather, a diversity of objective and approach is the norm and not the exception.

Francois Meienberg and Patrick Mulvany presented an NGO perspective to what the Governing Body can do. Meienberg started out by drawing the attention to four aspects he considered particularly important for the realization of Farmers' Rights, with a view to what the Governing Body can do:

- Funding is needed for the implementation of Farmers' Rights. This requirement should be given priority by the Governing Body. The Funding strategy is one of the main topics of the 2nd Session of the Governing Body. The current financial mechanism on benefit sharing of the Multilateral System will bring nearly nothing, or perhaps worse. However, Article 13.2 (d) ii states that the Governing Body may assess within a period of five years (i.e. before 2009), whether the mandatory payment requirement in the Material Transfer Agreement shall apply also in cases where such commercialized products are available without restriction to others. This is an entry point to create a stronger financial mechanism.
- Access under the Multilateral System should also be facilitated for farmers. This is not always the case as it is now. Also it may be necessary to revisit Article 11.2, to decide whether access shall continue to be facilitated to those natural and legal persons that have not included plant genetic resources for food and agriculture into the Multilateral System. It was stressed that patents restrict Farmers' Rights and that Article 12.3 (d) is vague on the topic of patents. It says that recipients shall not claim any intellectual property or other rights on material from the Multilateral System in the form it is received. A lot of farmers' organisations and NGOs have been ready to fight for stronger formulations on this point.
- As so many other participants, he emphasized that Farmers' Rights could also be dealt with under other Articles of the International Treaty, such as Article 6.2 (a): 'pursuing fair agricultural policies that promote, as appropriate, the development and maintenance of diverse farming systems that enhance the sustainable use of agricultural biological diversity and other natural resources.'
- Finally he stressed that discussing Farmers' Rights without farmers does not make sense. However, he asked: why should farmers' organisation participate at the discussion in the Governing Body if they are not integrated into the decision making and it is not clear whether the process will be worthwhile? It is extremely important that the topic is dealt with in a relevant way and that farmers' organizations are included in the process in a real way.

Agreeing with Meienberg and noting the points included in his background paper, most of which had been taken up by other speakers, Mulvany had the following suggestions for the Governing Body:

- The Governing Body should set up a working group on Article 9 and related provisions to review and monitor progress, report to the Governing Body at each session, hold inter-session meetings and to call for reports. It should consist of regional representatives of Contracting Parties, representatives of international and regional farmers' organisations and movements and observers in support of the above. The Working Group should have powers to request Contracting Parties and relevant international and national organizations to provide reports on the implementation of Article 9 and related provisions, including status and trends (positive and negative), participation in decision making, resource allocation to the realization of Farmers' Rights and how resources are provided.
- Each session of the Governing Body should have a standard item to discuss progress in the implementation of Article 9 and related provisions
- The Secretariat of the Treaty should be asked by the Governing Body to facilitate participation of relevant regional and international farmers' organizations and movements in the work of the Treaty and the deliberations of the Working Group on the implementation of Article 9 and related provisions.

Discussion

The ensuing discussion was aimed at developing elements with regard to proposals to the Governing Body.

First of all, it was emphasized that the Contracting Parties should give priority to promoting Farmers' Rights at the national and international levels, in recognition of the crucial role of Farmers' Rights in contributing to the continued availability of plant genetic resources for food and agriculture and in the implementation of the Treaty. Thus the Governing Body should give priority to the implementation of Article 9 and related provisions of the International Treaty where Farmers' Rights will play an important role for their implementation – and through which these rights can be realised – such as Articles 5 and 6.

The participants emphasized that:

- The participation of farmers in the discussions and work of the Treaty is crucial for the realization of Farmers' Rights. The Governing Body could facilitate, through the Secretariat, the involvement of farmers' organizations in its work related to the realization of Farmers' Rights. This could be done through various measures, *inter alia*: (1) encouraging parties to include representatives of farmers' organizations in their delegations and invite regional and international farmers' organizations to participate as observers; (2) encouraging inputs prepared by farmers' organizations on their perspectives related to Farmers' Rights, to be compiled into working documents for the Governing Body; (3) organizing consultations prior to Governing Body Sessions to gather farmers' perspectives on agenda items related to Farmers' Rights; (4) compiling farmers' views on agenda items of Governing Body sessions through questionnaire surveys to be made into working documents for the Body; and (5) involving regional and international farmers' organizations in any working group on Farmers' Rights.
- The Governing Body may encourage the Contracting Parties to submit reports on the realization of Farmers' Rights in their countries. For this purpose, it should request the Secretariat to develop a reporting format, and to monitor the reporting process. The Governing Body may consider country reports on the realization of Farmers' Rights at its regular sessions.
- The Governing Body should guide and assist Contracting Parties in their implementation of Article 9 and related provisions.

- The Governing Body should develop guidelines on the realization of Farmers' Rights at the national level with particular emphasis on how Farmers' Rights can be realized through relevant provisions of the International Treaty. The consultations recommend that this be done through an *ad hoc* Working Group. The *ad hoc* Working Group could be converted into a permanent Working Group to support the Governing Body in assisting Contracting Parties in their realization of Farmers' Rights. The process should be transparent, participatory and inclusive.

The participants discussed various scenarios on how a Working Group could be organized, with a special focus on the trade-offs between legitimacy and efficiency. Some participants stressed that guidelines are urgently needed, and that there is not enough time to wait for lengthy consultative processes. Other participants held that the value of a Working Group is to create ownership of the process and thus motivation to implement the ensuing guidelines. These differences of opinion were acknowledged and appreciated.

- The Governing Body should address the immediate importance of mobilizing funds within its Funding Strategy to facilitate the implementation of the International Treaty, with particular emphasis on the realization of Farmers' Rights. This could include the development of financial mechanisms to attract donors, and a review of the voluntary payment system with a view to broadening the mandatory payment in the benefit-sharing mechanism in accordance with Article 13.2 d ii.

Whereas the emphasis of the discussion was on the above points, participants also had other suggestions, which were deemed interesting in the group, but could not be discussed to an equal depth.

- The Governing Body could organize documentation, sharing of experiences and highlighting good of practices and challenges through an agreed reporting framework. In addition a framework for an information management system could also be developed.
- The Governing Body could organize a world forum on Farmers' Rights to create awareness on the importance of these rights and to encourage the sharing of experiences on progress made and remaining challenges. Such a forum could be developed through a consultative process from the local, via the national and regional, and up to the international level.
- Finally, it was suggested that the Governing Body could establish a global award for outstanding contributions to the conservation and sustainable use of plant genetic resources for food and agriculture *in-situ* on farm.

**Informal International Consultation on Farmers' Rights
18-20 September 2007, Lusaka, Zambia**

Part 3. Presentations

Opening Session and Welcoming Addresses

Welcome address

Presented on Behalf of the Zambia Agricultural Research Institute, ZARI

Mr Moses Mwale

Representative from the Norwegian Embassy in Zambia,
The Senior Officer from the Treaty Secretariat in Rome, Ms Angela Hilmi,
Legal Expert from Bioversity International in Nairobi, Dr. Robert Lettington,
Organisers of this meeting,
Distinguished invited guests, Ladies and Gentlemen,

It is with great pleasure that I welcome you to Zambia where you have come to participate in an informal consultation meeting on Farmers' Rights. I wish, on behalf of the Zambia Agriculture Research Institute and indeed the Ministry of Agriculture and Cooperative, to extend a special welcome to those of you coming to Zambia for the first time. I invite you to feel at home and enjoy the friendly environment and hospitality of the country as you participate in the deliberations of the meeting.

Zambia Agriculture Research Institute is happy to be co-hosting this event with our Norwegian counterparts on a topic, which is of great relevance to our farming communities in Africa and Zambia in particular.

I wish to commend our colleagues from the Norwegian Ministry of Agriculture and Food and the Fridtjof Nansen Institute in Norway for the initiative to organize and conduct the informal consultations on Farmers' Rights through both financial and technical contributions. This gesture builds upon the long standing support of the Norwegian government to our region in general and Zambia in particular in the area of plant genetic resources through the Nordic funding of the SADC Plant Genetic Resources Programme over the last 17 years.

Chairperson,

It is my trust that the conditions offered by this wonderful venue and Zambia as a country is conducive enough to enable you conduct your deliberations fruitfully.

It is a great honour for our country to host such a meeting whose outcome I believe will greatly contribute towards building the agenda item on Farmers' Rights for the Second Session of the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture scheduled for October/November 2007, in Rome Italy. This initiative also renders support to Zambia

which is currently holding the Chair of the Governing Body through Mr. Godfrey Mwila. We are happy to play this humble role in the implementation of the Treaty.

Chairperson,

In my view it is appropriate that this informal consultations are taking place on the African soil as this Article on Farmers' Rights under the International Treaty on Plant Genetic Resources for Food and Agriculture has its conception and origin from Africa. In this regard it is right to state that most African countries, both contracting and non contracting parties to the Treaty have special interest on Farmers' Rights. I am delighted to note that prominent individuals who took part in negotiating the Treaty as a whole and in particular the Farmers' Rights Article are present at this meeting. In this regard allow me to recognize Ms. Matos from Angola, Dr. Lim from Malaysia and Dr. Tewolde from Ethiopia. Unfortunately Dr. Tewolde could not make it due to last minute illness.

Chairperson,

The realization of Farmers' Rights, which encompass the rights to save, use, exchange and sell farm saved seeds and propagating material, protection of relevant traditional knowledge, equitable benefit sharing and participation in decision making is critical to ensuring the maintenance of plant genetic resources for food and agriculture in situ and on-farm. This diversity is particularly essential for traditional small scale farming on which a large number of people in developing countries and Africa in particular depend for their livelihood. Farmers' Rights face serious implementation challenges especially because of the explicit statement that the responsibility for its implementation rests with national Governments. It is also clear that understanding of modalities for the implementation of Farmers' Rights provisions at national level is limited. There is also need to outline the role of the Governing Body in this regard.

The importance of this meeting in providing ideas on the implementation of the Farmers' Rights Article cannot therefore be overemphasized. It is my hope that this gathering of eminent people from different parts of the world with various expertise and experiences on this topic will enable the meeting come up with useful recommendations.

I thank you and enjoy your stay.

Informal International Consultation on Farmers' Rights
18-20 September 2007, Lusaka, Zambia

Welcome address

Presented on Behalf of the Norwegian Embassy

Ms Moosho Imakando

Programme Officer, Norwegian Embassy, Lusaka, Zambia

The Chairman Plant Genetic Resource Committee,
The Director Zambia Agricultural Research Institute,
Distinguished ladies and gentlemen,
all protocols observed.

It is an honour and privilege for me to give a welcome address on behalf of the Norwegian Embassy in Lusaka at this important occasion of informal consultations on Farmer's Rights. The forum is indeed significant as it brings together international participants from various countries to discuss, debate and consult on a very important agenda in agricultural development namely farmers' rights.

The fundamental question is how to steer the realisation of farmers' rights in developing countries. What are the steps at national level to protect and promote farmer's contribution to the conservation and sustainable use of crop genetic resources, how can farmers' traditional knowledge be protected and how can farmers participate in benefit sharing. What can be done to ensure that the rights of farmers to save, use, exchange and sell seeds and propagation material are protected?

Farmers' rights ladies and gentlemen as you may be aware, is a wide concept that may assume different definitions according to the needs and priorities obtaining in various localities. It is my sincere hope that this consultative process will help to decode the complex conceptualisations of farmers' rights to a level that can be commonly understood and practiced particularly in developing countries in Africa.

Maintenance of genetic plant material for future use is an investment that contributes to securing sustainable food and agricultural production and should be at the epicentre of any agricultural development programme. The role of farmers in this complex process should be recognised and credit so be given. In this regard, recognition of farmers' intellectual property rights and farmers indigenous knowledge imbedded in their traditional farming practices should be protected through the introduction of suitable legal frameworks.

In recognising the importance of conserving crop genetic resources and their sustainable utilisation, Norway along with other Nordic countries (SIDA is the lead) are supporting the SADC gene regional bank located in Lusaka. The aim includes building a regional genebank in Zambia to assist in creating a network of plant genetic resource centres in each of the SADC member states. The purpose of the programme is to ensure short and long term conservation of the germplasm of crop and wild plant species for immediate and future crop improvement as well as to provide for the survival of genetic material and facilitate training in this field.

Apart from this, the Embassy in Zambia is supporting small scale farmers through a programme on conservation farming under the Zambia National Farmer's Union (ZNFU). The programme targets 120,000 small scale farmers. The question is how much of their rights do they know? This question can be asked for many other countries represented here. Most small scale farmers particularly in developing countries are not aware of the issue concerning their rights. Awareness creation is therefore an important challenge that will be put forward for discussion in this consultative workshop. I am glad that some of the expectations expressed by participants on this workshop include the need to address the issue of awareness rising. Unless farmers know their rights they cannot demand for them.

A hearty welcome to you all. To our foreign visitors, I extend a special welcome and trust that you will enjoy our Zambian hospitality.

Thank you.

Informal International Consultation on Farmers' Rights
18-20 September 2007, Lusaka, Zambia

Evolution and Development of the Concept of Farmers' Rights

Angela Hilmi

Senior Officer, Secretariat of the ITPGRFA, FAO, Rome

Ms Grethe Evjen,
Mr Godfrey Mwila,
Ms Regine Andersen,
Ladies and gentlemen,

Thank you to the wonderful organizers of this consultation and above all thank you to Zambia and Norway for hosting this event.

Ladies and gentlemen,
Thank you for giving me the opportunity to be here with you as a representative of the Treaty Secretariat
Thank you to Norway for giving us the opportunity to move forward, together, on this crucial and outstanding issue
thank you to the organizers of this consultation and to Zambia for hosting this major event.

And thank you to all of you.
You would not be here if you would not have been involved in one way or the other for the farmers of the world
Let us remember our reasons for being here
Most of us are not farmers, but the decisions that you will make, during these few days have the potential to affect the people who are one of the most important parts of the Treaty

if it weren't for the farmers, nobody would be here in this room today

you may here proposal to take political decisions
this is not just numbers we are talking about
but people, who have made real sacrifice
to bring us were we are today

and we have this marvelous instrument, the Treaty
you wouldn't be here probably if your country would not have ratified it

and there is flexibility throughout the text of the Treaty, including in the preamble and operative provisions of the Treaty
even more to the benefits of the farmers

with these and your creativity, you actually have the opportunity to make sure that things really happen in the countries
whether anything happens it will depend on you, solely on you

2
the concept of farmers' rights is an evolving concept
it is a well deserved recognition as stated in the first paragraph of Article 9

3
the concept is widely recognized because after all, the farmers are the true custodians of diversity
which has brought us where we are today

4
we are talking here not only about compensating for the past for the contributions to the foods and wealth farmers have provided
we are talking about providing incentives to the future

5
yes, our foods are the result of 10000 years of agriculture...

6
and when talk about recognizing farmers it means for all of us looking forward
for the benefit of all

7
without farmers there is no conservation of genetic resources
as we all know ex situ conservation has its limits, it does not allow for the coevolution which has been the basis of the creation of diversity along the centuries
and there is no in situ without farmers

8
I would like to take this opportunity to recall that
if you think about it, we all have our roots in farmer communities
Some just recently, some a few centuries ago
Our social values
Our roots as human beings
Our cultural identity
Come from farmers
And they have been the custodians of our traditions
This word that is so important to all of us.
It is AGRI CULTURE, biological diversity, grounded into cultural diversity
Too often agriculture has been seen primarily as a technological process for using soil, water and biodiversity to produce goods and commodities.
We need to return to the main focus of agriculture: people, farmers, using culture to define and shape their biophysical environment to meet their food and livelihood needs.
Development begins with the study of culture, customs and institutions that shape and distribute knowledge and resources.

9
we have succeeded with the Treaty to have a written text, a binding instrument which recognizes the past and future contributions of farmers and their rights

10
it is now time to put written law into practice

it is time to implement the Treaty

11

under article 9 the responsibility for realizing farmers' rights rests with national governments but in the preamble of the Treaty the international dimension is clearly stated

12

Article 9 includes 3 crucial measures

Protection of traditional knowledge

Sharing of benefits

Participation in decision making

And these were obtained by consensus

But this is not all...many more measures were discussed and can be implemented

13

in particular in the preamble the right is mentioned to save, use, exchange and sell farm saved seeds and other propagating material...

14

the Treaty puts Farmers' Rights in capital letters

this is a first step and a common measure in international instruments

15

now it needs to be implemented at national level

we have examples such as

the AFRICAN MODEL LEGISLATION FOR THE PROTECTION OF THE RIGHTS OF LOCAL COMMUNITIES, FARMERS AND BREEDERS, AND FOR THE REGULATION OF ACCESS TO BIOLOGICAL RESOURCES: see especially Articles 24-27 (Part IV, Farmers' Rights)

- the Portuguese Decree Law: see esp. the 3rd recitation in the Preamble and Article 3, but also Art.

- the Peruvian Law 27811

- the Costa Rican Biodiversity Law

- the Philippino Indigenous Peoples' Rights Act

- the Indian Protection of Plant Varieties and Farmers' Rights Act of

- and the Peruvian Potato Park contract of the Ketchua with CIP

16

and international level

17

moving beyond with new measures

such as developing a farmers' perspective of in situ conservation and climate change, seen from their point of view

or genebanks developing awareness campaigns for farmers to inform them on access to material held in genebanks, which would be reported to the GB

18

the possibility for farmers to express their own perception of art 9, and thereby creating a dialogue for interaction and information exchange

the possibility of organizing a World Special Forum on art 9 and related provisions, with national and regional consultations has been mentioned

etc

19

as we have seen,
we would not be here today if it was not for the farmers,
we all come, one way or the other, from farmer communities,
cultural diversity is as important if not more as biological diversity for our new development
paradigms for the future
we all have a fundamental responsibility in insuring that the treaty is now implemented
flexibility in the text allows for more opportunities for concerted action
the Secretariat of the Treaty needs your guidance
the GB and the countries
need your deep commitment
to what is not only one more project
but a responsibility that will affect the people who are the most important
and that will affect us all tomorrow

we can start right here
right now
to move in that direction

you have the opportunity with this meeting to undertake practical and tangible steps forward to
support the farmers and guarantying the future

END

First Session: Understanding Farmers Rights

Towards a common understanding of the contents of Farmers' Rights

Regine Andersen

Senior Research Fellow, Fridtjof Nansen Institute, Norway

This presentation is based on the findings from a comprehensive international project on Farmers' Rights, including a study on the history of Farmers Rights, designed as a guide to central documents and literature; an international stakeholder survey on perceptions of Farmers' Rights, state of realization, barriers and options; case studies from Peru, Ethiopia, India and Norway, and a summary of findings. For more information on the project, next activities, and to download the reports, please visit www.fni.no/farmers/main.html.

1. Brief history of Farmers' Rights in the FAO

The idea of Farmers' Rights emerged from the debate on intellectual property rights to plant genetic resources in the early 1980s, as voiced in international negotiations, and was first addressed in the FAO at a working group meeting in 1986 (CPGR 87/3, October 1986). At that time the signatories to the FAO International Undertaking on Plant Genetic Resources discussed how they could attract the signatures of further countries, as this was pivotal to realising the objectives of conserving these resources and making them available. The recognition of Plant Breeders' Rights was set as a precondition for many Northern countries to join the International Undertaking. However, many developing countries were opposed, seeing such rights as against the objectives of the Undertaking and in addition unfair, since plant breeders add only the final few links to the hard work and innovations that farmers, particularly in developing countries, have carried out for hundreds and thousands of years (Andersen, 2005a). The solution to this conflict was that Plant Breeders' Rights were recognised along with Farmers' Rights by the FAO Conference in 1989, in the form of an agreed interpretation of the International Undertaking (FAO Conference Resolution 5/89):

Farmers' Rights mean rights arising from the past, present and future contributions of farmers' in conserving, improving, and making available plant genetic resources (...). These rights are vested in the International Community, as trustee for present and future generations of farmers, for the purpose of ensuring full benefits to farmers, and supporting the continuation of their contributions (...)

This recognition of Farmers' Rights was achieved in exchange for something that already existed: Plant Breeders' Rights. As such, this can be seen as a breakthrough for the advocates of Farmers' Rights. However, the concept was not defined, and there was great uncertainty as to what it should cover. There had been seemingly consensus that these rights applied to entire peoples who have bred and maintained plant varieties, and not to individual farmers or communities (CL 91/14, appendix F, 1987). Also there was consensus that the best way to implement Farmers' Rights would be to ensure the conservation, management and use of plant genetic resources for the benefit of present and future

generations of farmers, and for this purpose an international fund was proposed (Resolution 4/89). These are the roots of the *stewardship approach* to Farmers' Rights (see below).

In 1991, the Conference decided that the concept of genetic resources as mankind's heritage, as applied in the International Undertaking, was subject to the sovereignty of the states over their plant genetic resources, and decided to set up an international fund for the realisation of Farmers' Rights (FAO Conference Resolution 3/91). This was a reaction to what happened under the negotiations leading to the Convention on Biological Diversity (CBD) in 1992, which was in turn a reaction to the Uruguay Round that led to the establishment of the World Trade Organization (WTO) with its Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) in 1994. In response to the emerging intellectual property regime, negotiators from developing countries demanded the control over access to their genetic resources and the fair and equitable sharing of the benefits arising from their use under the CBD negotiations. This introduced a shift in the thinking of genetic resources in many circles, from the common heritage of mankind model and to a bilateral approach to benefit sharing. It can be seen as the roots of the *ownership approach* to Farmers' Rights (see below). As for the international fund, a few contributions were received, but it never materialized as envisioned.

When the Convention on Biological Diversity (CBD) was adopted in 1992, the negotiators urged the FAO to commence negotiations on a legally binding regime on plant genetic resources for food and agriculture, including the question of Farmers' Rights (UNEP: Nairobi Final Act, 1992). At its next session, in 1993, the FAO Conference accordingly requested the FAO director to provide a forum for negotiations for harmonising the International Undertaking with the CBD (FAO Conference Resolution 7/93). This marked the start of the lengthy negotiations that finally led to the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) in 2001.

According to its Article 9 of the ITPGRFA, governments are to protect and promote Farmers' Rights, but can choose the measures to do so according to their needs and priorities. Certain measures are suggested, covering the protection of traditional knowledge, benefit sharing and participation in decision making. Also the rights of farmers to save, use, exchange and sell farm saved seeds and propagating material are addressed, but without giving any particular direction for implementation. Two other provisions (Paras 13.3 and 18.5) state that funding priority will be given to farmers contributing to maintaining agro-biodiversity. Article 21 provides that the Governing Body is to ensure compliance with all provisions of the International Treaty, and the preamble highlights the necessity of promoting Farmers' Rights at the national as well as the international levels. There is, however, as yet no common understanding of how this can be done. Norway, with the support of a range of developing countries, proposed at the First Session of the Governing Body that the topic be put on the Working Agenda of the Governing Body. Following from that, the Governing Body of the ITPGRFA will discuss the implementation of Article 9 on Farmers' Rights at its Second Session in October/November 2007.

2. Why Farmers' Rights?

Farmers' Rights are a precondition for the maintenance of agro-biodiversity and as such central means in the fight against poverty. Genetic diversity of agricultural plants is the very basis of farming. It provides the pool from which plant traits can be found that meet the challenges of crop pests and diseases, marginal soils, and – not least – of changing climate conditions, and it is vital for spreading risks for smallholder farmers. Plant genetic diversity is probably more important for farming than any other environmental factor, simply because it is *the* factor that enables adaptation to changing environmental conditions. Today, 75 percent of the world's 1,2 billion poorest people live in rural areas and depend on traditional agriculture.

The world's agro-biodiversity is disappearing at an alarming rate. For several major crops, up to 80–90 per cent losses in variety over the past century have been reported (FAO, 1998). In addition, legal restrictions on access to available genetic resources are emerging as an obstacle to traditional farming (Andersen, forthcoming 2007). Since the dawn of agriculture, farmers have been the custodians and innovators of agro-biodiversity. In developing countries, the vast majority of farmers still act as stewards and developers of genetic diversity – but the enormous transformations

of agricultural systems worldwide are increasingly curbing their possibilities. Farmers' Rights are about enabling farmers to continue as stewards and innovators of agro-biodiversity, and about rewarding them for their contribution to the global genetic pool. Thus, Farmers' Rights are crucial for genetic diversity in agriculture as well as to global food security and poverty eradication in the South.

3. Present perceptions on Farmers' Rights

There is great uncertainty as to what Farmers' Rights mean. This uncertainty is probably one of the greatest barriers to progress in this area. The many perceptions generally fall within one of two main approaches, or somewhere in between (Andersen, 2005b):

- *The ownership approach*² refers to the right of farmers to be rewarded for genetic material obtained from their fields and used in commercial varieties and/or protected with intellectual property rights. The idea is that such a reward system is necessary to enable equitable sharing of benefits arising from the use of agro-biodiversity and to establish an incentive structure for continued maintenance of this diversity. Access and benefit-sharing legislation and farmers' intellectual property rights are suggested as central instruments.
- *The stewardship approach*³ refers to the rights that farmers must be granted in order to enable them to continue as stewards and innovators of agro-biodiversity. The idea is that the 'legal space'⁴ required for farmers to continue this role must be upheld and that farmers involved in the maintenance of agro-biodiversity – on behalf of our generation, for the benefit of all mankind – should be rewarded and supported for their contributions.

