8 Farmers’ rights

Evolution of the international policy debate and national implementation

Regine Andersen

Realizing farmers’ rights essentially means enabling farmers to maintain and develop crop genetic resources as they have done since the dawn of agriculture, and recognizing and rewarding them for this indispensable contribution to the global pool of genetic resources. The realization of farmers’ rights is a precondition for maintaining crop genetic diversity, which is the basis of all food and agricultural production in the world. Plant genetic diversity is probably more important for farming than any other environmental factor, simply because it is the factor that enables farmers to adapt to changing environmental conditions, such as climate change (Esquinas-Alcázar, 2005; Andersen, 2008; Fujisaka, Williams and Halewood, 2009; United Nations, 2009). Since farmers are the custodians and developers of crop genetic resources in the field, their rights in this regard are crucial for enabling them to continue this role. For this reason, farmers’ rights constitute a cornerstone in the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). Achieving the first two objectives of the treaty – the conservation and sustainable use of crop genetic resources (Article 1) – depends to a large extent on farmers and their ability to maintain these resources in situ on their farms, which in turn depends on farmers’ rights.

In this chapter, we look at how these rights are addressed in the ITPGRFA. We then proceed to examine the concept of farmers’ rights and to identify the central content of these rights and achievements so far with regard to their realization. Examples of best practices will be presented, and an overview of the negotiations leading up to the treaty’s ratification will be highlighted before conclusions are drawn.

Farmers’ rights in the ITPGRFA

Farmers’ rights in the ITPGRFA are strictly related to plant genetic resources for food and agriculture. Some nongovernmental organizations (NGOs) have criticized this mandate as being too limited since farmers’ rights to land, water and other resources and services are also closely interlinked with their rights to seed and propagating material. In this respect, however, it should be borne in mind that farmers’ rights under the treaty can only be related to the mandate
of the treaty, which concerns specifically plant genetic resources for food and agriculture. This is not to say that other rights are not important, but rather that, in the context of the ITPGRFA, farmers’ rights are necessarily related to crop genetic resources.

To understand farmers’ rights in the ITPGRFA, the text of the provisions on farmers’ rights forms a starting point. Article 9 is devoted to the realization of farmers’ rights:

9.1 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.

9.2 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.

9.3 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.

Many other provisions are relevant for the realization of farmers’ rights, and there are various angles from which implementation can be derived. For example, the ITPGRFA provides that countries shall promote or support, as appropriate, farmers’ and local communities’ efforts to manage and conserve on-farm their plant genetic resources for food and agriculture (Article 5.1(c)) and take steps to minimize or, if possible, eliminate threats to plant genetic resources for food and agriculture (Article 5.2). Article 6 states that the contracting parties shall develop and maintain appropriate policy and legal measures that promote the sustainable use of plant genetic resources for food and agriculture. A range of measures is listed for this purpose, among them ‘reviewing, and, as appropriate, adjusting breeding strategies and regulations concerning variety release and seed distribution’ (Article 6.2(g)). In addition, the ITPGRFA supports the implementation of the Global Plan of Action (Article 14), with its provisions
on farmers’ rights. Articles 7 and 8 provide for international cooperation and technical assistance, with a particular view to strengthening developing countries capabilities to implement the ITPGRFA.

Two other provisions (paras. 13.3 and 18.5) state that a funding priority is to be given to farmers who contribute to the maintenance of agrobiodiversity. The first paragraph states that farmers who contribute to maintaining plant genetic resources for food and agriculture are entitled to receive benefits arising from the multilateral system of access and benefit sharing that was established under the treaty. Paragraph 18.5 ensures that a funding priority will