If we take the measures suggested under the ITPGRFA for the realisation of Farmers' Rights as points of departure, the goals would be different for the two approaches (Andersen, 2006):

Goals for the realisation of Farmers' Rights: TWO APPROACHES		
ITPGRFA measures:	STEWARDSHIP APPROACH	OWNERSHIP APPROACH
Protection of farmers' traditional knowledge (§ 9.2.a)	The goals are to protect this knowledge against extinction and thus to encourage its further use.	The goals are to protect the knowledge against misappropriation and to enable its holders to decide over its use.
Equitable sharing of the benefits arising from the use of genetic resources (§ 9.2.b)	Benefits are to be shared between stewards of plant genetic resources and society at large – partly through the Multilateral System and ODA.	Benefits are to be shared between purported 'owners' and 'buyers' of genetic resources upon prior informed consent on mutually agreed terms.
Participation in relevant decisions at the national level (§ 9.2.c)	Participation is important to ensure legal space and rewards for farmers' contributions to the genetic pool.	Participation is important to ensure adequate legislation on access and intellectual property rights.
Farmers' customary use of propagation material (saving, sharing, selling) (§ 9.3)	The goal is to uphold the legal space to ensure farmers' continued maintenance of plant genetic resources.	The goal is to introduce farmers' intellectual property rights along with breeders' rights – in balance.

Protecting farmers' traditional knowledge can mean different things. Based on the ownership approach it would mean offering ownership status to farmers with the right to act against

² *Ownership* is used as a term here because it is regarded as the basis for a reward system (benefit sharing).

³ *Stewardship* is used as a term here although it does not sufficiently cover the innovative work that farmers are doing as breeders of plant genetic resources. As no other term was found, which could sufficiently cover farmers' maintenance and innovations, the term was kept, with this footnote as an explanation of its contents.

⁴ This concept was first used to coin this requirement in Andersen, 2006. It will be further explained below.

misappropriation and decide over the use of their knowledge and related plant genetic resources.⁵ In Norway, farmers stress that their traditional knowledge is about to disappear. Protection, in their understanding, is about ensuring that the knowledge is not becoming extinct. For that purpose the broadest possible sharing of knowledge is necessary. An ownership approach to protection could provide disincentives to sharing knowledge between and among farmers, as seen among potato farmers in Peru (Andersen, 2005b). Some proponents of the stewardship approach note that agricultural plant varieties and related knowledge are normally shared among farming communities, that ownership in this context is traditionally an alien idea among farmers, and that it represents a profound break with traditional perceptions. Whether a stewardship approach, an ownership approach or a combination is chosen to protecting traditional knowledge related to agro-biodiversity, it is important that it does not provide any disincentives to the sharing of knowledge and genetic resources among farmers, and that it does not contribute to genetic erosion or the loss of traditional knowledge. That would be against the intentions of the ITPGRFA.

Measures to ensure the equitable sharing of the benefits arising from the use of genetic resources can be designed very differently. With an ownership approach, direct benefit sharing would be the avenue. Here benefits from the use of genetic resources would be shared between purported 'owners' and 'buyers' of genetic resources – directly, upon prior informed consent on mutually agreed terms (as set out in the CBD). Under the stewardship approach, an indirect way of benefit sharing would be chosen. Here the thinking from the early days of the FAO negotiations come through, and benefits should be shared between 'entire peoples', all stewards of plant genetic resources in agriculture – and the society at large. The idea is that it is their legitimate right to be rewarded for their contribution to the global genetic pool, from which we all benefit, and an obligation of the 'International Community' to ensure such reward. Benefit sharing mechanisms would be the Multilateral System of the ITPGRFA, its Funding Strategy, and Official Development Assistance (ODA). Proponents of the stewardship approach maintain that it would be difficult to identify exactly who should be rewarded if using an ownership approach. In addition, the demand for farmers' varieties among commercial breeders is limited, so relatively few farmers would benefit, whereby most of the contributors to the global pool of genetic resources would remain unrewarded. Also this approach to sharing benefits could lead to disincentives to share seeds and propagating material among farmers because of benefit expectations. Although several countries in the South have enacted legislation on direct benefit sharing, no instances of such benefit sharing have been reported so far with regard to agro-biodiversity (Andersen 2005b and 2007 forthcoming). By contrast, there are many examples of indirect benefit sharing, normally non-monetary (see Session 3). At the other hand, the transaction costs by establishing access and benefit sharing legislation in many countries have been comprehensive. Thus the ownership approach has not proven to be very promising with regard to benefit sharing so far, even though some stakeholders would mean that it is the most fair and equitable approach. These serious concerns must be taken into account when designing measures to ensure benefit sharing – in line with the intentions behind the ITPGRFA.

Participation in relevant decision making would be important for different reasons under the two approaches. Under the stewardship approach, the most important objectives would be to ensure legal space for farmers to continue their practices as custodians and innovators of plant genetic resources and to establish reward mechanisms for farmers' contributions to the global genetic pool. Under the ownership approach the goals would be to ensure appropriate legislation on access and benefit sharing, and safeguarding farmers' intellectual property rights to genetic resources in their fields and related knowledge. Based on the discussions on traditional knowledge and benefit sharing above, it is clear that these two sets of objectives could be conflicting. To avoid conflicts, the considerations above may serve as guiding principles.

Farmers' customary use of propagating material, their right to save, use, exchange and sell farm saved seed and propagating material, could likewise be handled differently. Under the

⁵ I am grateful to Dr. S. Bala Ravi from the MS Swaminathan Foundation for comments on an earlier draft of this presentation, some of which are worked in here.

stewardship approach, it is vital to uphold the *legal space* for farmers to save, use, exchange and sell farm saved seed and propagating material. Many different regulations are currently reducing this space, thereby threatening farmers' possibilities to maintain and breed plant genetic resources, as well as their livelihoods. From an ownership approach, the most important goal is to introduce farmers' intellectual property rights to varieties in their fields on an equal footing with breeders' rights. Arguments related to this objective have been discussed above. India's Protection of Plant Varieties and Farmers' Rights Act of 2001 represents an interesting example of trying to combine these two sets of objectives.

There are probably more possibilities of combining the two approaches to realising Farmers' Rights. What matters in this context, is that the approach chosen does not conflict with the principles of the stewardship approach, which has been the main avenue of the FAO since the issue was first addressed.

4. Towards a common understanding of the contents of Farmers' Rights

When discussing Farmers' Rights it is useful to seek to establish a common ground of shared perceptions, a lowest common denominator. Such a common understanding would enable advancing the discussion on Farmers' Rights from the concept and to concrete measures to be proposed. It could also provide a basis for widening the common understanding on the contents of Farmers' Rights among stakeholders. Such a working definition would not be exhaustive, but cover the elements of an understanding which are shared among most stakeholders. Based on the many perceptions on the concept (compiled in Andersen, 2005a and b), the following working definition may be seen as a lowest common denominator:

Farmers' Rights consist of the customary rights that farmers have had as stewards of agro-biodiversity since the dawn of agriculture to save, grow, share, sell, develop, and maintain plant varieties, of their legitimate right to be rewarded and supported for their contribution to the global pool of genetic resources as well as to the development of commercial varieties of plants, and to participate in decision making on issues that may affect these rights.

Such a 'minimum definition' does not directly address the latent conflict between Farmers' Rights and intellectual property rights. Rather, it seeks to establish a common ground from which to address the crucial issue of Farmers' Rights, which is necessary to develop a fruitful dialogue among stakeholders on necessary measures to be taken – also with regard to intellectual property rights.

5. A few words on what this may mean in practice

Based on the working definition and the discussion above, we can derive three core challenges to realising Farmers' Rights, which are shared among most stakeholders:

- upholding and developing *legal space* for farmers' customary practices related to agro-biodiversity (re. ITPGRFA Art. 9.3)
- creating *support mechanisms* for farmers' contributions to the global pool of genetic resources (re. ITPGRFA Art. 9.2.b and 9.2.a)
- enabling farmers' *participation* in relevant decision making processes (re. ITPGRFA Art. 9.2.c).

Different stakeholders and countries may want add challenges to this list, and certainly there are many possibilities. The point here is that these are the challenges that are most widely shared among stakeholders and thus probably a good starting point. The following are some first considerations on practical solutions to these challenges.

Upholding and developing legal space

A concrete measure would be to review legislation and draft legislation affecting Farmers' Rights with a view to upholding or creating legal space. Farmers' practice of saving, using, exchanging and selling seeds and propagating material from their own harvest is increasingly affected by three forms

of legislation: (1) intellectual property rights (plant breeders' rights and patents); (2) seed laws; and (3) access laws.⁶

Plant breeders' rights restrict the use of farm-saved seeds and the exchange of seeds and propagating material from plants protected with such rights. The extent to what they restrict such practices depend on the coverage of the rights and possible exemptions for small-scale farmers. The past 40 years have seen a steady increase in restricting these rights through the Union for the Protection of New Varieties of Plants (UPOV), the WTO Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) and the World Intellectual Property Organization (WIPO). Also regional and bilateral trade agreements between countries of the North and the South often set the introduction of plant breeders' rights as a condition. Such regimes are evolving extremely fast in many developing countries, increasingly restricting farmers' legal space. An attached problem is that the seed sector in these countries never had the chance to adapt to a slowly developing intellectual property regime, as in the North. This makes it extremely difficult to establish 'prior art' – formal knowledge of already existing plant varieties – which is necessary to establish whether a new variety, for which plant breeders' rights are sought, is really new. Normally the burden of proof lies with the farmers, who mostly have only marginal institutional and financial capacity to challenge rights conferred to breeders.

Patent systems enable the protection of plant properties or breeding processes and provide exclusive rights to the rights holder. Such protection is far stricter than plant breeders' rights. So far, there are few examples of patents in developing countries, which have had negative impact on Farmers' Rights. However, there are several examples on patents in developed countries, which have affected farmers in the South, such as the US yellow bean patent.

Seed laws cover exchange and sales of seeds and propagating material – regardless of whether they are protected with intellectual property rights – for plant-health reasons. Their certification rules are normally based on criteria relevant for genetically homogeneous plant varieties from professional plant breeders, but not farmers' varieties. The result is that farmers' varieties are excluded from the formal market in many countries – in Europe it is even prohibited to exchange seeds among farmers or to give them away.

Access laws, often adopted with reference to the Convention on Biological Diversity (CBD), tend to restrict access to genetic resources for companies and entities other than farmers and indigenous peoples. However, in some cases the acts also cover gene bank conservation activities, vital for farmers' continued access to agro-biodiversity. In Peru, for example, access-related legislation on the protection of traditional knowledge has proven a barrier to conservation, and has discouraged the sharing of seed potatoes among farmers (Andersen 2005b).

From a Farmers' Rights perspective, the main goal must be to uphold the legal space for farmers within these emerging legislative frameworks. As a minimum, it must remain allowed for farmers to save, develop, exchange and sell seeds and propagating varieties from their varieties⁷ with other farmers. Plant-health concerns must be addressed in other ways. Furthermore, intellectual property legislation must be designed so as to enable small-scale farmers to continue their customary practices related to seeds and propagating material. Finally, access legislation must not impose barriers to conservation activities, or serve to discourage seed exchange among farmers.

Creating support mechanisms as a benefit sharing measure

Creating support mechanisms is an international as well as a national challenge. At the international level, we have seen that the International Fund for Farmers' Rights was approved but did not materialise. Through the Multilateral System benefits are to be shared with farmers' who maintain and develop plant genetic resources. Also the Funding Strategy has provisions in this regard. We do not know currently how much funds will be generated in these systems and flow to farmers. Most probably additional funds will be required. A potential that has so far not been systematically tapped is Official Development Cooperation. Some funds have been directed to *in situ* management of plant

⁶ This development can be seen as the result of the interaction between the international regimes presented here, and their driving forces, as analysed in Andersen, 2007, forthcoming.

⁷ This concept broadly covers traditional varieties and farmers' plant variety innovations.

genetic resources for food and agriculture through the Global Environment Facility (GEF). Some funds have also been channelled through bilateral donor agencies and NGOs. But there is no systematic approach to tapping this potential. If the importance of Farmers' Rights for poverty eradication and the UN Millennium Development Goals would be sufficiently highlighted, more funds could probably be released for this purpose, and possibly a joint funding mechanism could be discussed.

At the national level there are many small scale activities which are relevant in a benefit sharing context, such as the establishment of community gene banks, participatory plant breeding, farmers' field schools, and various marketing activities. Today, these benefits are achieved mostly through initiatives taken by Non Governmental Organizations (NGOs), Intergovernmental Organizations (IGOs) and some extension services, and reach a limited number of farmers. Options to scale up such and other activities relevant in the context of benefit sharing include the establishment of funding mechanisms at the national level to channel the necessary resources (partly from international sources) to activities supporting farmers in their maintenance of agro-biodiversity. This would also require up-scaling institutional structures and competence for these purposes – in close collaboration with farmers.⁸

Enabling farmers' participation in decision making

This is an issue which will necessarily have to be approached differently according to the political situation in various countries. Possibilities are *inter alia* the participation in decision making bodies, in hearings regarding legislation and policies, in research organisations and extensions services, and in discussions in media.

An important question in this regard is how to determine legitimate representatives of farmers. Here the way in which farmers' unions and institutions are organised is crucial to enable legitimacy.

To achieve farmers' participation in decision making, awareness rising among farmers as well as authorities and other stakeholders is crucial. Capacity building and information work is central in this context.

6 Conclusions

The clarification of the contents of Farmers' Rights is a key to their realisation. An analysis of perceptions shows that there are two main avenues to the realization of Farmers' Rights: the stewardship and the ownership approach. Countries are free to choose the measures they deem relevant. If they choose an ownership approach, it is important to safeguard that it does not conflict with the principles of the stewardship approach, which has been the main avenue in the FAO since the issue was first addressed.

For the purpose of advancing the discussions on Farmers' Rights from concept debates to concrete action, it is necessary to develop a common ground of understanding. A minimum definition of Farmers' Rights – a lowest common denominator among stakeholders – has been proposed, and taken as point of departure to identify core challenges and measures. Measures are required within three areas: upholding or restoring legal space within legislative frameworks for farmers' stewardship and innovations in agriculture; establishing funding mechanisms at the international and national levels in order to scale up activities supporting farmers in their vital contribution to the global genetic pool; and enabling farmers' participation in relevant decision processes. A minimum definition, as proposed here, may also be instrumental in furthering fruitful dialogue between stakeholders on further measures required for the realisation of Farmers' Rights.

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⁸ A question for discussion in this regard is whether benefit sharing should also involve the sharing of benefits which are not directly related to farmers maintenance and breeding of plant genetic resources. Should benefit sharing – as reward for farmers' contribution – for example include health stations, schools or other measures?

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Revisiting the concept of Farmers' Rights: Consensus reached and challenges remaining

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1. Origin and brief history of farmers' rights

Farmers' rights was first coined as a term and nascent concept in the mid eighties by Pat Mooney and Cary Fowler, and subsequently presented to the Working Group of the FAO Commission on Plant Genetic Resources in 1986. The concept was proposed as a response to plant breeder's rights over crop germplasm (Mooney, 1983).

The FAO Conference of 1989 adopted a Resolution on Farmers' Rights (5/89) by consensus. This resolution was adopted as a package, together with a resolution on the interpretation of the International Undertaking regarding plant breeder's rights. The FAO Conference Resolution on Farmers' Rights refers to the need for continuing conservation and development of plant genetic resources as well as for benefit-sharing, and the need for sufficient funding.

The FAO website offers an explanation of Farmers' Rights⁹, including the statement that the concept of Farmers' Rights provided "a measure of counterbalance to "formal" intellectual property rights and patents that compensate for the latest innovations with little consideration of the fact that in many cases these innovations are only the most recent step of accumulative knowledge and inventions that have been carried out over millennia by generations of men and women in different parts of the world."

Also, The Keystone Dialogue Session of Madras (now Chennai), 1990, recognized the importance of Farmers' Rights, and referred to the need for an International Fund. Subsequently, the concept was - at least in spirit, if not in the same terminology - incorporated in the Convention on Biological Diversity (CBD), and elaborated in the FAO Global Plan of Action for Plant Genetic Resources for Food and Agriculture (GPA) of 1996, as well as the International Treaty on Plant Genetic Resources for Food and Agriculture (IT PGRFA) of 2001. The concept of farmers' rights was also discussed and developed by farmers' organizations and collaborating Non-Governmental Organizations.

In 1992, Brush claimed that

- farmers' rights should be fundamentally different from intellectual property rights, including plant breeder's rights
- farmers' rights are group rights assigned to the collective interests of farmers who contribute to the conservation and development of plant genetic resources, not assigned to individual varieties or plants

⁹ <http://www.fao.org/docrep/X0255E/x0255e03.htm>

- farmers' rights are non-exclusive, meaning that no direct reciprocity or bilateral compensation should apply
- farmers' rights can only be valued by non-market mechanisms, and that
- a fund is needed for their implementation.

Whereas, in contrast to the perspective above, the CBD does create options for direct benefit-sharing in the context of a bilateral access agreement, the claims listed above are not in disagreement with the provisions of Article 9 of the IT PGRFA.

In addition, the Charter of Farmers' Rights (1993) refers to farmers' rights as far more encompassing rights of an entire segment of the national or global population, in line with the nature of farmers' rights as fundamentally different from intellectual property rights described above. According to this charter, the following rights should be regarded as farmers' rights: the right to land; the right to conserve, reproduce, and modify seed and plant material; the right to feed and save the country; the right to just agricultural prices and public support for sustainable agriculture; the right to information; the right to participatory research; the right to natural resources; and the right to safety and health.

However, the Farmers' Rights formulated by Via Campesina (1996) are more ambiguous since they contain elements that are reminiscent of intellectual property rights ("the right to control, the right to decide the future of genetic resources, the rights to define legal framework of property rights of these resources"), but also state that farmers' rights are of a collective nature.

2. International agreements referring to farmers' rights

In 1989, the FAO Commission on Plant Genetic Resources described farmers' rights as "rights arising from the past, present and future contributions of farmers in conserving, improving, and making available plant genetic resources, particularly those in centres of origin/diversity. These rights are vested in the International Community, as trustee for present and future generations of farmers, for the purpose of ensuring full benefits to farmers, and supporting the continuation of their contributions".

The FAO Global Plan of Action on Plant Genetic Resources for Food and Agriculture (GPA), under Activity 2, on Supporting on-farm management and improvement of plant genetic resources for food and agriculture formulates as a long-term objective, "to realize Farmers' Rights as defined in FAO Resolution 5/89 at the international, regional, and national levels."

The International Treaty on Plant Genetic Resources for Food and Agriculture (IT PGRFA), agreed in 2001, contains a separate Part with a single Article on Farmers' Rights. Article 9.1 states that "The Contracting Parties recognize the enormous contribution that the local and indigenous communities and farmers of all regions of the world, particularly those in the centres of origin and crop diversity, have made and will continue to make for the conservation and development of plant genetic resources which constitute the basis of food and agriculture production throughout the world."

In addition, Article 9.2 formulates that "The Contracting Parties agree that the responsibility for realizing Farmers' Rights, as they relate to plant genetic resources for food and agriculture, rests with national governments. In accordance with their needs and priorities, each Contracting Party should, as appropriate, and subject to its national legislation, take measures to protect and promote Farmers' Rights, including:

- (a) protection of traditional knowledge relevant to plant genetic resources for food and agriculture;
- (b) the right to equitably participate in sharing benefits arising from the utilization of plant genetic resources for food and agriculture; and
- (c) the right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture."

Finally, Art. 9.3 concludes by stating that “Nothing in this Article shall be interpreted to limit any rights that farmers have to save, use, exchange and sell farm-saved seed/propagating material, subject to national law and as appropriate.”

The Convention on Biological Diversity (CBD), concluded in 1992, does not use the term farmers’ rights since it does not specifically deal with farmers and agro-biodiversity. However, it refers in different wording to the similar rights in its Article 8(j), stating that “(Each Contracting Party shall, as far as possible and as appropriate: “Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices”. In other words, Article 8(j) provides for new rights, which – when applied to farmers and agricultural genetic resources - add another dimension to farmers’ rights, i.e. rights over the knowledge, associated with biological diversity.

The CBD promotes the wider application of knowledge, innovations and practices with the approval and involvement of the holders of such knowledge, innovations and practices, and this wording suggests elements of intellectual property as well. The debate at the international level on the protection of traditional knowledge in relation to genetic resources was largely referred to the Intergovernmental Committee on Traditional Knowledge, Genetic Resources and Folklore (IGC) under the World Intellectual Property Organisation (WIPO). The IGC has not come to any tangible agreement yet.

In addition, the CBD has introduced the principle of national sovereignty over genetic resources to implement one of its basic goals, the sharing of benefits arising out of the use of genetic resources. Under the CBD, access to genetic resources shall be subject to prior informed consent of the Contracting Party providing such resources, but also proceed with the approval and involvement of the holders of such knowledge, innovations and practices. Under the IT PGRFA, Article 11.2 states that “the Multilateral System, as identified in Article 11.1, shall include all plant genetic resources for food and agriculture listed in Annex I that are under the management and control of the Contracting Parties and in the public domain. With a view to achieving the fullest possible coverage of the Multilateral System, the Contracting Parties invite all other holders of the plant genetic resources for food and agriculture listed in Annex I to include these plant genetic resources for food and agriculture in the Multilateral System”. In other words, farmers will be encouraged but will need to give consent, as is also apparent from Article 12.3(e), stating that “access to plant genetic resources for food and agriculture under development, including material being developed by farmers, shall be at the discretion of its developer, during the period of its development”.

In conclusion, both national governments and farmers or farmers’ communities will have to consent with access to materials held by farmers (landraces and modern farmers’ varieties).

The need for a fund to support and operationalise farmers’ rights is widely recognized, including in the IT PGRFA, and in the benefit-sharing principles of CBD and IT PGRFA alike.

In another setting, farmers’ rights were implicitly debated as well. In the 1960s, during the national discussions in the USA preceding the drafting of the first Plant Variety Protection Act (1970) claims were made that the Act should not impair the right of farmers to save, re-use and resell seed of protected varieties. This ‘right’ was actually incorporated in the law as an exemption to the right of the breeder and allowed the free use of protected variety seeds for private and non-commercial use, an exemption which was only curtailed in the 1991 Act of the International Union for the Protection of New Varieties of Plants (UPOV) and concomitantly defined as the ‘farmers’ privilege’. In this context, Farmers’ Rights can be regarded a formalization of the “law of the land”, the non-codified, but widely recognized right of farmers to freely manage the seed that they use and produce.

In taking all the issues listed above into account, the international debate on farmers' rights has become exceedingly complex. The international debate has resulted in formulating justifications for farmers' rights' (FAO CGRFA resolution 5/89) as well as various objectives for such rights (e.g. supporting conservation and traditional lifestyles). However, the wide array of relevant stakeholder views spurred a lengthy debate on the contents of rights and whether such rights should be of private, community or common nature. One extreme position holds the view that Farmers' Rights should provide mainly recognition; the other extreme claims that Farmers' Rights should entail far reaching (exclusive) property rights over genetic resources and access rights to other natural resources. The international debate included proposals for the inclusion of farmers' rights into the 'sui generis' option of TRIPS-agreement of WTO, to be realized by reducing the uniformity and novelty requirements of plant breeder's rights to accommodate the protection of farmers' varieties in the regular breeder's rights systems. In two cases international and national debates have led to explicit formal policies, notably in the African continent and in India where (model) laws were designed that include both breeder's rights and farmers' rights.

In the chapter below we have made an attempt to summarize perspectives and positions in various agreements and by various stakeholders.

3. Proposed contents of farmers' rights

The excerpts from international agreements presented in chapter 2 contain justifications as well as definitions, and objectives of farmers' rights.

Justifications are reflected in the *recognition of farmers' contributions* to the conservation of genetic resources, as in the FAO Commission's statement and also in the CBD provision 8(j) (*respect for knowledge, innovations and practices of indigenous and local communities*) and the ITPGRFA Art 9.1 (*recognition of the enormous contribution that the local and indigenous communities and farmers of all regions of the world*).

Farmers' rights thus originate from different motivations:

6. equity between the users in the North and the suppliers of genetic resources in the South;
7. codification of the "law of the land" regarding seed handling, necessary because of encroaching (IPR and seed) regulations;
8. a contribution to the conservation of genetic resources;
9. balancing of intellectual property rights;
10. a moral right on traditional knowledge in relation to genetic resources.

Definitions are contained in CBD Art. 8(j), and Art. 9.2 and 9.3 of the IT PGRFA, and relate to

- protection and maintenance of knowledge, innovations and practices of indigenous and local communities,
- the rights to participate in sharing benefits,
- the rights to participate in decision-making in matters related to PGRFA conservation and use, and
- the rights to manage farm-saved seed and propagating material.

So, in these definitions, farmers' rights are foremost protective rights stemming from the recognition of farmers' roles, which consist of quite dissimilar elements, relating to the maintenance of knowledge systems, and the maintenance of farmers' seed systems, and to retribution for their roles through benefit-sharing and participation in decision-making.

Other groups have provided wider definitions for farmers' rights, in particular farmers' organizations that developed the Charter of Farmers' Rights (1993) and the increasingly globally operating small-scale farmers' organization Via Campesina (1996).

Objectives, finally, include

- conservation of genetic resources through supporting the continuation of their contributions (FAO Commission), through protection and maintenance of knowledge systems (CBD) and seed systems (IT PGRFA), and through participation in decision-making (IT PGRFA);
- ensuring full benefits to farmers (FAO Commission; CBD; IT PGRFA).

These objectives are in line with the overall objectives of the CBD and IT PGRFA.

In what follows we shall further analyse perspectives and positions on elements of farmers' rights by adhering to the order in which these elements appear in Article 9 of the IT PGRFA.

4. Relation to the protection of traditional knowledge [Art. 9.2(a)]

Concomitant and overlapping debates in the Conference of the Parties of the CBD on the rights on indigenous communities, in the FAO-Commission on PGRFA on genetic resources and Farmers' Rights, and in the World Intellectual Property Organization on rights over expressions of folklore, led to the initiative to establish an "Intergovernmental Committee on genetic resources, traditional knowledge and folklore" (IGC) in the WIPO framework that is charged with the development of a strategy for an equitable system for the protection of traditional knowledge and folklore, often in relation with genetic resources, that is in harmony with intellectual property rights systems. The perceived need to harmonize any system of farmers' rights with intellectual property rights is the main reason why the IGC operates in the WIPO framework. The key elements that the committee has to discuss is how communal rights over these three interrelated issues can be combined with the private (individual) rights in IPR systems, more specifically how such necessarily rather 'soft' rights will relate to the hard patent right, copyright, trade secret and plant breeder's rights systems. Moreover, the relation between the communal rights and the national sovereignty (over genetic resources) will require careful consideration: the outcome should be compatible with the principle of national sovereignty over genetic resources. The IGC is likely to require a few more years to come to a conclusion. (Louwaars, 2007)

Similar to the knowledge of traditional healers who use genetic resources, traditional knowledge of farmers can be relevant for the plant breeding and seed production sectors, since the identification of genetic resources of potential value may be facilitated by information that farmers provide at the time of collection. A question is whether the use of this knowledge should depend on the right of the knowledge holder to control the use of this knowledge and subsequently the genetic resources in either an exclusive or a non-exclusive way. Furthermore, major issues are how to formally recognize the use of that knowledge in plant breeding, whether and how benefits derived from the use of that knowledge should be shared, and if and how to otherwise protect the traditional knowledge. In this sense, it may be worthwhile to analyse possible differences between the sharing of traditional medicinal knowledge related to genetic resources, which is commonly passed from individual healers to the next generation, and the sharing of agricultural knowledge. Article 12.3(c) of the IT PGRFA is relevant, specifying that "... "subject to applicable law, any other associated non-confidential descriptive information, shall be made available with the plant genetic resources for food and agriculture provided;". In other words, whereas confidentiality may be respected, the same conditions as for the resources themselves seem to apply to the associated knowledge, in case plant genetic resources have been assigned to the Multilateral System. In general, considerations leading farmers to freely exchange their plant genetic resources seem to equally apply to the traditional knowledge associated with such genetic resources. Farmers have mostly adhered to the principle of free exchange, and this holds for the genetic resources themselves as well as the associated information. (Louwaars, 2007).

5. Relation to Access and Benefit-sharing [Art. 9.2(b)]

This chapter relates to the protection and maintenance of knowledge, innovations and practices (access) and to the right to participate in benefit-sharing.

Conditions to access can be set according to both the CBD (Art. 8(j) and 15) and the IT PGRFA (Art. 12.3). Proper implementation of these articles will bind bio-prospecting to clear rules and prevent bio-piracy.

Benefit-sharing is regarded a major aspect of farmers' rights. Various options for the operationalization of benefit-sharing exist.

Multilateral or bilateral. Although farmers' rights are generally regarded as a group right, this does not automatically result in a multilateral concept of farmers' rights. Indeed, the CBD maintains the option that individual communities or ethnic groups might profit from access provided as is strongly suggested by the wording in Article 8(j), stating in a single sentence that the wider application (of knowledge, innovations and practices) should take place with the approval and involvement of the holders of such knowledge, innovations and practices, and that this should encourage the equitable sharing of the benefits.

However, the Multilateral System of the IT PGRFA delinks access and benefit-sharing (Visser & Louwaars, 2006). Benefits should be shared with a fund (or trust account) and should flow primarily, directly and indirectly, to farmers in all countries, who conserve and sustainably utilize PGRFA, according to Article 13.3.

Monetary or non-monetary. Direct or indirect. Benefit-sharing with farmers may come in monetary form as well as in non-monetary form, and it may be organized through direct funding of community initiatives, but probably more likely through indirect support via third party activities, such as breeding institutions, extension services and other government offices, or also NGOs (Visser *et al.*, 2005). The importance given by the IT PGRFA to non-monetary benefit-sharing is obvious from the detailed text of Article 13 of the IT PGRFA dealing with Benefit-Sharing in the context of the Multilateral System, and is also warranted looking at current-day experience with benefit-sharing that in practice is largely organized through non-monetary mechanisms. Information exchange, technology transfer and capacity building form mechanisms that may well serve the sharing of benefits with farmers, whether directly or indirectly. An example of direct benefit-sharing with farmers may be formed by participatory plant breeding programmes, directly involving farmers with support from external parties, and contributing to the wider goals of conservation and sustainable development of plant genetic resources.

Current proposals elaborating the Funding Strategy of the IT PGRFA do assume that any proposals for support from the Funding Mechanism should be submitted by Contracting Parties, possibly enhancing the probabilities that public institutions may play a role in delivery of benefits.

Targeting benefits: conservation or wider. A rather fundamental issue is whether benefits should mainly contribute to the conservation of genetic resources, or whether it is the right of farmers to use the shared benefits for alternative purposes as they please. This question relates directly to the underlying perspectives presented above. If farmers' rights are primarily conceived as an equity issue, no restriction may apply (including the use of the benefits to purchase new uniform varieties). The CBD is not explicit in this matter. The IT PGRFA specifically targets benefits to those farmers who conserve and sustainably utilize genetic resources, thus implicitly assuming a contribution from the use of the shared benefits to further conservation.

6. Relation to decision-making [Art. 9.2(c)]

Whereas literature on governance and stakeholder involvement in policy development processes is abundant, scant literature is available on the rights to participate in decision-making in matters related to PGRFA conservation and use.

At the international level, the CBD contains specific provisions that allow for the involvement of indigenous communities in the decision making-process. Special meetings are devoted to the implementation of Art. 8j, which give such communities a voice. However, neither the CBD nor the IT PGRFA contain provisions on the rights to participate in decision-making at the national level, an issue that is explicitly and deliberately left to the Contracting Parties.

According to Article 9.2(c) , farmers' rights do not only entail rights to fair decisions in farmers' interests by governments, but only involvement in the decision-making process on such rights by farmers themselves.

Two regional policy instruments, i.e. Decision 391 of the Andean Community as well as the OAU Model Law do explicitly relate to the right to participate in making decisions in a similar wording as in the International Treaty. However, in a number of recently published case studies (Lettington *et al.*, 2006) covering 10 countries in Latin America and Africa, no provisions were identified in national laws or regulations ensuring that the interests of all stakeholders are accommodated when negotiating agreements. Institutional arrangements for ABS decision-making following from such laws and regulations are as yet unclear.

In general, this right has not been translated in practical policy instruments or institutional arrangements at the national level.

7. Relation to farmers' seed systems (The right to save, use, exchange and sell farm-saved seed) [Art. 9.3]

This chapter relates to the rights to manage farm-saved seed and propagating material. In this context, a major remaining issue is formed by the interpretation of Article 9.3 of the IT PGRFA. Many experts regard this Article as void, since it only reconfirms an existing situation and explicitly subordinates the interpretation of Farmers' Rights to national law. Article 9.3 also specifies that rights are subject to national law and as appropriate, providing discretion to national governments to interpret where farmers' rights may be limited based on the scope of other laws.

Rights that farmers have to save, use, exchange and sell farm-saved seeds can be regarded customary rights. As usual, such rights are rooted in functional mechanisms and relationships between stakeholders involved in such mechanisms. At the same time these rights are challenged by rather recent regulations, such as seed laws and intellectual property rights.

The majority of genetic diversity maintained on-farm is managed in small-scale agriculture in which traditional or local seed systems dominate and where the formal seed sector plays a limited and additional role. Local seed systems depend heavily on the free exchange of seeds, whether through small gifts, barter and exchange, or trade. It is this system that needs to be protected from negative impact of policies developed to regulate and often to promote the formal seed system. Such negative impact may stem from agricultural policies, such as seed laws, from environmental policies regulating (and often limiting) access, and from trade policies (IPRs). When seed laws prohibit the marketing of non-certified seed, most of the exchanges in farmers' seed systems are made illegal. When modern varieties enter the farmers' seed system and seeds are shared among farmers, intellectual property rights may interfere. When farmers share their materials across legally defined borders of communities or states, biodiversity laws that limit access to genetic resources may be offended.

Since long, in many parts of the world local seed systems do not only cover traditional landraces but also modern farmers' varieties that partly result from introgression of genetic material of modern varieties, including protected varieties (Salazar *et al.*, 2007). Also, farmers may cultivate PBR-protected varieties, and save part of the seed on-farm or sell this locally. This habit keeps modern varieties in local seed systems and increases the probability of introgression of genetic material of such varieties into local farmers' varieties for their further improvement. Thus, these practices benefit both local seed systems and the maintenance and further development of genetic diversity on-farm.

Whether under market-oriented and intensive production systems or in more marginal production systems, farmers continue to create their own varieties. Modern varieties have simply replaced landraces as the source of diversity in intensive production systems, but have not abolished farmers' breeding. The reason for this development is that farmers often recognize the attractive features of modern varieties, including high yields and novel resistances, but also identify various characters that are not appreciated, especially regarding taste, processing qualities, and resilience under less optimal growing conditions. This is highly evident in South-East Asia where rice is the major staple crop, but also in other regions and for other crops.

1. Eight years ago the Philippine Seed Board certified the farmers' variety "Bordagol", a very popular variety that was spreading throughout the country. The farmer who selected this variety claimed that he selected Bordagol as an "off-type" from an IR36 rice field. Apparently, the Philippine Seed Board found the level of distinctness, uniformity and stability sufficient for such registration.

2. In the island province of Bohol in the central Philippines, the local population prefers rice grains with a red colour, as this characteristic is associated with a better quality and greater satisfaction after the meal. Over a few years, many Philippine Seed Board-released rice varieties available in the island gave rise to new phenotypes with red grains. Molecular studies comparing these red types with the original varieties showed that these varieties descended from the original formal sector varieties and had incorporated the preferred red pericarp trait. The studies concluded that this trait most probably resulted from introgression of genes from traditional red rice varieties exhibiting this trait in the newly released Seed Board varieties.

3. A study of the popular local rice variety "Tai Nguyen" in southern Vietnam showed that economic reforms created a large demand for this aromatic rice variety in urban centers, in particular in Ho Chi Minh City. "Tai Nguyen" is now cultivated in high-external-input systems, unlike in the past, and can be found over large distances across the Mekong Delta. Comparison between the "Tai Nguyen" varieties from gene bank stocks collected 15 years ago with those that are presently cultivated and comparison between samples from different geographic origins within the Mekong Delta surprisingly showed that no phenotypic and molecular differences had emerged in the "Tai Nguyen" variety and that farmers readily and accurately identified off-types exemplifying that farmers are able to accurately maintain a preferred variety.

4. It is estimated that approximately 20% of rice varieties cultivated in an area of around 5,000 hectares under high-external-input conditions in North Cotabato Province in Mindanao, in the southern Philippines, constitute farmers' varieties. These varieties are distinct and exhibit a fairly high degree of uniformity and stability compared to landraces; and they show traits that are desirable under this production system, such as medium or short stature, short or medium term duration, and non-photosensitivity.

5. In Nepal, participatory plant breeding resulted in new rice varieties for high-altitude areas. One of the most adopted varieties, Machhapuchre-3, that was based on farmers' selection from a segregating F3 population, performed much better than the products from centralized breeding and spread over large areas. All selection for this variety was done in two villages in the same valley, indicating that farmers' varieties may spread over wide areas.

6. A comparison of farmer selection strategies in Syria and other countries with formal breeding selection strategies and identified substantial differences between the barley lines selected by formal breeders on-station and by farmer-breeders in their fields. It was demonstrated that it is possible to organize a plant breeding programme so that farmers become major actors in the selection of new cultivars.
7. A maize improvement project in the State of Rio de Janeiro, Brazil, showcases collaborative contributions from the formal sector and farming communities based on a local maize variety as starting material. Six cycles of mass selection in the agricultural community of Sol da Manhã resulted in an upgraded local variety characterized by low nitrogen use, rendering the variety highly attractive for small-scale farmers.
8. The presence of small plots of new commercial maize varieties in small-scale farmer fields in East Java was reported, deliberately planted amidst local varieties to allow random introgression of genetic information into farmers' own varieties with the purpose to enrich and improve such varieties. Such strategy was preferred to straight adoption of the new commercial varieties.
9. Major differences among maize farmers in the state of Jalisco on the Pacific Coast of Mexico have been described. Some farmers select seeds almost exclusively from their own harvests, whereas farmers who do not produce enough seed for the next season buy all their seeds. The most interesting group of farmers use their own seed lots in addition to seed acquired in the community or introduced from other regions, and thus experiment with new varieties. In the case of maize, continuous introduction of new varieties leads to extensive gene flow within and between varieties. At the same time, these farmers are well able to maintain all the typical characteristics of their preferred local varieties. The assumption that traditional systems are closed with respect to gene flow is clearly contradicted.

The farmers' varieties of the examples above often emerged as farmers' selections from modern and traditional cultivars in market-oriented production systems. Selection and the emergence of new farmers' varieties are occurring with as well as without external intervention or support. Farmers' practices may or may not include crossing and conscious creation of new genotypes, or rely on natural introgression events keenly identified and followed by selection. Once a preferred variety has been established farmers are well able to maintain its typical characters, although generally farmers' varieties are deliberately maintained more heterogeneous than private sector varieties, in order to overcome the vagaries of environmental conditions. These farmers' varieties are well able to spread on the territory.
(Salazar *et al.*, 2007)

8. Implementation level and stakeholder responsibilities

Perspectives on the desirable level of implementation are reflected in the early FAO Commission's statement of 1989, mentioning that farmers' rights are vested in the International Community, as trustee for present and future generations of farmers, whereas later on in 2001 the Treaty defines farmers' rights as the responsibility of national governments, which is already also implied in the CBD formulation of 8(j) in which Parties (=governments) form the active subject.

However, even if taking into consideration that farmers' rights are primarily a national responsibility, the Governing Body of the International Treaty may consider it useful to advise national governments on possible ways to operationalize farmers' rights and on the need to develop laws or regulations that may provide the proper framework for such implementation. A rationale for such position would be that governments may learn lessons from each other's views on and experiences with designing and implementing farmers' rights, that such implementation may be in the context of multi-national initiatives, and that the civil and private sector have a more effective forum to deliver their contributions to the implementation of farmers' rights.

9. Revisiting Article 9 of the Treaty

A certain level of agreement between a large number of stakeholders and Contracting Parties to the Treaty may exist on a number of interpretations of the concept of farmers' rights. Such consensus has been suggested above as an interpretation of the IT PGRFA, and appears to include the following aspects:

6. Implementation and operationalization of farmers' rights is a national responsibility.
7. Farmers' rights should not be considered a form of intellectual property rights, but instead represents a much wider concept of recognition of farmers' contributions, protection of farmers' knowledge and seed systems, and involvement of farmers in decision-making, in addition to the right to benefit-sharing.
8. Farmers' rights in the context of the IT PGRFA are group rights in a wide sense, since they refer to the contributions of local and indigenous communities and farmers of all regions of the world, particularly those in the centres of origin and crop diversity, and since access and benefit-sharing have been delinked in its Multilateral System.
9. Benefits shared in the context of the MLS should primarily, directly and indirectly, flow to farmers in all countries, ..., who conserve and sustainably utilize plant genetic resources for food and agriculture.
10. Therefore, the Governing Body and the Contracting Parties have the responsibility to develop the funding mechanism of the IT PGRFA in such a way that it maximally reaches farmers, both as compensation and as a condition for continued contributions to the conservation and sustainable development of plant genetic resources for food and agriculture.

The Governing Body may wish to take into account that benefits shared maximally reach farmers when discussing the Priorities for the allocation of funds under the direct control of the Governing Body.

In addition, the Governing Body may wish to advise Contracting Parties on minimizing the negative effects of other rights systems, such as seed laws, plant breeder's rights and patent rights, and legislation on access and benefit-sharing, on the functioning of local seed systems and the contribution to conservation and sustainable development of PGRFA on-farm. Protection of traditional knowledge associated to such PGRFA from misappropriation by third parties should be included in these considerations.

In order to do so, the Governing Body may wish to study and evaluate (1) which policies may have negative impacts on local seed systems that in turn negatively influence the current and future contributions of small-scale agriculture to the conservation and sustainable development of PGRFA, (2) how such negative impacts can be mitigated or avoided by adjustment of policies (laws or implementing regulations), and (3) which international initiatives may facilitate such corrective measures. The results of such a study may be presented to the Contracting Parties, in order to facilitate implementation of Farmers' Rights at the national level.

10. Conclusion

Although in the IT PGRFA Farmers' Rights have been declared a national responsibility, nevertheless the Governing Body has a role to play in guiding the operationalization of farmers' rights at the national level, given the current lack of experience and the many challenges that the implementation of farmers' rights is still confronted with.

In particular, negative effects of intellectual property rights and access and benefit-sharing regimes on local seed systems need further study and ways to mitigate and prevent such effects should be explored.

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Informal International Consultation on Farmers' Rights
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Second Session: Farmers' Contribution to the Conservation and Sustainable Use of Crop Genetic Resources

Mechanisms for Implementing Farmers' Rights on Plant Genetic Resources: Experiences from Nepal

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1. Background

Nepal is a small mountainous country with an area of 147,181 square kilometers, and is located between 26° 22' N and 30° 27' N latitude and 80° 4' E and 88° 12' E longitude. It extends from the gangetic plains in the south with an altitude of about 60 m asl to Mount Everest, the highest peak of the world, in the north. The climatic conditions vary sharply from hot tropical to freezing alpine across the ecological regions from south to north. The extreme variation in altitude, complex topography, climatic conditions, socio-cultural composition of the communities and farming practices have evolved immense diversity in natural flora and fauna as well as cultivated plant species. The Himalayan region of Nepal has been internationally recognized as one of the World's top 20 hottest global biodiversity hotspots. Comprising of less than 0.1 per cent of earth's land mass, Nepal supports 8 per cent of all birds, 4 per cent of all mammals, 1.53 per cent of all reptiles, 6 percent of all bryophytes, 3 per cent of all pteridophytes and 2 per cent of flowering plants (Ryman, 1992; NBS, 2000). Nepal has over 7,000 species of flowering plants (Regmi, 1990), of which about 246 species are endemic to Nepal (Shrestha & Joshi, 1996).

Nepal is increasingly giving more priority and attention to the conservation of its rich biodiversity in the recent years. The conservation efforts are, however, largely targeted in the protected forest areas – national parks and reserves. The agricultural biodiversity, which is more dynamic in nature due to continuous human interventions, is gradually emerging as important component of the national biodiversity. The research and development initiatives undertaken in the last 10 years for the conservation of agricultural biodiversity have further established its value in the conservation for livelihoods of Nepalese farmers. Local Initiatives for Biodiversity, Research and Development (LI-BIRD), a civil society organization (CSO) has been one of the pioneer organizations in promoting on-farm conservation of agricultural biodiversity in Nepal since 1997. Working with a number of international and national partners, such as Bioversity International, Nepal Agricultural Research Council (NARC), Department of Agriculture and community-based organizations (CBOs), LI-BIRD has identified a number of good practices for community-based on-farm conservation of agricultural biodiversity. The article discusses experiences of LI-BIRD in promoting these good practices in Nepal.

2. Agricultural biodiversity and livelihoods

Agriculture is the main source of livelihood for nearly 80 per cent of the people in Nepal. It contributes about 38 per cent of the national Gross Domestic Product (GDP). The farming, however, is largely subsistence-oriented with little integration to the market economy. Farmers are predominantly small holders with an average holding of less than 1 hectare of cultivated land. Farmers' access to infrastructure (irrigation, electricity, road, market and so on), services and inputs necessary for farming is quite poor and inadequate. As a result, the average productivity of the major cereal food crops is less than 2 tons/hectare, and a majority of the farming households are food deficit from their own production. The per capita income is about US \$ 322 and 31 per cent of the total population is below poverty line (CBS, 2004).

These conditions have impacted on the farming and livelihood strategies of farmers in Nepal. Farmers in Nepal widely practice mixed farming systems, which involve very high interdependence between crop production, livestock rearing and use of tree resources from community forest and/or farm managed trees. A majority of farmers meets most of their family requirements of food, income, shelter and socio-cultural rituals from the production of their own farms and exchange within the village. For this, they produce a wide range of cereal, legume and crops; vegetables, spices, fruits, livestock, and fodder and other trees in their farm. Farmers, therefore, maintain a very amount of agricultural biodiversity in their farm – home gardens and farm land – and in their communities. A village in western Nepal has reported to maintain and cultivate more than 50 varieties of rice every year (Rana *et al.*, 2000). More than 90 per cent of farmers' seed requirement of major food crops are met by their own production, saving and farmer-to-farmer exchange. The local seed supply systems have not only been helpful in maintaining on-farm agricultural biodiversity but have also been contributing to the food security of resource poor farmers of Nepal.

The local or traditional knowledge possessed by the farmers have played important role in the maintenance of rich agricultural biodiversity on-farm. Farmers have intricate knowledge about the nature, production management and use value of a wide range of plant and animal species and their varieties/ breeds maintained on-farm. Nepal is also rich in terms of ethnic diversity. The rich food culture associated with different ethnic groups has also been contributing to the maintenance of high agricultural biodiversity in the Nepalese farming communities. The food related socio-cultural values and practices have also shaped agricultural biodiversity through selection of plant and animals for particular traits. Farmers' local innovation in maintaining desired species and varieties/ breeds has also kept evolutionary process alive. Maintaining a rich agricultural diversity on-farm is, therefore, a way of life and a strong basis for livelihoods of farmers in Nepal. As conservers and custodians, these farmers therefore have primary rights over the benefits arising from the use of these genetic resources.

Like other developing countries, Nepal is also undergoing development transformation through technological interventions and integration into market economy. Socio-cultural values and rural lifestyles are rapidly changing. This has impacted on agricultural production systems with gradual loss of agricultural biodiversity from the farms and farming communities. There is now greater need for restoring traditional knowledge and maintaining agricultural biodiversity for improved food and livelihood security of farmers and the farming communities.

3. Position on Farmers Rights

Nepal is committed to protect and implement Farmers Rights on the access to and utilization of plant genetic resources, and is reflected from its commitment to international convention and treaties and formulation of national policies and laws. For example:

- Nepal is party to Convention on Biological Diversity (CBD) since 21 February 1994
- Nepal became member of the WTO on 23 April 2004

- Nepal is a member of WIPO since 4 February 1997
- Nepal ratified ITPGRFA on 2 January 2007
- National Agricultural Biodiversity Policy has come into force from 5 March 2007
- Plant Variety Protection (PVP) Bill drafted and is undergoing review for approval
- Access and Benefit Sharing (ABS) Bill drafted and is undergoing review for approval

A wide range of Farmers Rights provisions has been made in the National Agricultural Biodiversity Policy, and PVP and ABS draft Bills. Some of the important policy provisions made in the National Agricultural Biodiversity Policy relevant to the Farmers Rights are:

- Documentation of plant genetic resources and associated traditional knowledge and granting Farmers Rights over these resources and knowledge
- Require pre-informed consent (PIC) from farmers for the access to genetic resources
- Making necessary arrangements for the projection of Farmers Rights

The draft “Access and Benefit Sharing (ABS) Bill” has made following provisions relevant to Farmers Rights:

- Farmers have ownership right over genetic resources found in their property
- Farming communities have right over their traditional knowledge, skill, innovation, technology and practice related to their genetic resources
- Require pre-informed consent (PIC) from farmers for the access to genetic resources
- Fair and equitable benefit sharing from the use of the genetic resources

LI-BIRD has been actively engaged with other stakeholders in revising the draft “Plant Variety Protection Bill” in order to develop it as an effective *sui generis* system for Nepal. This Bill directly emphasizes protection of Farmers Rights and has number of provisions for this. The major provisions include:

- Right to produce, save, re-use, exchange and non-commercial sale of new plant varieties
- Right to complete and true information about the quality of seeds of new plant varieties
- Right to claim compensation from the use poor quality seeds and/or wrong information about new plant varieties
- Recognition of farmers’ ownership on local and farmer developed plant varieties
- Provision of PIC and disclosure requirement for the use of farmers’ plant varieties
- Right to provide access to other users and benefit from the use of farmers’ genetic resources

The preparation for and the implementation of Farmers Rights in Nepal is at initial stage and requires strong capacity building programmes. LI-BIRD is working on developing field mechanisms to implement Farmers Right and access and benefit, and strengthening farmers’ and community capacity to institutionalize such mechanisms.

4. On-farm conservation strategies in action

LI-BIRD’s experiences in Nepal show that strategies that provide farming communities incentives to act together and benefit farming households have been helpful in promoting on-farm conservation of agricultural biodiversity. These strategies capitalise on opportunities for conservation through utilization of genetic resources to meet the cultural and development needs, and particularly included: (a) social value based strategies; and (b) economic incentive bases strategies. The social value based strategies promote on-farm conservation of agricultural genetic resources – plants and animals by increasing their uses in the socio-cultural rituals; and by providing social recognition – awards, naming as leader in conservation and so on to farmers and farming communities. The economic incentive based strategies involves conservation through value addition for increased production for desired traits of economic value, and for increased marketing and cash income.

LI-BIRD has been promoting approaches which support farmers and farming communities in taking lead role in the conservation and utilization of agricultural biodiversity. These approaches are referred to as good practices for on-farm conservation of agricultural biodiversity and are collectively called **community-based biodiversity management (CBM)**. It involves increasing the understanding of local knowledge and practices on the cultivation and use of the community genetic resources and building the capacity of local CBOs and farming communities to plan and implement conservation and utilisation strategies. Some of the major approaches for on-farm conservation of agricultural biodiversity are presented here.

Biodiversity fair. Farming communities are supported to organise biodiversity, where farmers bring and display their seeds, plants and plant products; share knowledge associated with them and exchange seeds and planting material among each other. Biodiversity fairs have been very effective in raising awareness about the value of agricultural biodiversity among farmers and other stakeholders. It has also been helpful in documenting diversity in genetic resources.

Community Biodiversity Register. LI-BIRD in collaboration with NARC and the Bioversity International pioneered the concept of promoting community biodiversity register (CBR) in Nepal. It enables farming communities to systematically document their genetic resources and associated local knowledge as a basis for formulating appropriate conservation strategies. Each farming community maintains a register with detail information about plants, animals, birds and associated knowledge used for agricultural production. These registers are designed to form basis for official recognition of genetic resources conserved and owned by the farming communities. These registers will also server as basis to recognise farmers'/community right over their genetic resources and facilitate access and benefit sharing mechanisms. The Ministry of Forest and Soil Conservation is now formally promoting CBR in 29 districts with plan to cover all 75 districts of Nepal.

Community Seed Bank. The community seed bank is a depository of crop seeds managed collectively by a farming community. It has been promoted as a strategy for conserving and securing access to seeds of local plant varieties within the farming community. The Agriculture Development and Conservation Society (ADCS) – a CBO formed and managed by the local farming community – in the Kachorwa village of Bara district has successfully established a community seed bank with rich depository of seeds of food and vegetable crops. The bank has established a system of collecting seeds of different crops from farmers of village, re-generate seeds every year member farmers, and organise production and distribution of seeds of local plant varieties. It has also re-introduced plant varieties lost from the village by bringing it from other villages. The bank has now more than 54 local varieties of rice and a big collection of seeds of other plants. Farmers, especially women farmers in the area have now secured access to the seeds of their local plants. The bank is also being sees seen as a means to secure Farmers Rights over the local genetic resources.

Value addition and marketing. Local plants and their products are generally preferred by rural and urban consumers for their taste and association with cultural rituals. However, due to low productivity and low volume of production, marketing of many of the local plants is difficult and usually not profitable. The on-farm conservation of such plants is usually under stake due to less and less farmers growing these plants. LI-BIRD has been working with a number of farming communities to improve value chain of many under-utilized crops by adding value to these crops through processing and packaging, and promoting them as quality food in the market. Local crops are also being promoted by using them to make non-traditional, i.e. modern food, such as bread, cake, cookies, noodle and so on to attract young generation. Because of these interventions, the production area of local crops, such as fingermillet, *Anadi* rice – a sticky rice with medicinal and cultural value, buckwheat and taro has steadily increased in the farming communities participating in the programme.

Participatory Plant Breeding (PPB) for conservation and development. LI-BIRD's extensive experience in PPB has successfully been used for on-farm conservation of the local rice

varieties/landraces. The basic principle of the conservation-oriented PPB is to add value to the local plant varieties/landraces by improving their traits of economic and/or socio-cultural value and to conserve genes of these varieties in the process. The “Jethobudho” – an aromatic rice landrace of the Pokhara valley – enhanced though this partnership has now been formally registered by the national variety release authority. Such grassroots breeding programme has also promoted farmers’ innovation in local crop development.

Box 1: PPB as a strategy for combining conservation with development goal

Mrs. Radha Adhikari, one of the members of Participatory Plant Breeding (PPB) group at Begnas project site in Nepal, is excited with the performance of three rice lines she has selected from a cross between Mansara and Khumal 4. Mansara, a locally cultivated rice landrace, is a poor farmers’ variety as it grows well under low fertility and water regime but is poor in eating quality and fetches low market price. To improve the eating quality of this variety, it was crossed with Khumal 4 – a fine quality modern rice variety. The new rice lines selected and advanced by Mrs. Adhikari have good cooking and eating quality of Khumal 4 but have also retained all good quality of Mansara. Many farmers from the village have approached Mrs. Adhikari for information and seed of the new varieties. PPB is now increasing being appreciated both by farmers and scientists as a viable strategy for combining conservation with development goals of the farming communities.

Strengthening rural institutions and establishing community biodiversity fund. Farmers’ organizations and other community-based organizations have been given key role in planning, implementing and managing interventions promoting on-farm conservation of agricultural biodiversity. Each village has formed an Agricultural Development and Conservation Committee (ADCC), which is responsible to coordinate all the biodiversity conservation and utilization activities within the village. Training and exchange visits have been organized to strengthen capacity of these committees. Each committee has also established a Community Biodiversity Fund to promote activities related to conservation and utilization of plant genetic resources among the farming households. The fund is also used to support farmers to undertake conservation-based income generating enterprises to support their livelihood.

5. Conclusion: issues and considerations

Experiences of LIBIRD show that community-based biodiversity management approach has been quite effective in engaging farmers and farming communities in the conservation and utilization of agricultural biodiversity on-farm. Linking conservation with development through utilization of genetic resources and supporting farmers’ and community actions are important strategies for promoting conservation of agricultural biodiversity on-farm. Mechanisms to implement Farmers Rights to, and access and benefit sharing from the use of genetic resources are emerging but needs strong policy support to institutionalize these mechanisms in long run. The policy, legal and operational mechanisms for the implementation of Farmers Rights in Nepal are still as initial stage and require strong support and capacity building programmes. Some of the important issues that require urgent attention for this are:

- Requires resources, capacity building programmes and national commitments for implementation of Farmers Rights
- Establishment and strengthening of farmers’ organizations/ community institutions
- Establishing funding mechanisms, and ensuring benefit sharing and mobilization of biodiversity conservation fund at all levels
- Facilitated access and exchange of plant genetic resources through multilateral system
- Support institutional and operational mechanisms implementation of policies and acts relevant to Farmers Rights

Addressing these issues is necessary condition for effective implementation of International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) at national level, and this requires global actions designed to support national initiatives and mechanisms.

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Farmers' Contribution to Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture in Bhutan, Lao PDR, Philippines, Thailand and Vietnam¹⁰

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I. Context

Increasing pressure to modernize in order to develop economies (with agriculture as one of the major, if not prime economic sector)

- Bhutan, Lao PDR, Philippines, Thailand and Vietnam represent countries in the Asian region whose agriculture is in various stages of economic development and degree of integration to the global economy.
- Bhutan exemplifies a country in the Asian region whose agriculture is farthest from global market integration while Philippines, Thailand and Vietnam are highly integrated to the global market. Lao PDR straddles in between with agriculture moving in transition to integrate to the global economy

But states recognize the need to protect the diverse resource base, including the diverse plant genetic resources to sustain economic growth

- With existing national laws and programs towards this end

States are likewise concern in ensuring that the human resource base – especially small-holder farmers' and farming communities, who have been managing the rich agricultural biodiversity - will not be displaced with market integration.

- integration to the global market are opening up domestic markets to food and agriculture imports competing with local food production
- Government support to farmers (in the form of subsidies) is being reduced if not eliminated
- States encouraged to pursue policies promoting the production of certain high value crops for exports over traditional staples and food sources of small holder farmers
- Free trade agreements are also opening up investment areas in agriculture to foreign capital - foreign capital investments inescapably require stringent protection of intellectual property rights (IPRs) as a means to maintain legal control over technology and products to ensure market viability

¹⁰ This presentation is drawn from the experiences of SEARICE in working with farmers in partnership with government agencies, non-government organizations, academic institutions and local governments in the five countries for a regional program on agricultural biodiversity conservation and use – CBDC-BUCAP (Community Biodiversity Development and Conservation – Biodiversity and Use Conservation Program) since 1998. Paper presented for the Informal Consultation on Farmers' Rights, 18-20 September 2007, Lusaka, Zambia.

- bilateral and regional trade agreements require countries to adopt IPR protection including plant variety protection and patents on agro-biological materials and technologies as pre-conditions or part of agreement conditions
- development of seed technologies with “built-in” control mechanisms that has the potential to restrict farmers’ continued saving and re-use of harvested seeds/plant genetic resources
- Combined with IPRs, the technologies become a closed system as technology holders are able to effectively monopolize the development and use of proprietary seeds to the exclusion of farmers except, for instance, as seed end-users or as contracted seed growers.

Context in five countries with different forms of states

- Bhutan – constitutional monarchy working towards decentralization at District level
- Vietnam and Lao PDR have centralized economic planning states, with initiatives towards decentralized governance (e.g. in Vietnam, rice production is governed at the provincial level)
- Thailand and the Philippines - emerged from long history of military and authoritarian rule, in the process of refining and defining their own style of democratized and decentralized governance

What role can the state play in dictating the degree and pace of integration of agriculture to the global market economy while protecting its natural and human resource base – it’s agricultural biodiversity and farmers? How do the governments in these countries view farmers’ contribution to conservation and sustainable use of PGRFA, which is the basis for Farmers’ Rights?

II. Farmers contribution to conservation and sustainable use of PGRFA

Farmers system of conservation and sustainable use of PGRFA is in a constant state of development.

- materials currently planted in their fields will be selected from to be used as seeds for next planting season, and the next and the next - in a cycle of perpetual conservation by use which gave us agricultural biodiversity which we now enjoy
- Consumer preferences and market demand contributes to the continual conservation of certain varieties – e.g. “jasmine rice” rice of Thailand, ‘Tai Nguyen’ in Vietnam or ‘Dinorado’ which commands higher market price than other rice varieties
- Culture also plays significant role in the continual farmers’ conservation by use of PGRFA.
 - E.g. Manobo community (indigenous people in the South of the Philippines) continually plant at least 75 rice varieties handed down from ancestors
 - E.g. Farmers in upland areas of Sabah, Malaysia continually create a heterogenous population of rice (‘gondulot’) – mixing 5-15 varieties into one population with different maturity dates but with defined characteristics as preferred by farmers. There has to be two varieties from the population which will break the famine months (early maturing) and varieties which will flower/seed long after all the rice is harvested. The mixture is constantly evaluated by farmers’ season after season, for addition or deletion.
- Conserved materials by farmers are also undergoing changes with interaction to the changing environment which makes the materials constantly evolve and develop
 - A study conducted by Mr Huyn Quang Tin of Can Tho University where he compared the variety in farmers’ fields with the collection in the genebank (of the same variety collected some 10 years ago) showed there were genetic differences with the collection and what farmers keep on-farm for the same

variety. There was, he proposes a genetic drift, as farmers constantly select under a changing environment.

- Some farmers select variants (off-types or mutations) from a standing population which they plant and observe the following season and the next, until they have sufficient population to cover their own fields, exchange with other farmers and eventually spread to the community.
 - This was how some of the red rice of Bohol (an island in Central Philippines) evolved from modern white rice varieties. Red rice is the preferred rice in Bohol and it commands a higher price than white rice especially with local resorts offering red rice as a specialty food. There are no formal releases of red rice in the Philippines.

Farmers honed to the practice of constant evaluation and observation of their materials, treat all materials (be it protected variety, traditional variety, genetically engineered or not) as parent materials – either as seeds for the next season, part of a population they are maintaining, source of variants or as the male or female plant in their crosses.

Participatory plant breeding

There are farmers who undertake actual hybridization and selection thru several generations to produce a new population (variety) though participatory plant breeding.

Table 1. Comparison between varietal releases by the national rice breeding station and by farmers engaged in participatory/farmer plant breeding in two provinces in the Philippines.

Years	Philippine Rice Research Institute national releases	Farmer developed varieties in North Cotabato	Farmer developed varieties in Bohol (from 7 villages)
1994-2004 (10 years)	55 inbred rice varieties		
1998 – 2004 (6 years)		56 farmer developed varieties thru own cross and selection 64 distinct population thru off-Type selection Total: 120 farmer developed varieties of local adaptation and preference	
1996 – 2004 (8 years)			- 43 farmer developed varieties from own cross and selection - 46 new population from off-type selection - Total: 89 farmer developed varieties (mostly red rice) from 10 female and 17 male farmers

- From the table above, it is not surprising that 60-80% of the farming communities in these provinces are now planted to farmer developed varieties. The popularity of farmer developed varieties was borne out of farmers' needs - these farmers used to buy certified seeds for their lowland irrigated farms with seed germination problems (quality issues) and sometimes insufficient supply, at a price. Now, they are able to produce their own materials and seeds based on their own requirements and local preferences.
- Community and cultural pressure (including evaluation of standing crop) provides a guarantee system for quality which prompts other farmers to try the new materials in their fields and ultimately lead to the spread of materials
- Similar trend is happening in Lao PDR where farmer developed varieties from local materials (and improved materials) are spreading and covering 60-80% of rice areas in the valleys of Luang Prabang.
- Ken Giang Province, Mekong Delta of Vietnam - with farmer developed variety (HD1) planted in 10,000 hectares
- Ken Giang, Department of Agriculture and Rural Development estimated PPB and seed production (which is turning into an ambiguous classification straddling between 'formal and informal' seed system) - contributed to 20-30% of the total seed requirement of the province, even surpassing the less than 10% contribution of the formal system.

In 2006, the Mekong Delta Research and Development Institute of Cantho University estimated farmers' contribution to the development of good quality seeds, including the development of new rice varieties (through a development aid funded agricultural biodiversity program in the Mekong Delta called CBDC – Community Biodiversity Development and Conservation Program) to be valued at 40B VND (US\$2.6M) of 'social profit' in the Mekong Delta. The development aid provided to enable this (direct project support) amounts to a maximum of only US\$90,000 in 2006. Local counterpart can be valued, slightly higher than the direct support. The estimated social profit in the Mekong Delta, are translated into notable impacts on the economic (and social) status of farmers involved – gaining 10- 30% or more increased income according to farmers' own perceptions.

Local governments saw this strengthening of farmers' seed system, not as their contribution to the realization of Farmers' Rights but in economic/practical terms. Agriculture officials, provincial heads/party leaders saw the potential of strengthening farmers' role in conservation and sustainable of PGRFA as one of the mitigating measures to counter the potential negative effects of liberalizing agriculture - rice industry in particular. By the time the domestic rice market opens to foreign investment – farmers and local governments are better prepared.

III. Defining the legal spaces at local and national level

How does this increased recognition of farmers' role on conservation and sustainable use of PGRFA fare in the legal arena? Especially when the predominant laws are geared towards 'ownership' approach (exclusive proprietary rights), as the dominant paradigm/approach re-enforced by bilateral trade agreements and development aid in the form of technical assistance to developing countries and countries in transition to harmonize national policies to facilitate free trade and avoid trade distorting measures.

National and local recognition of farmers' contribution (non-monetary benefits)

- Awards – accords social prestige
 - Provincial awards in 2004 and 2005 to farmers undertaking farmer rice breeding and seed production in the Mekong Delta

- National awards – e.g. 2006, the Ministry of Agriculture and Rural Development of Vietnam awarded Mr Ngo Khe, farmer leader of Tan Binh Seed Club with the distinction’ for his work in the production and distribution of good quality seeds (including farmer developed materials) in Dong Thap province and the Mekong Delta during the International Agriculture Fair, held in Cantho, Vietnam
- Local government programs on conservation, development and sustainable use
 - Bohol provincial PGR program – training all Municipal Agriculturist of the Province in cooperation with other line agencies of the Department of Agriculture in order to cover new communities to strengthen farmers work on conservation, development and sustainable use of PGR
 - An Giang Provincial Seeds Program to strengthen the capacity of farmers for conservation, development and production of good quality seeds and its use in the province. Provincial call to train all farmers – with provincial funds provided + incentives to farmers to develop new good quality materials for use in the province.
 - This has resulted to the development of 200 seed clubs/farmer groups
 - Involved the export (state) company in providing funds to support the provincial program (form of non-monetary access and benefit sharing scheme) – to ensure continual supply of good quality grains for export
 - In 2006, with less than 100 seed clubs, the work of farmers was estimated to have contributed 21B VND (US\$1.4M) in ‘social profit’ to the province.
- Participatory/farmer plant breeding becoming part of national breeding strategy in Lao PDR and Bhutan to complement institutional plant breeding for wide adaptation

Review of National Varietal Development System, National Seed Rules and Regulations including Plant Variety Protection Laws - Upholding the legal spaces for farmers role as ‘stewards’ (common property keepers) of PGR under review in Bhutan, Vietnam and Lao PDR with strong ‘ownership’ approach in current laws

- VIETNAM
 - HD1, the farmer developed variety in Vietnam, according to the value for cultivation and use guideline by the seed centers in the Mekong Delta is already, a variety by virtue of its 10,000 hectare coverage. But HD1, although the name and origin is spread like a regular rice variety within the Mekong Delta is still not accorded that status formally (at the national level) as the seed centers, plant breeding institutions and other stakeholders are at a loss as to its classification within the national guidelines – it did not undergo varietal testing. To address this impasse (between reality on the ground and the legal framework), Mekong Delta Research and Development Institute facilitated the testing and registration of HD1 at the national level. Currently, HD1 is being subjected to multi-location trials and evaluation. But while the new material is being evaluated for national varietal release its spread continues.
 - There is a standing policy in Vietnam that only registered seeds (at the national level) can be traded across provinces. HD1 broke that policy working through the informal seed system and with support from local seed centers and extension agencies.
 - Local and provincial authorities started issuing local and provincial certification to farmer developed materials like the MD lines/populations developed by a group of farmers in North Vietnam
 - Varietal development is not seen by farmers as an individual pursuit but as part of community pursuit, and in cases in North Vietnam as part of group activity. Even the name of varieties reflect this – MD stands for Mo Da, the commune in Hoa Binh Province of Vietnam where the variety was developed

- These experiences prompted farmers and other stakeholders to review the appropriateness of the current laws, rules and regulations – the work of farmers has reached strong provincial support in 24 out of 59 provinces of Vietnam which compels national government agencies to look at national laws
- As a response, a national workshop was held in February 2007, with the key institutions working on the seeds issues and farmers particularly with the Department of Crop Production which houses the Plant Variety Protection Office and is also responsible for seed rules and regulations.
 - Alarmed at the work of farmers as happening outside of the legal sphere – making their customary rights to save, use, sell seeds as illegal which made the farmers wonder and debate further the options to take
 - Agreed that the current law is for compliance to trade agreements and promised to work for the exemption of farmers in coverage (actual implementation)
 - Option 1 is to ask National Assembly not to implement the Seed Ordinance – which is next to impossible (translates to resignations)
 - Option 2 – to move the work of farmers into the legal sphere (take the ‘stewardship’ approach into an ‘ownership’ approach) by facilitating the protection and registration of farmer developed varieties
 - Cost of testing and associated fees shouldered by applicant – farmers who have no resources
 - Work for local level support to enable the ‘formalization’ of farmer developed variety – but what happens with overwhelming varieties developed
 - Work for Decrees (executive/party orders) to support farmers’ work
 - Option 3 – develop parallel bills/laws (Farmers’ Bill to be initiated thru the Farmers’ Union) to counter the possible effects of PVP law on farmers’ conservation and sustainable use of PGR

- LAO PDR
 - The Department of Agriculture of the Ministry of Agriculture and Forestry, personnel who drafted the seed laws and regulations admitted that they did not view farmers’ system as under continual development and that farmer can develop new materials individually and collectively. That they saw these only when they were directly involved in the field work on farmers’ conservation and sustainable use.
 - Currently reviewing seed rules and regulation in relation to Farmers’ Rights (farmers’ conservation and sustainable use of PGRFA) and developing National Seed Sector Strategy Paper
 - Undertaking policy studies to develop a *sui generis system* of Plant Variety Protection in case they become member of WTO and for bilateral trade negotiations
 - But with serious pull in relation to trade agreements and ASEAN membership - current ASEAN project with the EU on IPR which basically pushes for the adoption of UPOV 1991 model as the form of *sui generis system* of protection by providing technical support and backstopping. UPOV is also providing technical support to Lao PDR. What flexibilities are there in UPOV 1991 for Farmers’ Rights?

- BHUTAN
 - Ministry of Agriculture of Bhutan called a technical working group to review its Seed Laws and Regulations to look at farmers’ seed system. Prompted by experience of farmers selling potatoes to a government trading centre which in turn sells the potatoes to India. Indian traders, then re-pack the table potatoes into seed potatoes

gaining more profit margin than the government and the farmers of Bhutan. The Ministry wanted to support Bhutanese farmers to tap into this export market for seed potatoes of their traditional potato variety but is constrained by what is set in the Seed Rules and Regulations. Ministry officials admitted that they created the seed rules and regulations to regulate only the 2% of national seed system, and that they have no capacity to monitor/regulate the remaining 98% which is the farmer seed system.

- Ministry officials said that they can easily exempt farmers' seeds from registration (and protection) at the national level, but for export they are deliberating how product quality (and disease control) can be guaranteed.
- Even if the farmers form into a cooperative, the amount of government investment, to enable farmers to be 'legally' eligible to trade across the country is quite an investment for Bhutan.
- This coming November 2007, the technical working group will discuss the options within the current legal framework for a classification and guarantee system (including disease control) for farmers to trade outside of the country.

Farmers asserting their legal (and extra-legal) spaces for Farmers' Rights

- Armed with their own experiences in the fields and provided with platforms for discussions/dialogues with local and national officials, farmers have started to seek more support for the work they are doing – the review of laws in Lao PDR and Vietnam was prompted by years of dialogue by farmers from the local level, to the provincial level to the national level
- Thailand farmers tapped cultural practices/ceremonies to renew commitment to land and resources every year, including conservation of genetic resources
- Filipino farmers setting up community registry models – in different forms as part of community declaration (outside of legal sphere) or as local and provincial ordinance to counter possible negative effects of PVP law
 - Subject of academic studies at the University of the Philippines as an example of a pre-emptive measure to mitigate possible negative impacts of liberalized agriculture (in relation to IPR)
 - Complemented with study on legal standing of community registry system within current Philippine laws
- Philippine farmer groups of different political persuasions, redefined Farmers Rights
 - The farmers' discussion for the redefinition of Farmers' Rights started with Article 9 of the ITPGRFA
 - Farmers saw the constricting legal spaces and wanted to explore, at the national level where the possible avenues to gain more support are
 - with 38 elements at household, community and national level
 - as a bundle of rights – Farmers' Rights to land, water, market, appropriate technology, healthy environment, participation in governance, support services and as human rights interlinked with farmers' rights to seeds/plant genetic resources
 - with very specific indicators of what each of these rights mean –
 - e.g. right to education - farmers are asking whether it is possible to provide farmers with diplomas from agricultural state colleges and universities as agriculture graduates tend to have more opportunities than farmers
 - e.g. right to social services – farmers asked how come laborers can have pension/retirement support, why is this not possible for farmers?
 - Farmers' rights articulation as part of work towards agrarian reform
 - Came out with legislative wish list to work towards the realization of Farmers' Rights within current legal framework and to guide groups in the formulation of new laws – Farmers Rights Bill etc.

- Called for more consultations with indigenous peoples and fisherfolks to expand Farmers' Rights definition
- Philippines has strong farmers' movement with long political history + 'democratic space' to enable articulation; a redefinition of Farmers' Rights as experienced in the Philippines
- Complementary work on the legal standing within Philippine laws (legal review from the constitution down to local ordinances) of Farmers' Rights as stipulated in Article 9 of the ITPGRFA and as a bundle of rights.
- Complemented with parallel workshops and discussions between farmers and human rights lawyer who looked at the translation of what human rights mean to farmers (in agriculture)

This growing discussion and development is borne out of growing recognition of farmers' role in the conservation and sustainable use of PGRFA – out of the realization of the need to protect the resource base (agricultural biodiversity) and human resource base (farmers more than plants) while moving towards economic development. In some ways, support to farmers' role and contribution to conservation and sustainable use of PGRFA is seen as a balancing act, a form of developing a safety net as governments push for market integration. There is also growing acknowledgement of the constricting legal spaces for farmers to continue their contribution to conservation and sustainable use of PGRFA. Nation states (be it highly democratic or centralized) have different options to take to work towards the realization of Farmers' Rights as stipulated in the ITPGRFA.

Although the implementation of Farmers' Rights remains at the national level, countries need international support. The Governing Body has a role to play in terms of promoting the realization of Farmers' Rights by ensuring funding support to farmers' efforts from the field up to policy discussions; documenting farmers' contribution to conservation and sustainable use of PGRFA; further studies on the negative effects of IPR, ABS regimes, seed rules and regulations, sanitary and phytosanitary standards, biosafety laws etc; providing support to countries wanting to review their legislations in relation to Farmers' Rights; compelling contracting parties to a regular reporting on the status of Farmers' Rights implementation to identify gaps and areas for assistance/support (national plans for the implementation of Farmers' Rights); encouraging participation of farmers in discussions of the GB and exploring with other international bodies on how to push for the implementation of Farmers' Rights.

Third Session: Realization of Farmers' Rights

Highlights from an International Stakeholder Survey on the state of realization of farmers' rights

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This is a summary of findings from an international stakeholder survey on Farmers' Rights carried out in 2005 (see: <http://www.fni.no/farmers/stakeholders.htm>). Considered a central part of *The Farmers' Rights Project* (see Session 1), it gathers the perceptions and opinions of stakeholders from all parts of the world, covering state delegates to the FAO, representatives from international governmental as well as non governmental organizations, and of experts. Altogether 60 questionnaires have been received from 31 countries. In this summary, we will focus on the response regarding the state of realization of Farmers' Rights.

The survey shows that, despite the huge challenges ahead, efforts are already underway with regard to all measures addressed in the provisions on Farmers' Rights in the International Treaty (Articles 9.2 and 9.3). This indicates that there is already an opportunity for learning and for deriving models and success stories.

1. On the importance of Farmers' Rights

Farmers' Rights, as they pertain to plant genetic resources for food and agriculture, are an issue of central importance in countries where the majority of the population lives in rural areas and base their livelihoods on farming – and particularly so when farming systems are based on traditional varieties. This is the case in many developing countries, as the survey shows. In Northern countries, Farmers' Rights concern a much smaller segment of the population. Whereas most farmers in the North rely on commercial plant varieties, saving and re-use of propagating material is still practiced to some extent, and there is increasing interest among eco-farmers to develop plant breeding based on traditional varieties. Thus, Farmers' Rights are also important in the North, though to a more limited extent than in the South.

2. Protection of farmers' traditional knowledge

Protection of farmers' traditional knowledge is one of the possible measures for the implementation of Farmers' Rights, as addressed in the ITPGRFA (Art. 9.2.a).

Most of the countries in the South, which have accounted for the protection of farmers' traditional knowledge relevant to Plant Genetic Resources for Food and Agriculture in their legislation, have done so in laws pertaining to the protection of biological diversity in general. Bangladesh, Bhutan, India, Vietnam and Chile are examples in this regard. Several countries have provisions pertaining to the protection of farmers' traditional knowledge in their regulations on access to genetic resources, of which the Philippines and Ethiopia are examples. Some countries have

accounted for such protection in the legislation pertaining to indigenous peoples, like in Peru. A few countries have relevant provisions in their legislation on plant variety protection. India, has issued far reaching legislation explicitly on Farmers' Rights in such a context. Several countries are in the process of issuing legislation on Farmers' Rights, including the protection of farmers' traditional knowledge. Nevertheless, so far, little has been achieved in terms of protection with regard to implementing such legislation.

Whereas such legislation is more related to the ownership approach to Farmers' Rights, there are also several measures which fall under the stewardship approach. These are typically about documentation, maintenance of the knowledge and activities related to gene banking. A range of projects and programmes are being carried out in the South, often by NGOs, and often supported by NGOs in the North. They provide examples of how farmers' traditional knowledge can be protected.

In the North, the picture is somewhat different: According to the respondents, the protection of farmers' traditional knowledge relevant to Plant Genetic Resources for Food and Agriculture is usually not subject to legislation but is dealt with in Government programmes protecting such knowledge from extinction. Such programmes are normally coordinated by the authorities, but there are also examples of private initiatives in this regard.

3. Equitable sharing of benefits

Farmers' participation in the sharing of benefits derived from the utilization of plant genetic resources for food and agriculture is another measure for the implementation of Farmers' Rights suggested in the ITPGRFA (Art. 9.2.b).

In the South policies on benefit sharing – if any – are provided for in various forms of legislation, most notably laws and regulations on access to biological resources, of which the Philippines provides an example. Also in legislation on the protection of biological diversity, provisions on benefit sharing are sometimes incorporated, as in Burundi, Bhutan and Bangladesh. Legislation in Bangladesh is extraordinary in this regard. Some countries also provide for benefit sharing arrangements in their plant varieties protection laws, like in India, which is an outstanding example in this regard. Countries with legislation on indigenous peoples' rights often have provisions on benefit sharing in these laws, which then also cover indigenous farmers, like in Peru. Some countries are in the process of developing legislation pertaining to benefit sharing, like Ethiopia, Uganda, Zambia and Bolivia. Despite all these efforts, so far there have been no examples of direct benefit sharing related to plant genetic resources for food and agriculture, resulting from such legislation.

In the North, benefit sharing is not that much of a topic, since most farmers use improved varieties and buy their seeds and propagating material from breeding companies. However, there are examples of collaboration between farmer-breeders and commercial breeding companies, which have resulted in royalties for the farmers in the Netherlands. Also, there are examples of breeding companies, which are co-operatives owned by farmers, and where the royalties flow back to the companies, from which the farmers earn the surplus, like in Denmark.

Whereas these policies reflect an ownership approach to Farmers' Rights, measures that fall under a stewardship approach are often not covered by acts of legislation, and often not even by particular policies, as they are often carried out by NGOs. Farmers generally participate more or less in the sharing of *non-monetary* benefits. The most often mentioned non-monetary benefits were:

- access to seeds and propagating material, and related information
- participation in the definition of breeding goals
- participatory plant breeding in collaboration between farmers and scientists
- strengthening farmers' seed systems
- conservation activities, including local gene banks
- enhanced utilisation of farmers' varieties, including market access.

The survey shows that – for many reasons – benefit sharing is more promising when the farming communities which actually contribute to the maintenance of plant genetic diversity are the points of

departure, rather than when seeking to identify farming communities who have developed particular varieties of plants which are used in commercial breeding.

4. Participation in relevant decision making

A third measure for the implementation of Farmers' Rights, as suggested in the ITPGRFA, is the participation of farmers in decision-making pertaining to the management of plant genetic resources for food and agriculture (Art. 9.2.c).

There are generally few examples of legislation in this regard, but some countries in the South have extensive legislation on participation. That notwithstanding, actual participation in decision-making processes seems to be marginal, according to our respondents, and is often confined to large scale farmers who are normally not engaged in the maintenance of plant genetic diversity. In the North, the participation of farmers in decision making processes is more commonly practiced, but without reference to specific laws or policies. However, farmers in the North claim that their influence decreases, due to their countries' commitments to international agreements.

5. Farmers' customary use of seeds and propagating material

The practice by farmers of saving, using, exchanging and/or selling seeds and propagating material from their own harvest is also addressed in the ITPGRFA (Art 9.3).

Such practices are increasingly affected by regulations on plant breeders' rights and on the certification of seeds for sale. Generally, Farmers' Rights with regard to such practices are most restricted in the North, and least restricted in Africa. In Asia and Latin America, there are more examples of regulations in this context, which, however, generally have wider exemptions for farmers than in the North. The recognition of Farmers' Rights in India's regulation has received much attention of late, due to the wide exemptions for farmers, combined with farmers' intellectual property rights. The legislation in Bangladesh has received less attention, but is highly interesting in that it promotes plant breeding for the public domain, i.e. for the free use of farmers, according to our respondents.

In the North, there are strict regulations on intellectual property rights as well as seed certification. Often farmers are not allowed to use farm saved seed on their own holdings, or they have to pay a licence to do so. In addition, seed laws establish strict conditions for exchange or sale of seeds and propagating material of traditional varieties. Together, these types of regulations pose serious barriers for farmers' stewardship and innovations in agriculture. In the European Union, interesting measures have been discussed to solve this problem by allowing the marketing and sale of specified categories of plant varieties for such purposes. Whereas these measures have not yet been finally adopted, the Netherlands has already introduced legislation in this direction.

6. Some words on barriers and options for realizing Farmers' Rights

Lack of awareness among farmers was the most frequently cited barrier to the realization of Farmers' Rights, with lack of awareness among authorities closely behind. The problem is rooted in the difficulties related to defining Farmers' Rights and the different interpretations – and lack of understanding – of the concept. There are problems particularly when it comes to private ownership and monetary benefits, and the survey reveals that many respondents feel that such an emphasis blurs the discussion, and some perceive it as a barrier to Farmers' Rights. To solve these problems, models of redistributive mechanisms for benefit sharing which are more in line with the main features of the Farmers' Rights concept are needed, as well as more information and education on Farmers' Rights among farmers and decision makers, according to a number of respondents.

Political and economic barriers were highlighted by many respondents, emphasizing that the current agricultural paradigm is contradictory to sustainable management of plant genetic resources for food and agriculture, and thereby to the realization of Farmers' Rights. Paradigms are not easily changed, but the respondents had several suggestions on how to approach them. Representation of farmers who are engaged in such management, in relevant decision processes is most important, but

also creating space for sustainable management from below – with participatory plant breeding and the marketing of products resulting thereof.

Poor, weak or contradictory legislation was perceived as a central barrier in many countries. Several respondents highlighted the importance of developing adequate legislation and/or mainstreaming Farmers' Rights in existing legislation. However, the prevalent lack of implementation capacity in many countries represents an additional barrier. Capacity building is needed to approach this problem, and a funding structure to support such activities was highlighted as a necessary instrument for this purpose.

Several respondents felt that external pressures made it difficult for politicians to choose politics in accordance with the needs of farmers, and that also seed companies would have substantial influence over politics. The ITPGRFA could be used to counterbalance external influence, it was suggested, and seed companies should be invited to support and promote the realization of Farmers' Rights.

Civil society organizations are often crucial actors in the initiation of efforts for realization of Farmers' Rights. However, several respondents felt that the organizations in their countries were not attentive enough to Farmers' Rights, or not creative or active enough. More advocacy and information work would be needed from their side. Capacity building among NGOs was suggested as a measure to approach this problem, and also for this purpose funds **were needed**.

7. Needed action by the Governing Body of the ITPGRFA

The survey shows that the respondents are quite unison in their analysis of what the Governing Body should do to promote the realization of Farmers' Rights and of the issues that should primarily be addressed in this regard.

First and foremost, it is important to note that all respondents suggest that the Governing Body should take action to promote the realization of Farmers' Rights. The absolute minimum version is that the Governing Body organizes the sharing of experiences regarding the realization of Farmers' Rights between the Parties. Based on the response to the questionnaire, this suggestion is likely to have the best prospects for being accepted in the Governing Body.

In addition, most respondents found that the Governing Body should encourage parties to develop national plans for the realization of Farmers' Rights, and that it should monitor and support the implementation of such plans.

A range of further suggestions were made by the respondents, such as developing minimum standards for Farmers' Rights from national and regional experiences to a level of international harmonization; the highlighting of models as positive examples of implementation; legislative and institutional assistance to countries in their efforts to realize Farmers' Rights; public information and assistance in communicating the importance of Farmers' Rights; and efforts to ensure the representation of farmers in the Governing Body.

Farmers' Rights is a wide concept without any stringent definition. Whereas the Parties are free to define Farmers' Rights according to their needs and priorities, it is important to be aware of the generally most pressing issues in this regard – in order to consider how these may be addressed at the international level.

According to the respondents, the most important issue to address at the international level is the question of how to secure farmers' access to seeds and propagating material covering a genetic diversity according to their needs. This is crucial to current and future agriculture and thereby to the current and future livelihoods of farmers. It is also vital for food security. To address this issue adequately, it is necessary to take into account the different needs and framework conditions in the various countries.

Along with this priority, a central issue to promote at the international level is the documentation and maintenance of farmers' traditional knowledge pertaining to agricultural varieties. Whereas the most important issue is to secure farmers' access to seeds and propagating material covering a genetic diversity according to their needs, such access would be of considerably less value without the knowledge related to these resources. Therefore the two issues can be seen as two sides of the same coin.

The third issue, which is considered important among the respondents, is the representation of farmers in decision-making bodies at the national level pertaining to plant genetic resources for food and agriculture. Many respondents express that a central reason why the legislation and policies on these issues are weak or even lacking, is that farmers are not adequately represented in relevant decision-making bodies.

The issue of farmers' continued practice in saving, using, developing, exchanging and selling seeds and propagation material, also when protected with intellectual property rights, received high scores with regard to importance among the respondents. It is closely related to the first issue on access to propagating material, since a restriction of farmers' practice in this regard would affect their access to such material. This is therefore a question which needs attention at the international level. However, it is the issue that caused the hottest controversies in the negotiations under the International Undertaking on Plant Genetic Resources as well as in the negotiations leading to the ITPGFA, without any substantial solutions. Raising the question in the context of Farmers' Rights – and with reference to the provisions in Article 9 of the ITPGRFA – would necessitate a genuinely new and constructive approach, taking the freedom of countries to choose means according to their needs and priorities into account. The concept of 'legal space', as introduced in the presentation in Session 1 may provide a viable path.

The most important issue raised by the respondents in addition to the listed ones, was Farmers' Rights pertaining to biosafety and genetically modified organisms (GMOs). This issue is pressing in a range of countries, and will probably receive more attention in the years to come. Several respondents hold that farmers must have the right to choose whether they will grow GMOs or not, and that it is difficult to uphold this right if they are not informed about the GMO-content in the seeds they buy, or if their harvests are infested from neighbouring fields. Also food aid containing GMOs is perceived a danger to this right, and donors are requested to respect government decisions against the introduction of GMOs in a country.

**Informal International Consultation on Farmers' Rights
18-20 September 2007, Lusaka, Zambia**

Key Issues Regarding the Protecting Indigenous knowledge

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Summary

The foremost characteristics of local knowledge around Genetic Resources is that it is *Oral*; and large aspects have to do with practices that are hard to record. Some people (Holle Recharte) argue that Andean Agriculture is a performing art, and one would agree if one would watch the ground breaking, sowing, hilling up activities that are communal . Thus farmers can make small adjustments for each field, situation, year, lack or abundance of certain seed, etc. Other practices that make for uniqueness is sowing in mixtures, which creates crop resilience for biotic and abiotic stresses, and at the same time enabling farmers to utilize as big a diversity as possible and explains why farmers are always keen to increase their genetic diversity through variety exchange. Perhaps the greatest gift is seed of the “papa de ragalo “ which are the flowery fantastic tasting varieties that are so highly prized in Andean cuisine..

Their soil conservation abilities using the foot plow, and its various ways to make use of minimum tillage and ground cover is not been well studied, nor is it known how they are able to keep varieties going for hundreds for years without these succumbing to virus diseases, there are some studies how the sectoral fallow system which allows for long rotations avoids soil disease such as nematodes, wart, rhizoctonia, and aids in soil fertility. It is tragic that the move towards privatization of land and land titling is exacerbating this

I would argue that you can not really protect indigenous knowledge except by preserving it alive, and strengthening the aspects that make it viable. The fact that it is associated in Peru with the pockets of extreme poverty make it vulnerable as In fact it is a miracle that it exists with such strength in highland communities and perhaps it has to do with “voluntary” isolation of these communities to precisely protect their culture. Nevertheless large numbers of farmers now live in cities, and outside the country, perhaps they provide the subsidy that the government refuses to acknowledge. . However Government laws such as compulsory schooling, which take the children of the farm, seed laws that exclude all small farmers, food aid that change eating habits so that malnourishment has gone up 7% in the past 10 years, or aid in agricultural chemicals, improved seed which have a profound impact on eroding Indigenous Knowledge.

The one thing one can record and “protect” is the actual physical farmers variety by cataloguing as in the Indian model community by community. In my view giving this responsibility to communities will strengthen and legitimize them.. Molecular biology for fingerprinting could be of great aid instead of imposing taxonomic categories one could record farmers classifications and add the funds to fingerprint the variety, which is now a new and easy tool to record uniqueness.

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Farmers' participation in benefit-sharing: some key issues

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Farmers' rights have only been recognized in the International Treaty on Plant genetic Resources for Food and Agriculture ("the Treaty"), which is characterized by a strong focus on multilateral benefit-sharing. Article 9 of the Treaty describes the right to benefit-sharing as one of the components of farmers' rights. In the same article farmers' rights are declared to be a national responsibility. This sets the framework for farmers' participation in benefit-sharing.

Various types of benefit-sharing can be distinguished. Both monetary and non-monetary mechanisms exist. For farmers, it is likely that – at least in the context of the Multilateral System of the Treaty – non-monetary benefit-sharing will be most important. Also, direct and indirect forms of benefit-sharing may be distinguished. Direct benefit-sharing might be realized by direct co-operation between farmers and users of germplasm, e.g. in the context of characterization or multiplication of germplasm. Indirect benefit-sharing might take the form of technology transfer to developing country public sector institutes aiming at improving farmers' varieties or livelihoods. Some quick wins can be imagined, e.g. through the improvement of seed supply systems or the provision of local storage facilities, whereas other improvements, e.g. more drought tolerant crops stemming from breeding programmes, will need long-term investments.

The Treaty distinguishes three areas of benefit-sharing.

- Exchange of information, which may involve catalogues and inventories, information on technologies, and results of research relevant to plant genetic resources. This will normally not reach farmers directly, but may lead to indirect benefit-sharing with farmer communities by strengthening the public and national private sectors. Information exchange can often be realised without significant costs. In the context of information exchange, and to protect farmers' rights, the development of community registers of biodiversity and related knowledge in close collaboration with local communities documenting their knowledge of plants and animals can help the local communities conserve their biological resources and facilitate community participation in access and benefit-sharing partnerships.
- Access to and transfer of technology, including access to materials and access to relevant technologies for the characterisation, evaluation and utilisation of plant genetic resources. This type of benefit-sharing can directly and indirectly benefit farmers. In particular, access to proper breeding materials and well-adapted varieties often forms a bottle-neck for improving livelihoods in small-scale agriculture. Technology transfer may aim at new better-yielding varieties, new crops and varieties with different market opportunities, varieties with improved resistances, cleaned-up varieties free from viruses, and restoration of traditional varieties lost or destroyed by disaster. Technology transfer can also take the form of broad licences offered by universities and industry in developed countries that provide for royalty free use of protected biological tools and products (e.g., the humanitarian licenses on Golden Rice and the rice genome information). Finally, as a far-reaching option, technology transfer may involve commercial co-operation resulting in the production of market products by local

communities, either or not in joint ventures with the users of germplasm and/or traditional knowledge.

- Capacity-building, which may include programmes for scientific and technical research, education, and training in conservation and sustainable use of plant genetic resources, and for developing and strengthening relevant facilities. Participatory approaches, such as participatory variety selection and participatory plant breeding fall in this category and may directly benefit farmers. In addition, bio-prospecting activities can contribute to sustainable development by providing incentives for conservation while developing technological capabilities that enhance long-term opportunities for economic growth. Follow-up activities may be initiated to multiply and characterize collected germplasm by providers, replacing work that would ordinarily be done at distant locations. This latter type of activities might still meet many reservations from various stakeholders.

Information exchange, technology transfer and capacity-building are highly interdependent.

Information exchange is the most basic form of benefit-sharing. It is implied in technology transfer and capacity-building, but can also stand by itself. Technology transfer by necessity encompasses sharing of information, and requires concomitant capacity-building in order to be effective. Access to technology without the human knowledge and infrastructural capacity to use it is meaningless. Capacity building involves hardware and software, infrastructure and knowledge, and is a very open form of enhancing options for development, increasing the potential for future adoption of new technologies. Capacity-building is probably the most sustainable form of benefit-sharing. Training is a central element of almost all capacity-building arrangements. Benefit-sharing arrangements should promote a structural and long-lasting relationship between stakeholders with the aim of increasing their impact on conservation and sustainable use of plant genetic resources. Bringing new breeding products and production methods to effective use by farmers often requires strengthening of extension services and non-governmental organizations and an attitude that is open to participatory approaches that enable the optimal combination of communal knowledge with innovations of the formal sector.

The following measures might constitute early and easy-to-reach improvements to facilitate non-monetary benefit-sharing:

- The development of a Focal Point for Good Practices, including for direct co-operation with farmer communities.
- The active provision of all relevant information to agencies that may want to contribute to benefit-sharing with farmers through the provision of non-monetary contributions.
- The strengthening of national capacities for needs assessments regarding the conservation and utilization of plant genetic resources.

Non-monetary benefits should contribute directly to the conservation and sustainable use of plant genetic resources for food and agriculture; but may also result indirectly in other outcomes, to the benefit of a wider group of stakeholders, including

- social outcomes, such as improved quality of life, food security, health and recognition for cultural values,
- economic outcomes, such as lower food costs, increased productivity, expanded market opportunities, and
- environmental outcomes, such as sustainable production methods, protection of habitats and the reduction of genetic erosion.

Microfinance programmes, and policy measures to facilitate easier market access may facilitate reaching these broader outcomes of benefit-sharing.

Benefit-sharing with farmers can be considered a major goal of the Funding Strategy of the Treaty. Article 18.5 of the Treaty provides guidance as to the beneficiaries of the Funding Strategy, in that

“priority will be given to the implementation of agreed plans and programmes for farmers in developing countries, especially in least developed countries, and countries with economies in transition, who conserve and sustainably utilize PGRFA”. In supporting efforts in *in situ* management, the Governing Body may consider as priority areas to scale up current support for farmers and local communities through novel approaches, and - in addition - to take into account the importance of creating or enhancing markets for the products of local diversity. Active support for the maintenance of associated local and indigenous knowledge should be included. Support measures for *in situ* management should focus in particular on those crops that are poorly represented in genebank collections, and that experience a decreasing social status and minor attention in breeding and selection programmes. Against this background, the Ad Hoc Advisory Committee on the Funding Strategy of the Treaty has identified a limited number of priorities that the funds under direct control of the Governing Body should be used for, i.e. on-farm management and conservation of plant genetic resources, as well as capacity development, in addition to

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Key issues regarding farmers' participation in decision making and the rights that farmers have to save, use, exchange and sell seeds and propagating material

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Since the dawn of settled agriculture, generations of farmers, world over, and particularly at the centers of diversity of crop plants have been continuously selecting domesticated plants and generating genetic variability that suits to the different agro-climatic and edaphic conditions, changing agronomic requirements such as resistance against different biotic and abiotic pressures and food, fodder and industrial needs. Pioneering studies by the Russian crop plant explorer N. I. Vavilov and other have identified eight primary centres of crop plant origin across the world [Fig. 1].

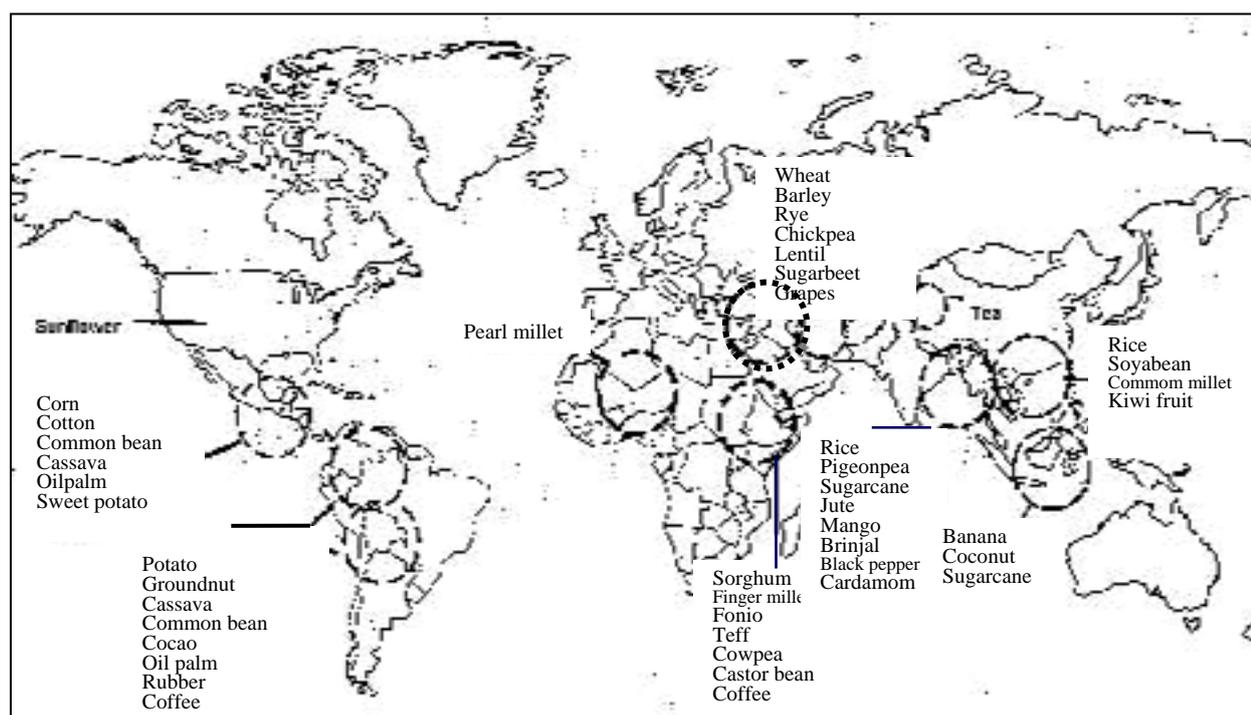


Figure 1: Primary centers of origin of major crop plants

Over the millennia, these crop plants spread across the globe through natural processes, human migrations, wars, trade, etc. In their new habitats, they got adapted and generated more variability, under selection by local farmers, suited to the new environmental niches. At some of these regions, certain well adapted crop plants evolved such large variability to deserve a status of secondary centre of origin. All along human history until recently, the whole genetic resources of crop plants, irrespective of its primary or secondary centres of diversity were freely shared by all farmers across the world. These were held as 'common heritage of mankind', with no specific ownership to a region

or a country or a community or an individual. This was despite the fact that each plant genetic resource is a product of considerable innovative value additions achieved through intelligent selection and diligent conservation across many seed cycles. The intimate understanding gained by farmers on the genetic resources during cultivation, selection and conservation in each region had generated a vast body of traditional knowledge on them. This traditional knowledge on each genetic resource, including the wild relatives of cultivated crops is virtually inseparable from the genetic resource *per se* and indeed the economic value of any genetic resource is governed by its TK. It would be true to state that modern plant breeding had not identified any new trait in most of the genetic resources, which was already not known to farmers. The collective value of these TK and genetic resources in terms social and economic benefits being accrued by the world is so huge to estimate.

It was this immense economic potential of crop genetic resources and the modern market economic thinking that cracked a new turning point to the time-honoured practices on this 'common heritage of mankind'. For the first time in human history, in 1930, the United States of America introduced ownership rights through patents on vegetative propagated plant varieties. Following this, in 1961, a few European countries joined together to establish plant breeders' right (PBR) on newly bred plant varieties under the International Convention on the Protection of New varieties of Plants (UPOV). In 1970 and later, the USA and few other countries extended the patenting scope to all plant varieties. Since 1986 the Uruguay Rounds on the General Agreement on Tariffs and Trade (GATT) came around with proposal to universalize the IPR protection on plant varieties under the Trade Related aspects of Intellectual Property rights (TRIPS) and this was firmed up in the Marrakesh Protocol in 1994.

Although the PGR is distributed all over the world, it is more concentrated in some of the developing countries, which come under the centres of primary or secondary genetic diversity. However, no country is having all genetic resources required for its food and agriculture. Plant breeding had become a commercial industry in the developed countries since mid-twentieth century and this requires newer and newer genetic variability, which are available in large measure only in centres of primary or secondary genetic diversity. With the mergence of major trans-national seed companies as the major users of plant genetic variability and the TRIPS providing IPR protection to the plant varieties, the political economy of proprietorship on plant variety unleashed new defensive responses from countries, which largely are providers of the plant genetic resources. The first response was made from the platform of the Food and Agriculture Organization (FAO) in 1983, where Farmers' Right was first proposed to safeguard the traditional rights of farmers on seed under an expanding appropriation of plant genetic resources for private profit. The FAO sought to establish the Farmers' Rights in recognition of "the past, present and future *contributions of farmers* in conserving, improving and making available plant genetic resources, particularly those at the centers of origin or diversity". "These rights are vested with the international community, as the trustees for the present and future generations of farmers, for the purpose of ensuring full benefits to the farmers and supporting continuation of their contributions". It also exhorted "to assist the farmers and farming communities in all regions of the world, but especially in the areas of origin/diversity of plant genetic resources, to participate fully in the benefits derived at present and in future, from the improved use of plant genetic resources through plant breeding and other scientific methods".

The second response came from a pre-CBD conclave called Keystone Dialogue organized by M.S. Swaminathan Research Foundation in Chennai in 1990 and later from the platform of United Nations' Environmental Programme, which concluded the Convention on Biological Diversity (CBD) in 1992. The CBD, which came into force in 1993, "reaffirmed the sovereign rights of nations over their own biological resources"(CBD Preamble) and sought to achieve "conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over

those resources and to technologies....” (Art.1). The CBD required the Parties to “respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices” (Art.8 (j)).

The Farmers’ Rights became an important element, subject to national treatment, of the legally binding International Treaty on Plant Genetic Resources for Food and Agriculture (IT for short) In consistence with the principles and provisions of CBD, the IT seeks to achieve (1) conservation and sustainable use of PGR of the listed species, (2) facilitation of fair and equitable sharing of benefits arising from the commercial use of these PGR, and (3) establishment and maintenance of a multilateral system for access to these PGR and benefit sharing, thereof. It emphatically declares the rights of farmers to save, use, exchange and sell farm saved seed and other propagating material apart from three other rights. These are the right on the traditional knowledge relevant to the PGRFA, the right to participate in decision making at national level on matters related to conservation and sustainable use of PGRFA and the right to equitably participate in sharing the benefits arising from utilization of PGRFA. The responsibility of realizing farmers’ rights is relegated to the concerned national governments.

It is in this context, proposal is being made by Andersen (2007) are: (1) to deem farmers as ‘stewards’ and innovators rather than the owners of agro-biodiversity which they had been cultivating, innovating and conserving, (2) to share the benefits between ‘stewards’ of PGR and the society at large, partly through the Multilateral System and Official Development Assistance, instead of access to PGR by prior informed consent of its owners and on mutually agreed terms including fair and equitable sharing of benefits, and (3) create a legal space to farmers for their continued conservation of PGR and rewarding them for contributions to the gene pool, instead of their participation in decision making at national level on matters related to conservation and sustainable use of PGR and in the equitable sharing the benefits arising from its utilization.

Any debate on Farmers’ Rights or assignment such as ownership or ‘stewardship’ of the PGR which they had been cultivating, improving and conserving should underscore that they neither had the aspiration nor the greed to establish any kind of proprietorship on the material, notwithstanding the extent of intellectual or economic cost they had spared for improving and conserving the PGR. The ownership issue on plant variety was brought forth by the greed for private profit through commercialization of plant breeding and for building huge private seed industries. The *locus standi* put forth for such proprietorship is the innovation they are claiming to have achieved in the development of a new plant variety. No doubt, such achievement might have added a minor or major tangible improvement. Let us not forget that this could not have achieved without the vast genetic diversity and associated TK generated, conserved and made available by the farmers. These claims on ownership on new varieties which possess small terminal advance in relation to the huge genetic advancement made all the way for the nobilization of PGR of each crop species from wild and semi-wild state to their present state, are like lifting a baked cake from some one’s shelf and claiming its ownership for having iced it. What ethics and standards of equity teach us to pronounce that such terminal interventions leading to the new plant variety alone is innovation and hence entitled to claim ownership on the product either by the patent or PBR, while the much larger intellectual inputs of farmers in evolving the pre-breeding material and the TK are not innovations deserving IPR? Andersen (2007) while acknowledging that farmers are innovators prefers to deal them on a plane different from that of breeders who claim IPR for their innovations.

It is well recognized that gene pool of a cultivated species is largely comprising of few hundreds or thousands of land races, populations or traditional varieties adapted to diverse growing regions and conditions. Each of these variety clusters suited to specific growing region is created and conserved

by the farming community of the respective region. Very often such clusters develop distinctiveness from rest of the gene pool and in some extreme cases it results in genetic drift. Similar genomic differentiation could happen even within a narrow area of cultivation with continued selection pressure applied by the local community of farmers. Such communities of farmers, who with continued intelligent selection and diligent conservation deserve recognition as innovators and not as mere 'stewards'. According to Oxford Dictionary, 'steward' means *some one who looks after or supervises something*. Such a terminology, although disrespectful of the innovative contributions of the farming communities, it may serve to deny the intellectual component discernible in Farmers' Rights. The fact that farming communities are not greedy in establishing ownership on their varieties should not be a ground to deny them this legitimate right. It is also wrong to presume that farmers are not breeders. There are several instances in India and elsewhere wherein varieties bred by farmers have gained wider acceptance and coverage in cultivation even in recent times. One example is a cardamom variety "Njallani" bred by a farming family in Kerala, which had spread to over 70 % of the crop area in India and currently no better variety is available to replace it (NIF, 2001). Andersen (2007), to adduce to her 'stewardship' concept argues that ownership of farmers on PGR would serve as disincentives to sharing knowledge between and among farmers. This seldom happens among farmers within a country and their sharing with other national farmers is restricted more by the national laws rather than their own reluctance. Interestingly, this argument is not put forth against the breeders and seed companies, which create ownership on the varieties, who are also known for their unwillingness to share either their material or information.

With respect to the fair and equitable benefit sharing arising from the commercial use of these PGR, which is one of the important components of Farmers' Rights, Andersen (2007) suggests that all benefits are to be shared between 'stewards' of PGR and the 'society at large', partly through the Multilateral System and Official Development Assistance. This suggestion is consistent with denial innovative contributions of farmers on PGR. However, the denial of this legitimate entitlement unambiguously provided under the CBD and IT for fair and equitable sharing of the benefits arising from the utilization of knowledge and innovations of local communities is no way to strengthen Farmers' Rights. Wherever a farming community is clearly discernible for its contribution to the evolution and conservation of a given PGR, equity and fairness demands that the benefit share arising due to such PGR should essentially flow to that specific community. Only in cases where a purported beneficiary party is not readily identifiable, the benefit share due to that party may be channeled to the devices like National Gene Fund (as in the case of Indian PVP law), Trust fund, etc. It is not clear whether the 'society at large' is circumscribed by national, regional or global boundaries. A legal entitlement like fair and equitable benefit sharing cannot be traded off for ODA, which is neither an entitlement nor legally bound support or essentially targeted to the beneficiary community. It should not be forgotten that benefit sharing is a mechanism to promote innovation and conservation of genetic diversity and associated TK and local communities even within a country differ in their capacity and concern for conservation.

The cardinal component of Farmers' Rights is the traditional seed right - the right to save, sow, share, exchange and sell farm saved seeds and other propagules. In the context of PBR, this right on seed is not implied on the traditional or farmers' varieties, but on the PBR or patent protected varieties. No on farm conservation would be possible without the traditional right on seeds to farmers. As conservation essentially is a community activity, the process requires not only the right to save and re-sow at individual level, but also to share, exchange or sell across the farming community(ies). In this context, it would be relevant to recall the IUPGR declaration on Farmers' Rights. It stated, "to assist the farmers and farming communities in all regions of the world, but especially in the areas of origin/diversity of plant genetic resources, to participate fully in the benefits derived at present and in future, from the improved use of plant genetic resources through plant breeding and other scientific methods". Thus, along with the right on seeds, Farmers' Rights include an entitlement to benefit from the improved varieties derived from conventional or other kind of crop improvement. It is important that farmers' right on seed has to be explicit and

unconditional as much as such right does not cause substantive economic injury to the breeder. The Indian PPVFR Act in this respect states “a farmer shall be deemed to be entitled to save, use, sow, re-sow, exchange, share or sell his farm produce including seed of a variety protected under this Act in the same manner as he was entitled before the coming into force of this Act” and it is further clarified that “the farmer shall not be entitled to sell branded seed of a variety protected under this Act."Branded seed" means any seed put in a package or any other container and labeled in a manner indicating that such seed is of a variety protected under this Act (Sec. 39.1. iv).

The scope of right to farmers to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of PGR is determined by the amplitude of Farmers' Rights that a Contracting Party is willing to allow under its national law. Restrictive concept like 'steward' does not naturally allow wider legal space, because a 'steward' is one *who looks after or supervises something* for someone else sake. The concept of involvement of farmers in decision making, at any level, on matters related to the conservation and sustainable use of PGR becomes cosmetic or pretentious or infructuous when they are dealt as steward rather than owners. It is difficult to understand that when the States have sovereignty over their agro-biodiversity, who else other than the very farmers would exercise right on deciding on the improvement, conservation, sustainable use and sharing of the PGR. This right is inconsistent with 'stewardship'. Would the 'stewardship' concept also mean that sovereignty of the State over the biodiversity is not absolute and also that the States serve as the stewards of biodiversity? The 'steward' concept obviously is flawed and incompatible with the CBD and more so with the IT. The scope of decision making at national level on conservation and sustainable use of PGR may include methods of conservation, areas designated for conservation, determination of incentives or opportunity cost for conservation, introduction of mechanism like reward and recognition to promote conservation, making benefit sharing genuinely fair and equitable (unlike the unfair decision of the First GB to limit benefit sharing to 1.4 %), on access to threatened components of biodiversity and PGR which are under research, particularly in farmer participatory breeding. In this context the decision of India under its PPVFR Act to establish a regular 'Genome Saviour Award' to promote agro-biodiversity conservation by individual and community of farmers is worth mentioning.

Conclusions

Perspectives of countries and their civil society organizations on FRs and IPR on PGR are strongly influenced by their socio-economic state, wealth of agro-biodiversity, agricultural systems and their ethical value system on IPR on life forms.

Strong FRs is preferred by farmers in developing countries, which possess rich agro-biodiversity, long history of conservation and selection and have large dependence on farmers' varieties for the livelihood of vast numbers of small and medium farm holdings.

TK on PGR *prima facie* determines its economic value. TK on PGR is inseparable from the PGR itself either during its conservation or utilization. Therefore conservation of PGR has to go hand in hand with conservation of its TK.

Increasing stress on plant patent or increasing stringency to PBR with increasing denial or dilution of Farmers' Rights would adversely affect conservation and sharing of agro-biodiversity, endangering future of global food security.

Absence of FR in a country's national law should not be used to deny extension of unreserved respect to the FRs of other countries or in material or technology transfer. Positive and holistic Farmers' Rights should be recognized as an element of effective *sui generis* system for protection of plant varieties.

A perspective that does not recognise farmers as breeders and owners of PGR can neither support or sustain conservation nor offer fair and equitable sharing of benefits due from commercialization of products derived from farmer innovated diversity. This would also leave no just legal space to farming community in decision making on matters of conservation, sustainable use, material sharing and equitable benefit sharing.

An IPR regime recognising innovative contributions of professional breeders or corporate seed companies should extend a fair deal to farmers for their equivalent contributions and recognize an IPR component in FRs.

The 'steward' concept to deny ownership of PGR to farming communities is inconsistent with CBD and IT and all the more belittling the intellectual contributions made by the farmers, particularly those in the centers of crop plant diversity, for enriching the PGR.

Private sector spending relatively small part of fund in seed research in developing countries is influencing their seed policy to restrict FRs to serve their self-interest at the cost of livelihood options of farmers.

Conservation, *in situ* or *ex situ* involves high cost. On-farm conservation by farmers involves high opportunity cost to those farmers who are small or marginal and poor. While the *ex situ* conservation in IARCs is supported, the international community extends frugal support to on farm conservation. Over years, the international fund flow on on-farm conservation is rapidly declining.

A strong FRs offers opportunity to the multi-lateral system established by the IT to be enlarged to more crop plants and to better global food security.

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Farmers' Rights and civil society perspectives in Zambia and Southern Africa

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1. BACKGROUND

In the brief background to farmers' rights and civil society issues it is important to recognise that these issues have been discussed for many years through various workshops both in the formal and informal sectors. For example, in the events leading to development of the *African Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources* ("the African Model Law").

(1) Workshops organised in Kampala (Uganda) in 1996 and Nairobi (Kenya) in 1997, by the Scientific Technical and Research Commission of the African Union¹¹ (STRC), recommended, inter alia, that the STRC should co-ordinate drafting of an *African model law on the protection of indigenous knowledge on medicinal plants* and that African countries should carefully study the implications of the WTO TRIPs Agreement for the pharmaceutical sector as well as for Africa's biodiversity. These workshops were held against the background of continuing developing country concerns about the misappropriation of their genetic resources and traditional knowledge (TK);

(2) In March 1998 the STRC convened a follow-up working group of experts in Addis Ababa (Ethiopia), who produced a draft model legislation on community rights and access to biological resources, a draft declaration on community rights and access to biological resources, and a draft convention on the protection, conservation and sustainable use of African genetic resources and related knowledge;

(3) The 34th OAU summit, held in Ougadougou (Burkina Faso), July 1998, endorsed the *African Model Law* and decided that African countries should adopt it in their national processes. The summit decided also that African countries should give priority to regulation of access to their biological material and the protection of traditional knowledge (TK, IKS etc).

(4) We have held number of workshops around the SADC Plant Genetic Resources Center (SPGRC) and the National Plant Genetic Resources Center (NPGRC, Zambia), Biodiversity Community Network (BCN, Zambia) and Community Technology Development Trust (CTDT, Zimbabwe) since 1999.

(5) Consultations in the *Community Biodiversity Development and Conservation* (CBDC) program working in civil society in Mali, Burkina Faso, Sierra Leone (West Africa), Ethiopia (North-East?), Malawi, Zambia, Zimbabwe and Lesotho (Southern Africa)

¹¹ Organisation of African Unity was re-named the African Union in July 2002.

We are agreed on the following:

In-situ and on-farm management of Plant Genetic Resources (PGR)

Capacity building elements for strengthening:

- National policy and legal framework (e.g. farmers' rights, TK, ABS)
- National programme on Plant Genetic Resources (PGR)
- Civil society organizations (NGOs, CBOs, farmers organizations etc)
- Farmer participatory research and extension (on-farm)
- Education and Public Awareness (EPA)
- Training and skills development among farmers
- Network support services (information, inputs, market channels, etc.),
- Financial support to agriculture (the famous 10% of national budgets)

2. DISCUSSIONS

The status of the model law is that Africa's Heads of State and Government have endorsed it and it is available as a model in the preparation and adoption of domestic laws. It is a model law for protecting *farmers' rights* and *community rights*, as well as for regulating access to genetic resources.

This short paper will deal with farmers' rights, though some of the areas that the Model Law and how they are interlinked with the civil society perspectives.

The model law was designed to implement both the *Convention on Biological Diversity (CBD)*, and the *WTO's TRIPs Agreement* particularly the provisions on protecting plant varieties. The Model Law took into account as well the then non-binding *International Undertaking on Plant Genetic Resources* (now, ITPGRFA). As such, the model law and the ITPGRFA are an appropriate embodiment of the interests of African countries, and appropriately takes their concerns on farmers' rights into account.

[Note that The ITPGRFA leaving the farmer's rights issue to the responsibility of the national governments was not well taken by the developing nations especially by the civil society, the farmers associations and the local communities in general]

With this brief background, we can turn to the main features of the model law, first, regarding the protection of farmers' rights. According to the model law, farmers' rights are recognised "*stemming from the enormous contributions that local farming communities, especially their women members, of all regions of the world, particularly those in the centres of the origin or diversity of crops and agro-biodiversity, have made in the conservation, development and sustainable use of plant and animal genetic resources that constitute the basis of breeding for food and agriculture production*". *The protection is to enable farmers to continue making these achievements.*¹²

¹² Article 24 of the Model Law

Consequently, the following rights are protected for farmers:

Protection of their traditional knowledge (TK, IKS, etc) that is relevant to the plant and animal genetic resources;

Obtain an equitable share of benefits from the use of plant and animal genetic resources;

To participate in decision making including at the national level;

To save, use, exchange and sell farm-saved seed or propagating material of the farmers' varieties; as well as the new plant varieties protected under breeders' rights (for protected varieties they may not commercialise them); and

To collectively save, use, multiply and process farm-saved seed of protected varieties.

To link farmers' rights to community life including livelihoods, food security, health and nutrition, biodiversity, and the communities' requirements for propagating material.¹³

Against this background, I wish to suggest the following two conclusions:

The Model Law and the ITPGRFA [having included the component of farmers' rights in international obligations] remain balanced, in protecting the rights of farmers without prejudice to the rights of plant breeders and the important role of government for ensuring the good of society and the local communities.

The Model Law documents the rights of farmers and breeders, and provides user-friendly text that may be used in preparing and adopting domestic laws on plant varieties in compliance with relevant international obligations.

3. EXCERPT FROM THE AFRICAN MODEL LAW

PART V

FARMERS' RIGHTS

Recognition of Farmers' Rights 24.

- 1) Farmers' Rights are recognized as stemming from the enormous contributions that local farming communities, especially their women members, of all regions of the world, particularly those in the centres of origin or diversity of crops and other agro-biodiversity, have made in the conservation, development and sustainable use of plant and animal genetic resources that constitute the basis of breeding for food and agriculture production; and
- 2) For farmers to continue making these achievements, therefore, Farmers' Rights have to be recognized and protected.

Application of the Law on Farmers' Varieties 25.

- 1) Farmers' varieties and breeds are recognized and shall be protected under the rules of practice as found in, and recognized by, the customary practices and laws of the concerned local farming communities, whether such laws are written or not.
- 2) A variety with specific attributes identified by a community shall be granted intellectual protection through a variety certificate which does not have to meet the criteria of distinction, uniformity and stability. This variety certificate entitles the community to have the exclusive rights to multiply, cultivate, use or sell the variety, or to license its use without prejudice to the Farmers' Rights set out in this law.

¹³ Articles 25 and 26 read together with Articles 31 and 33.

Farmers' Rights

26.

- 1) Farmers' Rights shall, with due regard for gender equity, include the right to:
 - a) the protection of their traditional knowledge relevant to plant and animal genetic resources;
 - b) obtain an equitable share of benefits arising from the use of plant and animal genetic resources;
 - c) participate in making decisions, including at the national level, on matters related to the conservation and sustainable use of plant and animal genetic resources;
 - d) save, use, exchange and sell farm-saved seed/propagating material of farmers' varieties;
 - e) use a new breeders' variety protected under this law to develop farmers' varieties, including material obtained from gene-banks or plant genetic resource centres; and
 - f) collectively save, use, multiply and process farm-saved seed of protected varieties.
- 2) Notwithstanding sub-paragraphs c) and d), the farmer shall not sell farm-saved seed/propagating material of a breeders' protected variety in the seed industry on a commercial scale.

Certification of Farmers' Varieties

27

1. Any product derived from the sustainable use a biological resource shall be granted a certificate or label of recognition.
2. A certificate of fair trade shall be granted to a product derived from a biological resource or knowledge or technology, when a significant part of the benefits derived from the product go back to the local community.

4. CIVIL SOCIETY ISSUES

(1) On-farm PGR management

In civil society, the farmers rights issue retains its characteristic features including the long history of on-farm plant domestication, development of *ecologically-adapted* crops and varieties, their exchange and various forms of utilization etc., are practiced in the context of the local and indigenous communities. Little wonder that in civil society perspective, maintenance of PGR diversity on-farm is tied to household food production for food security, livelihoods, human nutrition and health, and income generation.

Farmers rights therefore includes, inter alia, the phrase of Participatory Plant Breeding (PPB), which in the context of the resource-poor farmers and communities goes beyond the gradual selection in landraces (farmers' varieties) year after year to include development, adaptation and maintenance of the broad range of PGR diversity – which is the resource-poor farmers' best defense against vulnerabilities to insect pests and diseases, environmental stresses and socio-economic risks.

It is often said that, on scientific and technical level, the modern high yielding improved varieties (hybrids) developed the formal sector plant breeders tend to replace crop landraces (farmers' varieties) as a source of PGR diversity. [NB: This is also the threat leveled against Genetic Use Restriction Technologies (GURTs) as Genetically Modified Organisms (GMOs) which would, like

in certain cases of Open Pollinated Varieties (OPVs), cross-pollinate and contaminate the more *indigenous, ecologically-adapted* PGR diversity].

(2) Participatory Plant Breeding

Recognizing the long history of cultivation of the local PGR diversity and the rich socio-cultural settings within which the PGR diversity is maintained by local farming communities, it is counter-argued that the local practices attached to specific crops will continue and many crops will survive this way in these communities. Acknowledging this threat, however, under the civil society with reference to the *Community Biodiversity Development and Conservation* (CBDC) program, the basic element is to continue to sensitize, train and strengthen the participatory plant breeding activities among resource-poor farmers to ensure *ecologically-adapted* crop landraces (farmers' varieties) survive indefinitely, like in the past generations.

[NB: The other more policy-related and structural marginalization, in an increasing number of countries, plant varieties developed by the private and public sector can be protected by the Plant Breeders Rights (PBRs). Granting of such PBRs creates the commercial and trade opportunity for the public breeders including associated Seed Companies and multi-national corporations (MCs), while at the same time keeps the protected variety available for further research and plant breeding].

Alas the recognition of the contribution of landraces (farmers' varieties), which are actually the basic raw material, to crop improvement and agricultural development and the protection of IKS, are not specifically protected and/or regulated in the current form of the PBR regimes which normally follow the tenets of the *International Union for the Protection of New Plant Varieties* (UPOV) Convention.

In Zambia and Malawi, for example, we are seeing a more *structurally-driven* policy alienation of the farmers rights regime from the PBRs by separating the former from the latter and putting momentum on governments to enact *Plant Variety Protection* (PVP) policy and legislation that incorporates PBRs and excludes farmers' rights. Why?

(3) Farmers as Main Actors

Farmers rights empowers marginalized resource-poor farmers as main actors in local farming systems. For the national farmers, rights policy and legal frameworks to be effective, building capacity to supporting structures of farmers, e.g. farmer organizations, government agencies, policy makers, NGOs and private sector on technical information, skills, methods and national processes are necessary preconditions.

(4) Capacity Building

Manifold needs for the community-based on-farm management of PGR in traditional crops ("landraces", "farmers' varieties") to enable these crops and their resource-poor farmers respond to diverse ecological, social and economic needs, means that capacity building to supporting structures and process for development of national farmers' rights policy and legal regimes need a holistic approach to meet complex demands.

Capacity building has a long history to development cooperation and conservation programmes. Beyond the larger meaning, in the specific sense as applied to farmers rights regimes, capacity building means strengthening the farmer's individual capacities through education and training, including support for institutional development and institutional learning, and empowerment for networking alliances among the various actors in how to access further knowledge and vital

information necessary for both the development of the farmers rights policy and law at the national level¹⁴ and subsequent implementation of this framework at various levels.

¹⁴ In this paper reference or anecdotal information to capacity building to bring about the realization of the farmers rights policy and legal framework at national level, as in the *Convention on Biological Diversity* (CBD 1992), the *Global Plan of Action* (GPA 1996) and the *International Treaty on Plant Genetic Resources for Food and Agriculture* (IT-PGRFA 2002) issues of Indigenous or Community Rights (e.g. in Article 8j of CBD, or in paragraphs 220 and 313 of GPA), Farmers Rights, ABS and IKS (e.g. in ITPGRFA Article 9.2a), is very relevant and vital.

Fourth Session: Pooling Resources for Farmers' Rights at the National Level

Pooling Resources for Farmers' Rights at the National Level

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1. Background

Developing countries and African governments in particular should be proactive in analyzing and identifying their short and long- term policy needs, gaps and priorities regarding plant genetic resources conservation and sustainable use. The policy priority needs should ideally be developed within the context of signed and ratified international instruments such as the Convention on Biological Diversity (CBD) FAO Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture (GPA) and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA).

The concept of farmer's rights should be formalized through national policy and legislative frameworks, institutionalized at national levels and implemented through specific local and national strategic action plans. Such national policies and legislation for implementing farmer's rights should be based on Article 8(j) of the CBD which calls upon member states to put in place national legislation that respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying lifestyles relevant for the conservation and sustainable use of biological diversity.

The ITPGRFA under Article 6 b and F urges governments to strengthen research which enhances and conserves biological diversity for the benefit of farmers especially those who generate and use their own varieties. Article 9 of the ITPGRFA affirms the concept of farmer's rights and provides for a framework for restoring them through mechanisms designed to protect traditional knowledge, the right to participate in benefit sharing and decision-making processes.

2. Formalizing Farmers' Rights

The concept of farmer's rights have, been accepted by various regional and multilateral instruments such as the CBD, GPA, OAU-African Model Law and the ITPGRFA. However its implementation have been left at the discretion of governments who have limited technical capacity, expertise and resources. The process of formalizing farmer's rights should be facilitated through a number of strategies such as:

- National consultative processes leading towards the development of national policies and legislation designed to protect farmer's rights;
- Amendment of existing national seed laws to incorporate farmer's rights;

- Developing regulations to existing Agricultural Acts;
- Regional rationalization and harmonization of farmer's rights policies and legislation;
- Promoting national and regional networks for Plant Genetic Resources for Food and Agriculture;
- Developing comprehensive information systems for Plant Genetic Resources and monitoring Plant Genetic Resources erosion;
- Promoting public awareness on the value of plant genetic resources

3. Developing National Legislative Frameworks

It is critical to adopt an inclusive and participatory approach, which involves all concerned stakeholders in the process of national development of the requisite policies and legislative frameworks of farmer's rights. In this regard, a number of steps need to be taken into account in pooling together national resources towards the establishment of farmer's rights and these relate to:

- Establishing a National Coordinating Committee (NCC) with representatives from key public, private and civil society organizations;
- Undertaking sector specific consultations related to farmers rights issues (agriculture, environment, scientists, policy-makers, local authorities, farmers organizations, civil society, women's organizations traditional practitioners and their leaders);
- Developing a White Paper on farmer's rights, receiving comments, and consulting regional countries to ensure synergy, rationalization and harmonization;
- Finalizing a farmer's rights policy and legislation

4. Institutionalization of Farmers' Rights

There is need to involve as many concerned stakeholders as possible such as; National Genebanks, Local Governments ministries, National Herbarium, Rural Development Authorities, Universities, Departments of Natural Resources, Farmers Organizations Civil Society, Veterinary Services etc.. Institutional mechanisms have to be put in place to facilitate capacity building, regulation and management of farmer's rights. Such comprehensive national policy frameworks should be linked with regional initiatives designed to effectively implement farmer's rights.

However there is need to create appropriate but competent national institutions responsible for pooling resources towards the implementation of farmer's rights and these include:

- Establishing village/community based agro-biodiversity management committees;
- Establishing district level agro-biodiversity management structures;
- Putting in place National Biodiversity Authorities;
- Effecting application of farmer's rights policies and legislation and enforcement;
- Establishing the position of National Registrar of Farmer's Rights and related officers;
- Defining persons entitled to make applications and create awareness;
- Building national networks of farmers and improve institutional and sectorial linkages;
- Coordinating national priority setting related to on-farm agro-biodiversity conservation and sustainable use, access to farmers varieties and benefit sharing mechanisms;
- Creating farmers rights information management systems and database.

5. Implementation of Farmers' Rights

Farmer's rights should be developed and implemented based on the need to attain:

- Food security and self-sufficiency at local level including access to safe and sufficient food;
- Increasing agricultural productivity, rural development and poverty alleviation;
- Economic growth through diversification into value adding and product development of farmer's varieties.

There is need to develop national strategic action plans for the implementation of farmer's rights which create:

- ❑ Appropriate incentive measures for the conservation and sustainable use of plant genetic resources by farmers;
- ❑ Comprehensive and elaborate inventory of plant genetic resources in the hands of farmers;
- ❑ Affordable, viable and acceptable alternatives for livelihood survival beyond existing national resource base

WHOSE RIGHTS ARE BEING SERVED

PLANT BREEDERS	FARMERS
1. Have legal status	1. No legal Status
2. Intellectual Property Rights	2. No Recognition to Farmers Intellectual Rights
3. Patents	3. Piracy of Farmers Knowledge and Innovations
4. Terminator Technology	4. Legislated Restriction to Market Access
5. Market Access With Monopoly	5. No Institutional Support Other Than Customary Practices and Systems
6. Mergers of Seed and Chemical Companies	6. No Support and Recognition of Farmers Research, Knowledge and Innovations
7. Institutional Support at National, Regional and Global Levels	7. Prohibitive Cost to Externally Developed Technologies
8. Research Capacity (Access to Public Funds and Materials)	8. No Framework for Capacity Building Farmers to Maintain their Systems /Practices of Plant Genetic Resources Mgt.
9. Free Access to Farmers Plant Geneti Resources, Knowledge and Innovations	9. No Support to Farmers Organizations in Terms of Agro-Biodiversity Mgt.

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Pooling Resources for Farmers' Rights at the National Level

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Programme Co-ordinator, Development Fund, Norway¹⁵

For small-scale farmers in the South there is a close link between the free and open access to plant genetic resources and the sustainability of their production systems. Availability of plant genetic resources makes it possible for poor farmers in the south to maintain a flexible production system that responds to their multitude of preferences. Resistance to disease and pests, and adaptability to changing environmental conditions (e.g. climate), together with cooking qualities, taste, long or short maturity are only some of many traits farmers will be looking for when assessing their pool of genetic resources.

When genetic diversity continues to disappear at an alarming rate and when developing countries are compelled to implement laws that make in-situ conservation of plant genetic resources difficult or even illegal, the livelihoods and food security of millions of people is at stake. This paper will explore how a development organisation like the Development Fund can contribute towards pooling resources for farmers' rights at the national level. By resources I am referring not only to financial resources, but also knowledge and technology, as well as to plant genetic resources itself. By pooling in this context I refer to how to get the various type of resources – human resources and financial - to pull in the same direction and to work for the same objectives in their different capacities (vertical pooling). Pooling is also about mobilising more resources – i.e. more farmers, more researchers, more extension workers, more NGOs, more funding, etc., to work for the same goal (horizontal pooling).

Farmers Rights and the in-situ approach to managing Plant Genetic Resources is a strategic approach for the Development Fund to realise development in rural areas. With reference to the Biodiversity, Use and Conservation in Asia Programme (BUCAP), a project jointly supported by Development Fund, SwedBio and the Dutch Biodiversity Fund, I will argue that Participatory Plant Breeding (PPB) and the Farmer Field School Approach to PGR (FFS) management are cost effective ways of pooling resources at the national level for the realisation of Farmers' Rights.

Participatory Plant Breeding, Farmer Field Schools and operationalising Farmers Rights

Participatory plant breeding (PPB) is a method of bringing farmers into the breeding process and to ensure that the research undertaken is relevant to the farmers needs. Instead of being merely at the receiving end of a technology the farmers are treated as an equal partner. The farmers participate setting the breeding goals based on their knowledge and preferences and also in the breeding process itself. Unlike conventional breeding, where there is strong focus on broad adaptability, PPB's focus is on "specific adaptation" – i.e. to develop seeds and propagating materials that are appropriate to the specific conditions and priorities of the farmers. Managing plant genetic diversity is important

¹⁵ The Development Fund (DF) is an independent non-government organization (NGO). We support development projects through local partners in Asia, Africa and Latin America. In the area of agro-biodiversity and in-situ conservation of plant genetic resources DF supports a number of regional programmes (BUCAP, CBDC, PPB-LA) as well several national initiatives. For more information about DF visit our internet site www.utviklingsfondet.no.

for this purpose. The Farmer Field School (FFS) approach to managing plant genetic resources (building on the FFS model of the Integrated Pest Management programme) has proven to be an effective tool for engaging communities in research and breeding and in empowering farmers, both technically and socially.

In my view and how we approach this issue in the Development Fund, “Farmers’ Rights at the National Level” is closely linked to empowerment. PPB and FFS is a lot about confidence building of farmers – confidence in terms of valuing their own knowledge, taking an active role and responsibility in the development process and engaging with various actors in lobbying their rights. In other words empowerment is taking place at various levels:

- Technology/ knowledge/culture – farmers gaining confidence in their own skills and knowledge and being able to build on these skills.
- Economic empowerment – strengthening the livelihoods
- Social/political empowerment – farmers working together in groups – creating group dynamics and gaining confidence to engage with extension on livelihood related issues

PPB and FFS potentially addresses all these three levels although the focus between the two will often differ somewhat. Both have a clear bottom up approach. The farmers is in the centre identifying the desired traits and setting the breeding goals, but in close collaboration with the research and extension staff. But while PPB has a strong technical focus, FFS, with its strong focus on group learning and group processes and in bringing additional stakeholders on board, often assumes social and political dimensions as well.

Moreover, or more specifically, Participatory Plant Breeding and the Farmer Field School approach contributes to the realisation of Article 9 on Farmers Rights in the International Treaty on Plant Genetic Resources for Food and agriculture by,

- promoting traditional knowledge through use –by recognising/acknowledging it and giving it value – because it is acknowledged as an important and necessary contribution to the breeding process.
- promoting participation. At the minimum farmers are participating in the breeding process – and in setting the goals for the breeding process and to make sure that their needs are addressed.
- addressing benefit sharing – farmers benefit from transfer of knowledge – PPB is transfer of a needs based technology. At the end of the day the farmers also get better seeds.
- promoting use and access of PGR. Since farmers participate actively in the whole breeding cycle it may be assumed that they can freely use and exchange these seeds.

PPB and FFS have proven to be efficient in pooling resources nationally, both horizontally and vertically. By vertical I am referring to how to link different stakeholders – e.g. farmers, breeders, extension workers, local government officials, donors – to work towards a common goal in the various capacities. By horizontal I am referring to how to mobilise e.g. many farmers, many researchers, many extension workers, policy makers, etc to work collectively towards the same goal. I will say a little bit more about this now when I refer to the BUCAP example below.

BUCAP – an example of empowerment and pooling of resources for Farmers Rights

The Biodiversity, Use and Conservation in Asia Programme (BUCAP) was merged with the Community Biodiversity Development Conservation regional Asia programme (CBDC Asia) in 2006, thus forming the CBDC-BUCAP programme. It now embraces five countries, namely Bhutan, Laos, Vietnam, Thailand and the Philippines. However, for the sake argument

I will only discuss the original BUCAP (Vietnam, Laos and Bhutan) because it contains some rather unique features and this is where the FFS approach to PGR management was piloted on a larger scale.

The BUCAP programme is an interesting example in terms of pooling resources at various levels and in terms of empowerment at various levels. The three countries of Laos, Bhutan and Vietnam, are very different in many respects, but share a common feature in having centralised governments who provide little space for national NGOs/local civil society organisations.

One of the unique features of BUCAP then is that while being coordinated and backstopped by a regional NGO – i.e. SEARICE – it is implemented nationally by government institutions – i.e. Plant Protection Centre (PPC) in Laos, the Plant Protection Department (PPD) in Vietnam and the National Biodiversity Centre (NBC) in Bhutan. This is in collaboration of course with farmer groups, but also with research, extension and international NGOs with a national base in the countries. In other words, vertical pooling of resources.

In Vietnam the PPD is both responsible for the Integrated Pest Management programme (IPM) and BUCAP. By applying the same basic model of the FFS approach and by sharing the same knowledge base and infrastructure of extension workers trained in FFS under the IPM programme, BUCAP has proven to be both an effective and cost-efficient way of demonstrating and scaling up PPB and in-situ management of plant genetic resources and, as such, in pooling resources horizontally. In the presentation made by Wilhelmina R. Pelegrina (SEARICE) mentioned that in the Mekong delta project investments of USD 90,000 into FFS is generating results equivalent to USD 1,2 million. These impressive results can partly be related to the fact that the project is being implemented through existing structures – i.e. the IPM infrastructure with its pool of extension people trained in the Farmer Field School Methodology of IPM – and not creating parallel structures.

At one level the goal of the programme is to manage and conserve PGRFA by encouraging use of these resources and building on the skills of farmers to further develop these resources – basically building on an existing knowledge and technology base, but also introducing new technology, such as modern breeding techniques. The entry point is technical – i.e. collaboration between farmers and farmer groups with the formal sector in crop development (pooling resources vertically). But the FFS approach moves beyond technical empowerment and focuses on collective learning processes, on building group processes and on institutionalising group processes with establishment of seed clubs or PGR clubs and linking these to income generating activities such as seed production. With a strong focus on institution building – the programme has gradually assumed social and political dimensions as well.

What is interesting in this model is that formal institutions are given an actual stake in the implementation of the project – i.e. they are not only consulted as is often the case. In this model the formal institutions are learning through direct collaboration about what farmers can do – this has created some very positive dynamics between the stakeholders.

Because the projects are clearly demonstrating that farmers varieties and farmer produced seeds are filling a very important gap in terms of supplying quality seeds to farming communities (c.f. Mekong Delta), we are also seeing that policy makers, in these highly centralised countries, are beginning to discuss what policy measures are needed to support this practice and what existing policy measures are constituting barriers to such a practice...

In other words, the bottom up approach – which the FFS approach implies – and the systematic engagement of multiple stakeholders in the implementation process – has produced a very positive dynamic nationally where in-situ conservation of PGR through FFS approach (and thus also

Farmers' Rights) and is seriously being considered as a development model! – and not only an interesting experiment promoted by NGOs...

The role of development cooperation

75% of the people in the developing world are small scale farmers living in rural areas. This is where food production takes place and this is where development aid needs to focus its attention. Hence the implementation of Farmers Rights and development of in-situ management strategies for plant genetic resources is crucial if we want to have an impact on poverty and achieve the Millennium Development Goal 1. Development cooperation can play an important role in making this happen, by providing financial support to innovative projects addressing Farmers Rights. However, development aid will have a limited impact unless national governments ensure supporting regulatory frameworks and make farmers rights and in-situ conservation part of their priorities.

What will happen if we are unable to secure farmers the future rights to continue to save, exchange, manage and use plant genetic resources? Not only will farmers' varieties continue to disappear, but with it the evolutionary process that is continuously taking place through farmers' innovation, and which is so important for future adaptation, will also disappear.

What, then, is the alternative to farmers' varieties? The answer is the continued replacement of these varieties by a limited number of modern varieties and GMOs protected by Intellectual Property Rights. This is a development that already has a big momentum, not the least because it is profit driven, but also because it is receiving renewed attention and support by many of the big development organisations (c.f. the drive for a new Green Revolution in Africa).

There is, on the other hand, little profit involved in in-situ conservation and PPB and FFS type of activities and this is why development cooperation assumes an important role. In a sense development cooperation has in terms of financial support and otherwise the responsibility of balancing the multinational industries who are spearheading the push for GMO and green revolution technologies.

1. Support to institutionalising the management of PGRFA and implementation of FR
 - Provide support to projects that work on the vertical axis – i.e. projects that take an active approach in including all relevant stakeholders in the implementation process. Development organisations have a limited possibility of scaling up initiatives nationally – only governments can do this. If governments recognise that e.g. the FFS approach to managing PGRFA is filling important gaps – they will also be recognising the principles of FR.
 - BUCAP has been a lengthy process – 7-8- years. These years have been necessary to build trust between the various stakeholders – e.g. between farmers and plant breeders – but it is now becoming realistic to talk about in-situ management of PGRFA as a national programme - of becoming a national priority. If this happens it may be realistic to attract bigger funding from e.g. bilateral or multilateral agencies, whose mandate it is to respond to government priorities.
2. Funding/donor mobilization
 - Donor coordination pooling financial resources (c.f. BUCAP) –attract new donors through awareness raising/information. E.g argue the importance of Farmers' Rights and in-situ conservation of PGR in the context of Climate Change and of food security – demonstrate the importance of implementing Farmers' Rights in the context of adapting to Climate Change.
 - Lobby national government to prioritise FR and in-situ. A point of departure in this respect could be to look at ex-situ vs. in-situ and how much financial support they are receiving respectively. E.g. if much more funding goes to ex-situ than in-situ, this can be a lobbying point for increased funding to in-situ conservation and in lobbying the FR principles.

3. Networking & capacity building
 - Contribute towards strengthening networks of likeminded organisations, especially in the North – pooling resources horizontally with the objective of common strategies.
 - Contribute towards build bridges between opposing parties and create consensus around some basic issues.
 - Facilitate transfer of experiences between countries and between regions. E.g. what can Asia learn from Africa and vice-versa? This is already taking place through the global CBDC platform

Fifth Session: What can the Governing Body do?

What can the Governing Body do to help the implementation of Farmers' Rights?

Elizabeth Matos

Chairperson, National Plant Genetic Resources Committee, Angola

In many developing countries the majority of the population are small-scale farmers and they are the ones who have been, and are, conserving agro-diversity. For them to continue to play this essential role, that is a prime basis of their subsistence, their production for themselves and others and to continue to conserve PGR for the benefit of future crop improvement for everyone, the legal recognition of FR at national level needs to be addressed by Contracting Parties. Continued non-implementation of FR will result in further erosion of agro-diversity.

The largest regional group of Contracting Parties to the ITPGRFA are African countries, that were encouraged, and were keen, to become Contracting Parties in the expectation that the Treaty would support our efforts for PGRFA conservation and utilization.

Although Article 9, which deals specifically with Farmers' Rights, clearly states that they are subject to national legislation, there are other articles in the IT that are also concerned with FR implementation, some in relation to the Multilateral System and the crops listed in Annexe 1, and others in relation to PGRFA in general.

While there is a range of farmers' rights extending wider than those that directly affect PGR conservation and utilization, that different countries may wish to implement, the GB should, as a priority activity, give guidance and support to CP for the implementation of legislation of the FR set out in Article 9 of the IT.

What can the GB do to ensure the implementation of Farmers' Rights?

- Raise awareness of Contracting Parties that the need to conserve agro-biodiversity has never been more urgent than it is today, in the face of global climate change.
- Raise awareness of Contracting Parties that FR is not a secondary issue in relation to the conservation of agro-biodiversity. Farmers Rights to continue to save, use, conserve, breed, exchange, donate and sell their varieties is essential if they are to be able to conserve PGRFA for themselves and for use by others.
- Recognise that genetic erosion is continuing at an alarming rate, principally caused by increased monoculture production and by restrictive seed laws and property legislation.

- Raise awareness of decision makers in developing country Contracting Parties of the usefulness of the PGR contained in our farmers' varieties as essential raw material for use in sustainable food production and for use in national breeding programmes.
 - The Governing Body should treat FR as a priority issue, because: Restrictive seed laws and IPRs are rapidly closing the legal space that allows for the conservation and use of farmers' varieties. Examples may be pointed out of the number of countries which have recently recognised the need to take measures, such as re-drafting or amending their earlier restrictive seed laws, and legally recognise FR to save, use, exchange and sell their own seed, e.g. India, Brazil, Philippines, Nepal.
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Other articles of the Treaty that deal with Farmers' Rights:

- 5.2 *The Contracting Parties shall, as appropriate, adopt measures to minimize, or if possible, eliminate threats to PGRFA. (The GB could give guidance and support the amending of restrictive seed laws, which are now one of the greatest threats to the maintenance of agrodiversity.*
- 6.2 *The sustainable use of PGRFA may include measures such as:*
- (a) *pursuing fair agricultural policies that promote, as appropriate, the development and maintenance of diverse farming systems that enhance the sustainable use of agricultural biodiversity and other natural resources;*
 - (b) *strengthen research that enhances and conserves biological diversity, maximising intra- and inter-specific variation for the benefit of farmers, especially those who generate and use their own varieties and apply ecological principles in maintaining soil fertility and in combating diseases, weeds and pests;*
 - (c) *promote, as appropriate, efforts in plant breeding which, with the participation of farmers, particularly in developing countries, strengthen the capacity to develop varieties particularly adapted to social, economic and ecological conditions, including of marginal areas;*
 - (e) *promoting, as appropriate, the expanded use of local and locally adapted crops, varieties and underutilized species.*
- 12.3 (e) *access to PGRFA under development, including material being developed by farmers, shall be at the discretion of its developer, during the period of its development;*
- 12.3 (h) *Without prejudice to the other provisions under this Article, the Contracting Parties agree that access to PGRFA found in in situ conditions will be provided according to national legislation, or in the absence of such legislation, accordance with such standards as may be set by the Governing Body.*

To help Contracting Parties ensure that PIC is obtained in relation to PGRFA *in situ*, see Art 12.3 (h), Governing Body should provide guidance and support in the preparation of national legislation.

Perhaps a model legislation? that could be appropriately adapted to national legislation. This should be priority activity for the GB.

13.2 (a), (b) and (c): Non-Monetary Benefits: Exchange of Information, Access to and Transfer of Technology and Capacity-building.

The development of national plant breeding expertise in the use of local and exotic PGR is the only way that we will be able to produce the most appropriate crops for sustainable agriculture in our regions.

GB should help developing country CPs by giving guidance and support for training in conventional plant breeding, participatory plant breeding and use of local PGRFA in breeding programmes.

13.3 The Contracting Parties agree that the benefits arising from the use of PGRFA, that are shared under the MS, should flow primarily, directly and indirectly, to farmers in all countries, especially in developing countries and countries with economies in transition, who conserve and sustainably utilize PGRFA.

13.4 The G. Body shall, at its first meeting, consider relevant policies and criteria for specific assistance under the agreed funding strategy established under Article 18, for the conservation of PGRFA in developing countries and countries with economies in transition, whose contribution to the diversity of PGRFA in the MLS is significant and/or which have special needs.

Now we come to the second (or perhaps it should be joint first) priority item to be considered by the GB at its upcoming second session.

13.5 The Contracting Parties recognize that the ability to fully implement the Global Plan of Action, in particular of developing countries and countries with economies in transition, will depend largely upon the effective implementation of this Article and of the funding strategy as provided in Article 18.

What can the IT achieve if the Governing Body has no funds for activities?

Governing Body must address the situation of the Funding Strategy,

How will awareness be raised if there are no activities to do so? Where are the funds for projects for *in-situ* and on-farm conservation? Can farmers be encouraged to place their varieties PGR into the MLS if there are no benefits to be seen? Can developing countries be encouraged to place *in situ* wild relatives into the MLS as long as there is no implementation of the actions agreed to in the articles mentioned above ?

There is now considerable financial support for the conservation of *ex situ* collections, principally the world's major CGIAR collections, through the Global Crop Diversity Trust. This is clearly an essential and priority task, but how do we finance the other 15 points of the GPA, and particularly how are we to finance vital *in situ* and on farm conservation projects?

Developing country contracting parties have responsibilities to provide support for the conservation and utilisation of our own PGRFA, but we also require guidance and support from the GB to for this. We feel that it is not sufficient for the GB to advise CPs to prepare projects for approval by other existing institutions. The GB itself needs funds that can be administered for the implementation of the principles and activities of the Treaty. It is the GB that should have the guiding role in the conservation and utilisation of the raw material of all our food.

Shortlist of items for GB to deliberate on:

- Guidance and support for the implementation of Farmers' Rights, with priority for Article 9 implementation, through: awareness raising; legal support.
- Implementation of the agreed positions of Arts. 5, 6, 12,13,18, in relation to *in situ* conservation, benefit sharing and capacity building.
- Revision of the Funding Strategy and its implementation.

Informal International Consultation on Farmers' Rights
18-20 September 2007, Lusaka, Zambia

Implementing the Elements of Article 9 through the other Articles of the ITPGRFA. Format for Developing the Guidelines for National Implementation

Eng Siang Lim

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Implementing FR in relation to Article 5 of ITPGRFA

- Measures for safeguarding, promoting and improving the contribution of farmers in the survey and inventory of PGRFA – Article 5.1 (a)
- Measures for safeguarding, promoting and improving the contribution and participation of farmers in the collection of PGRFA and relevant associated information on those PGR that are under threat or are of potential use – Article 5.2 (b)
- Provision of support (non trade distorting?) to ensure continued contribution of farmers and local communities' efforts to manage and conserve on-farm their PGRFA – Article 5.2 (c)
- Measures for safeguarding, promoting and improving the contribution of farmers in the documentation, characterization, and evaluation of PGRFA – Article 5.2 (e)

The above measures can be drawn from the experiences of *in situ* management of farmers' varieties in Nepal, Peru, Philippines and India.

- Other Related matters: Bioprospecting in farmers' fields – decisions of farmers/farming communities (PIC requirements?)

Implementing FR in relation to Article 6 of ITPGRFA

- National policies (non trade distorting?) that promote the development and maintenance of diverse farming systems that enhance the sustainable use of agricultural biological diversity and other natural resources – Article 6.2 (a)
- Measures to safeguard promote and improve the contribution of farmers in research and breeding efforts (participatory plant breeding) – Article 6.2 (b) and (c) (experiences from Nepal)
- National policies to promote expanded use of local and locally adapted crops varieties and underutilized species by farmers - Articles 6.2 (e)
- National policies to promote the wider use of diversity of varieties and species in on-farm management, conservation and sustainable use of PGRFA – Article 6.2 (f)
- Policy and legal measures to adjust breeding strategies and regulations concerning variety release and seed distribution – Article 6.2 (g) – this is important to develop the “informal “ seed system.

Implementing FR in relation to Article 11 of the ITPGRFA

- National measures to encourage farmers to include their PGRFA in the MLS – Article 11.4

Implementing FR in relation to Article 12 of the ITPGRFA

- Material being developed by farmers – Under the condition of continuous plant-environment-human interaction in farmers' field – what is original material? What is material being developed by farmers? And what is final product? – Article 12.3 (e) Discretion of the developer – Article 12.3 (e)
- Who is the developer under condition of continuous exchange of materials in an informal breeding system? Access to PGRFA in situ conditions - national legislation or standards as may be set by the Governing Body – Article 12.3 (h)

Implementing FR in relation to Article 13 of the ITPGRFA

- Link between Article 9, Article 13 and Article 18 in particular the measures for benefits flow directly and indirectly to farmers, who conserve and sustainably utilize PGRFA – Article 13.3 ---- and agreed plans and programmes Article 18.5

Implementing FR in relation to ABS for Non Annex 1 Materials

- Protection of TK
- Right to equitably participate in sharing benefits
- Right to participate in making decisions
- **Implementing FR in IPR, ABS and Seed Legislations** Implementing FR in PVP legislation – Indian model?
- Implementing FR in ABS or Biodiversity legislation – PIC requirements?
- Implementing FR in Seed legislation – Registration of farmers' varieties:
 - Definition of farmers' varieties – DUS criteria?
 - Defining the informal seed system – exchange, use and sale of farm saved seeds
- Safeguarding farmers' materials - Biosafety legislation?

Proposal

- Establish an Expert Group to assist the Secretary of the GB to develop the first draft guidelines for national implementation of FR
- Establish an Ad Hoc Working Group to discuss and finalize the guidelines for consideration of the GB
- If needed, establish Working Group to review progress of implementation

Details of the process

- Governing Body's decision to develop Guidelines for National Implementation of Farmers' Rights.
- Preparation of 1st. draft of the Guidelines by the Secretariat
- Secretariat + Expert group (GB to decide on the formation of the Expert Group)
- Working group of Farmers' Rights (regional representation)
- Discussion/Finalization of guidelines
- National Consultations on Guidelines
- Approval of Guidelines by Governing Body
- Funding strategy for the implementation of the policies and measures in the Guidelines - Article 13.3 and Article 18.5
- At the national level: Preparation of National Plan of Action for the Implementation of Farmers' Rights
- Reporting from Contracting Parties on national priorities to the Working group
- Working group: Review of progress on the implementation of the Guidelines.
- Report to Governing Body

Governing Body: Decision on the Evolution of the Guidelines: Decisions on which parts of the guidelines that need to be changed in light of experience

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Reflections¹⁶

Robert J. Lewis-Lettington

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1. Key issues that could be addressed in the Governing Body

- a) Need more research on goals and objectives. With the arguable exception of some fundamental human rights, rights are rarely recognised or established without some particular goal or objective that is of direct or indirect benefit to, at least, a broad cross-section of society. These have been identified in a fairly rhetorical sense in Farmers' Rights discourse but need to be developed further, if for not other reason than as a means of developing indicative benchmarks.
- b) Despite the fact that Article 9 and the associated preambular text are based on an understanding that there are diverse views as to the nature and objectives of Farmers' Rights, there needs to be more thought given to descriptions of options for implementing Farmers' Rights that include detailed consideration of how these options relate to particular goals and objectives and how they might be practically implemented in different circumstances. Particular attention needs to be paid to the realisation of net benefits and the risks of perverse outcomes.
- c) Much more emphasis needs to be given to the fact that Farmers' Rights do not exist in the context of a zero sum discourse, such as the idea that they constitute a concept that exists purely in contrast to plant breeders' rights. Both Farmers' Rights and plant breeders' rights exist in a far broader and more complex discourse that includes a number of other interested groups and individuals with interrelated goals and objectives.
- d) More detailed consideration needs to be given to demonstrating the practical and relevant impact potential of various options for implementing Farmers' Rights. To the degree possible, this should be based on empirical research and must place Farmers' Rights in their proper legal and socio-economic context instead, thereby moving beyond the tendency to consider the implementation of Farmers' Rights in isolation.
- e) Explicit conceptual and practical links should be made between the implementation of Article 9 and other articles, in particular paragraph 6.2(g). Through this, the Treaty could act as a catalyst for the review of seed regulatory systems based on rigid control in light of the understanding that such systems are diverse; including not only multinational companies and smallholder farmers but, to be healthy and resilient, a wide range of actors in between the two poles.

2. Possible measures that the Governing Body may initiate

In general terms the Governing Body should avoid direct action that may be perceived as endorsing any particular approach or as undermining the rather jealously guarded right of countries to independently address implementation issues. However, I do believe that a number of countries could benefit from skilled assistance in the identification and analysis of practical options and in the implementation of conclusions from such a process. Such assistance could also benefit broader agricultural policy-making efforts. Particular activities the Governing Body itself could consider should include:

¹⁶ These notes are purely the personal views and opinions of the author and do not reflect the positions of Bioversity International or the organisers of the consultation on Farmers' Rights.

- a) Invite research and the submission of views on different aspects of, and approaches to, Farmers' Rights as a means of sharing experience and stimulating debate on practical options
- b) Some sort of review of the implementation of Farmers' Rights should be established. This would not need to focus on prescriptive measures but focus on more subtle forms of inducement.

3. How to ensure a fruitful process

- a) Do not involve the Governing Body in trying to reach conclusions. Farmers' rights, and more importantly farmers, are unlikely to benefit from a process of politicisation and rhetoric.
- b) Be consistently clear throughout that Farmers' Rights is not an absolute issue with clear rights and wrongs but, rather, a diversity of objective and approach is the norm and not the exception.

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***Expectations of the Treaty – especially regarding the rights of farmers.
Introduction from an NGO-perspective.***

Patrick Mulvany

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As intended by architects of the Treaty, its principal outcomes should be to staunch the haemorrhage of the on-farm diversity of seeds and related agricultural biodiversity and to ensure that this diversity is freely available to future generations.

The Treaty recognises that this diversity has been developed in fields and gardens by farmers, gardeners, indigenous peoples and other food providers, over millennia, and that they continue to manage and develop it. Without their unrestricted participation in these activities, agricultural biodiversity, enhanced through the free exchange of seeds and other planting material between growers, communities, countries and continents that produced a myriad of varieties suited to every social, environmental and food need, will continue to be eroded.

This participation will not be achieved without international recognition of farmers' inalienable rights over agricultural biodiversity and support for their continued production of food crops in diverse environments. Achieving this is a key task for the Governing Body of the Treaty.

The translation of farmers' inalienable rights over agricultural biodiversity* to the limited interpretation, within national law, of "Farmers' Rights" – as expressed in Article 9 – should not preclude the Governing Body from deciding on actions related to other Articles that also impinge on the rights of farmers in relation to the realisation of the purposes of the Treaty: for example:

- Conservation and Sustainable Use (Articles 5 and 6);
- The proscription of monopoly privileges being granted on any farmers' varieties (Article 12);
- Sharing of benefits derived from the use of seeds for food (MLS); and the
- Funding mechanism – that should primarily support on-farm conservation (Article 18).

Realisation of their inalienable rights over agricultural biodiversity will require recognition of the collective rights of farmers and other food providers and support for their activities.

These collective rights encompass a broader range of issues than simply access to and use of seeds. La Via Campesina, in 1996 at CGRFA 4ex, articulated these eloquently in the framework of what is now internationally referred to as Food Sovereignty (ukabc.org/Via_Camp.html).

The Governing Body should, therefore, through legally-binding decisions about the implementation of several Articles in the Treaty, find ways of involving and supporting small-scale farmers and other food providers and their organisations, and promoting the diversity that is managed by them.

To do this, the Governing Body will need to find ways, including through influencing the implementation of other instruments such as those of the CBD, of recognising farmers' collective

rights to, *inter alia*: agricultural biodiversity, its sustainable use and benefits derived from it; territory and land; water; local markets; services including research; as well as rights to organise and to be decisively involved in relevant decisions.

It is 11 years since the agreement of the Leipzig GPA that shifted the priority of activities from *ex situ* to *in situ* and on-farm conservation and sustainable use as the mechanism for sustaining agricultural biodiversity related to crop plants. There was little or no progress in implementing the plan, pending the agreement of the Treaty. Now, through addressing the issues raised above, the Governing Body could, at its second session, take decisive steps to enable this to be done.

Access and Benefit-Sharing under the FAO Seed Treaty

François Meienberg

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The first Session of the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA/ hereafter: Treaty) held in Madrid June 12-16 2006, answered many open questions concerning the way in which access to genetic resources from the multilateral system and the sharing of benefits will be handled in the future. The following article describes the current situation and suggests ways to improve a state of affairs that still is less than satisfactory.

The Treaty governs the access to plant genetic resources and the sharing of benefits arising from the use of species listed in Annex 1¹⁷ and administered by the signer states (including all national seed banks but also in situ crops). The extensive ex situ collections of the International Agricultural Research Centres (IARCs) of the Consultative Group on International Agricultural Research (CGIAR) will also be added to the system. The Standard Material Transfer Agreement (SMTA), approved at the first meeting of the Governing Body, sets out the terms of access and benefit sharing.

The present article treats only the terms of access and benefit sharing. Other very important parts of the Treaty concerning conservation, sustainable use of plant genetic resources, or farmers' rights, will not be discussed.

1. Access to Genetic Resources:

The inclusion of many national seed banks and the material under the auspices of the CGIAR in the multilateral system will simplify access to very large collections of plant genetic resources. Compared to the bilateral negotiations for access and benefit sharing under the Convention on Biological Diversity, access to plant genetic resources for food and agriculture under the terms of the SMTA is easy: just fill out an SMTA.

1.1. Access for all?

All countries, research institutes, and companies benefit from the simplified access under SMTA regardless of whether or not they make their collections available to the system. In other words, the system rewards freeloaders who keep their own collections to themselves but still want to benefit from the multilateral system. According to the terms of the Treaty these rules will be reviewed.

Paragraph 11.4 states that

“within two years of the entry into force of the Treaty, the Governing Body shall assess the progress in including the plant genetic resources for food and agriculture referred to in paragraph 11.3 in the Multilateral System. Following this assessment, the Governing Body shall decide whether access

¹⁷ Including most important food crops such as corn, wheat, rice potatoes, millet, but also many fruits, vegetables and fodder plants (64 species in all). Soy and tomatoes are the most important food crops not included in the multilateral system.

shall continue to be facilitated to those natural and legal persons referred to in paragraph 11.3 that have not included these plant genetic resources for food and agriculture in the Multilateral System, or take such other measures as it deems appropriate.”

At its first session the Governing Body decided to delay this assessment until the third session. In other words, everyone has access to the multilateral system for the time being. Also, the terms of engagement with non-contracting parties and companies within their jurisdiction have not been clearly defined. This state of affairs must not be allowed to go on indefinitely.

1.2 Patents prevent access

Paragraph 12.3(d) provoked considerable controversy during Treaty negotiations. Indeed, the current compromise¹⁸ leaves many questions unanswered. Specifically, it is not clear whether an unaltered gene (isolated from a plant in the multilateral system) is covered by these terms and whether, in a case like this, a patent application may be filed. Only a very narrow interpretation that excludes patents on isolated materials does justice to the spirit of the Treaty, which seeks to facilitate rather than restrict access to plant genetic resources. It would be intolerable if (freeloading) companies or universities, benefiting from easy terms of access, were to come into the system to isolate valuable genes and then proceeded to use patents to make these genetic materials off limits to others. In this case, the system would actually serve to diminish the access to genetic materials.

The wording of the adopted SMTA replicates Paragraph 12.3 (d) word for word. A clear decision on this urgent question was evidently avoided. As a result, users receiving materials from the system do not know what they are allowed to patent. It would be best to settle this matter on a political level within the Governing Body – admittedly a difficult process and one that was not planned. Even just putting it on the agenda will not be easy. At best the question might be resolved in a dispute settlement procedure in which an international body such as the International Chamber of Commerce holds the power of arbitration. However, only the provider, the recipient, or the so-called third party beneficiary (representing the Governing Body) may initiate this procedure. NGOs on the other hand cannot formally intervene against violations of SMTA (and, thus, of the Treaty).

1.3 Free access must be secured even outside the Treaty.

Comprehensive patents on plants and parts thereof pose a significant danger to the free and easy access of breeders and farmers. Take – as one example among many – patents on gene sequences which, rather than affecting only one crop, are found in rice, wheat and maize, as well as in bananas and vegetables. Thus even someone with access to crops outside the system can exert considerable influence on the access to genetic resources inside the system. The important political debates about these matters will continue to take place outside the Treaty – in the context of the revision of national patent laws, of free trade agreements and of the TRIPS agreement of the WTO. Here, an urgently needed change of the system will require a serious commitment.

1.4 Possibilities for changing terms of access under the Treaty

The following activities may improve the access to plant genetic resources in the framework of the Treaty. They might also provide lobbying opportunities for NGOs.

- Signatories contact private holders of plant genetic resources and encourage them to make their collections available to the multilateral system.
- At its third session, the Governing Body should restrict the access of freeloading states and especially legal persons, thus increasing the pressure on countries and corporations alike to make

¹⁸ Par. 12.3 (d) Recipients shall not claim any intellectual property or other rights that limit the facilitated access to the plant genetic resources for food and agriculture, or their genetic parts or components, in the form received from the Multilateral System;

their collections available. This demand goes beyond the option considered in paragraph 11.4, which only refers to legal persons within the jurisdiction of a contracting party.

- The interpretation of paragraph 12.3 (d) needs to be put on the agenda of the Governing Body. The object is to exclude, as fully as possible, the patentability of materials received from the multilateral system. If this is not possible, a resolution by dispute settlement should be considered.

2. Benefit sharing under the FAO Seed-Treaty

Paragraph 13.2 (d) (ii) of the Treaty¹⁹ stipulates that a fair share of the benefits arising from the commercialization of plant genetic resources be paid into an account specified by the Treaty if said product²⁰ is covered by intellectual property rights which are restricting the free access for further research and breeding. This passage raises several questions that were not fully addressed when the SMTA was adopted in Madrid.

2.1 Who must share benefits arising from commercial use?

Since the benefit-sharing requirement is limited to those who restrict the availability of a product, the definition of what it means to be “available without restriction” is of great importance. It has to be made clear that a patented product cannot be included in the definition of “available without restriction”. Industry representatives and some parties are suggesting that a patent does not restrict the availability of a product for further breeding by others if the laws of the country that grants the patent include a research exemption. This argument obscures the fact that the whole purpose of breeding is to produce seed for the market and that there is a big difference between a research exemption in patent law and the breeders exemption in PVP laws. It was quite clear during the negotiations for the Treaty that “without restriction for further research and breeding” means that a product is available for further breeding by a “breeders exemption”, as defined in PVP laws, which allow the breeder the right to sell new varieties developed from this product without restriction. This is not the case if patented traits or plants are used. It is clear that there will be almost no obligation to share any benefits if patents with research exemptions are included in this definition of “available without restriction”.

As defined in the adopted SMTA the term „available without restriction“ does not resolve the problem.²¹ It remains unclear just who, in the end, will be required to share their benefits. Will all patent holders have to pay or just some of them? If the Convention on Biodiversity is any indication the lack of clear definitions can severely limit the implementation of an agreement. Thus it is important that the Governing Body agree on a definition that unambiguously declares all patents to constitute a restriction on the access of breeders. If this is not possible, a resolution by means of arbitration might be considered. (See 1.2)

2.2. How much is an “equitable share” of benefits?

The adopted SMTA defines an “equitable share” as 1.1% of the selling price from which, moreover, an additional 30% may be subtracted. In real terms this puts the equitable share at 0.77% of the

¹⁹ *The Contracting Parties agree that the standard Material Transfer Agreement referred to in Article 12.4 shall include a requirement that a recipient who commercializes a product that is a plant genetic resource for food and agriculture and that incorporates material accessed from the Multilateral System, shall pay to the mechanism referred to in Article 19.3f, an equitable share of the benefits arising from the commercialization of that product, except whenever such a product is available without restriction to others for further research and breeding, in which case the recipient who commercializes shall be encouraged to make such payment.*

²⁰ In the SMTA “Product” is defined as “Plant Genetic Resources for Food and Agriculture that incorporate the Material or any of its genetic parts or components that are ready for commercialization, excluding commodities and other products used for food, feed and processing.”

²¹ Definition in the SMTA: “Available without restriction”: A Product is considered to be available without restriction to others for further research and breeding when it is available for research and breeding without any legal or contractual obligations, or technological restrictions, that would preclude using it in the manner specified in the Treaty.

selling price – practically a give-away²² for plant genetic resources with specific material characteristics (materials without such characteristics will be somewhat more expensive than in the past). But only those who restrict the access to their product through intellectual property rights will pay even this small price. In the end, very little benefit sharing money will flow back into the multilateral system.

A rough and optimistic calculation²³ may illustrate this point: ten years from now the global seed market (in USdollars) will be worth some 30 billion dollars. Ten percent or 3 billion dollars worth of seed will have been bred with genetic resources from the multilateral system, of which, again, only 10% (\$ 300 million) are protected by a patent and thus subject to benefit sharing at 0.77%. The resulting 2.31 million dollars per year do not even cover the treaty's administrative budget. The mountain has produced a molehill. According to paragraph 13.3 the benefit sharing funds from the multilateral system are supposed to benefit farmers „in all countries, especially in developing countries, and countries with economies in transition, who conserve and sustainably utilize plant genetic resources for food and agriculture”.

Having made available a large proportion of the plant genetic resources in the system these farmers now come away empty-handed. An important goal of the treaty would be missed. There are two ways to avoid this disastrous development:

- An African proposal was adopted as part of the SMTA under which users of the multilateral system would be required to share any and all benefits at a reduced rate of 0.5%. Under this regime the income of the multilateral system would no doubt increase. But given a choice between paying 0.5% on all sales and paying 1.1% on sales covered by patents most users in all likelihood will not chose the African proposal.

- Paragraph 13.2 (d) (ii) of the treaty also states that „[...] *the Governing Body [...] may also assess within a period of five years from the entry into force of this Treaty [i.e. before 2009], whether the mandatory payment requirement in the MTA shall apply also incases where such commercialized products are available without restriction to others for further research and breeding.*” Extended in this way (and at roughly the level proposed by the African model, i.e. 0.5%) these mandatory payments would actually constitute something like a real sharing of benefits with farmers and would promote the conservation and sustainable use of plant genetic resources.

2.3 Ways to improve benefit sharing under the Treaty

The following activities have the potential to improve benefit sharing under the Treaty. They might also provide lobbying opportunities for NGOs.

- The Governing Body should agree that all patents restrict the access of breeders and are subject to benefit sharing requirements.

- The mandatory review of benefit sharing terms results in an extension of mandatory payments to all commercial seed sales. This extension will also help to put the funding for the conservation activities on a broader basis.

3. Conclusions

Important questions concerning access and benefit sharing remain. Who should get easy access to the multilateral system and how many collections are added to the system? Should all users of the multilateral system be required to give back to the system a share of their commercial benefits, thus building a fund to preserve the planet's plant genetic resources? Increased participation and more efficient NGO-lobbying at future meetings of the Governing Body will be necessary.

October 2006

²² See also the report written by W. Smolders: <ftp://ftp.fao.org/ag/cgrfa/BSP/bsp27e.pdf>

²³ Thanks to Walter Smolders for the figures

Annexes

Annex 1. Programme

Updated 23.08.2007

Informal international consultation on Farmers' Rights 18–20 September 2007, Lusaka, Zambia

DRAFT PROGRAMME

Tuesday 18 September

- 09.00: Welcome address by *Mr. Moses Mwale* on behalf of the Director, Zambia Agricultural Research Institute, ZARI
- Welcome address by *Ms. Moosho M. Imakando* on behalf of the Norwegian Ambassador to Zambia (Programme Officer, Norwegian Embassy in Zambia)
- 09.20 Opening address by *Angela Hilmi* (Senior Officer, Secretariat of the ITPGRFA, FAO, Rome): Evolution and Development of the Concept of Farmers' Rights
- 09.35 Introduction about the seminar by *Grethe Helene Evjen* (Senior Advisor, Ministry of Agriculture, Norway)
- 09.40 Exchange among the participants on hopes and expectations for the informal consultation.
Chair: *Godfrey Mwila* (Principal Agricultural Research Officer, Ministry of Agriculture, Food and Fisheries, Zambia Agricultural Research Institute)

First Session: Understanding Farmers Rights. Chair: *Godfrey Mwila*

- 10.00: Introduction by *Regine Andersen* (Senior Research Fellow, Fridtjof Nansen Institute, Norway).
Topics covered:
- History of Farmers' Rights in the FAO
 - Why Farmers' Rights matter
 - Different perceptions of the concept
 - Potential elements of a common understanding of Farmers' Rights
- 10.30: Discussion with emphasis on different perceptions and on elements of a common understanding (tea break included at 11.00)
- 12.30: Lunch break

Second Session: Farmers' Contribution to the Conservation and Sustainable Use of Crop Genetic Resources. Chair: *Grethe Helene Evjen*

- Topics to be addressed:
- Farmers' role in *in situ* and on-farm conservation, in plant development and breeding, in use of local and locally adapted crops, varieties and underutilized species
 - Farmers' contribution to maintaining the global genetic pool
 - Preconditions for farmers' present and future contributions (legal and other)
- 13.30: Short introductions on experiences from other countries:
- Peru: *Alejandro Argumedo* (Director of the Quechua-Aymara Association of Sustainable Livelihoods, Cuzco, Peru)

- Nepal: *Pratap K. Shrehestra* (Executive Director, Local Initiatives for Biodiversity, Research and Development, LI-BIRD, Nepal)
 - The Philippines: *Wilhelmina R. Pelegrina* (Executive Director, SEARICE, the Philippines)
- 14.20: Discussion with emphasis on needed steps at the national level to protect and promote farmers' contribution to the conservation and sustainable use of crop genetic resources
- 16.00: Tea break
- 16.15: Excursion to nearby Shikunu Village to learn about farmers' contributions and bringing insight from farmers' into our discussion.
- 19.30: Dinner

Wednesday 19 September

08.30 Report from the discussions on Tuesday, by *Godfrey Mwila*

Third Session: Realization of Farmers' Rights. Chair: *Godfrey Mwila*

Topics to be addressed:

- Protection of farmers' traditional knowledge related to PGRFA
 - Farmers' participation in benefit sharing
 - Farmers' participation in decision making
 - The rights that farmers have to save, use, exchange and sell seeds and propagating material
- 08.35: Highlights from an international stakeholder survey on the state of realization of farmers' rights, by *Regine Andersen* (Senior Research Fellow, Fridtjof Nansen Institute)
- 08.50: Key issues regarding the protection of farmers' traditional knowledge, by *María Mayer de Scurrah* (President of Grupo Yanapai, Peru)
- 09.05: Key issues regarding farmers' participation in benefit sharing, by *Bert Visser* (Director, Center for Genetic Resources, Wageningen, Netherlands)
- 09.20: Key issues regarding farmers' participation in decision making and the rights that farmers have to save, use, exchange and sell seeds and propagating material, by *S. Bala Ravi* (Advisor, M.S. Swaminathan Research Foundation, India)
- 09.40: Farmers' Rights and civil society perspectives in Zambia and Southern Africa, by *Arthur Nkonde* (Director, Biodiversity Community Network, Zambia)
- 09.55: Discussion with emphasis on key issues to be addressed at the Second Session of the Governing Body, and clarification of the different views regarding these issues (tea break included at 10.30).
- 12.30: Lunch
- 13.30: Additional time for discussion and summary of key issues

Fourth Session: Pooling Resources for Farmers' Rights at the National Level. Chair: *Grethe Helene Evjen*

Topics to be addressed:

- Role and contributions of NGOs
 - Role and contributions of breeders and researchers
 - Possibilities for networking and pooling resources
 - Supporting measures from the North to the South, including development cooperation
- 15.00: Introduction by *Andrew Mushita* (Director, Community Technology Development Trust, CTDT, Zimbabwe)
- 15.15: Introduction by *Tor Skudal* (Programme Co-ordinator, Development Fund, Norway).
- 15:30: Tea break
- 15.45: Discussion with emphasis on the possibilities of pooling resources at the national level, and options for international support to the realisation of Farmers' Rights in developing countries.

19.00: Dinner

Thursday 20 September

08.30: Report from the discussions on Wednesday, by *Godfrey Mwila*

Fifth Session: What can the Governing Body do? Chair: *Godfrey Mwila*

Topics to be addressed:

- Key issues that could be addressed in the Governing Body
- Possible measures that the Governing Body may initiate
- How to ensure a fruitful process

08.35: Introduction by *Elizabeth Matos* (President, National Committee on Genetic Resources, Angola)

09.05: Introduction by *Eng Siang Lim* (Honorary Research Fellow, Bioversity International-APO, Malaysia)

09.15: Introduction by *Robert Lettington* (Policy and Legal Specialist, BIOVERSITY)

09.25: Introduction from an NGO-perspective by *Patrick Mulvany* (Senior Policy Advisor, Practical Action) (confirmed) and *Francois Meienberg* (Programme Director, Bern Declaration, Switzerland) (not confirmed)

10.00: Discussion with emphasis on clarifying different positions and identifying elements of joint perception regarding the question 'What can the Governing Body do?' (including tea break at 10.30)

12.00 Lunch

13.00 Time for further discussion and a summing up key points (until 14.00).

Sixth Session: Summary of the consultations Chair: *Grethe Helene Evjen*

Aims:

- Clarification regarding remaining topics
- Provide an agreed summary of results
- Presentation in the report
- If possible, formulate a list of recommendations to the Governing Body

14.00: Where we stand. Presentation of the results from the consultation so far, by the rapporteur *Gunnvor Berge* (Associate Professor, Noragric, University of Life Sciences, Norway)

14.20: Discussion (including tea break at 15.00)

18.00: Closing the discussion and evaluation of the process

18.15: Closing addresses by *Godfrey Mwila* and *Grethe Helene Evjen*.

18.30: Finalisation of the consultation

19.00: Dinner

Annex 2. List of Participants

PARTICIPANT LIST TO THE INFORMAL INTERNATIONAL CONSULTATION ON FARMERS' RIGHTS IN ZAMBIA SEPTEMBER 2007

**Informal international consultation on Farmers' Rights
18–20 September 2007, Lusaka, Zambia**

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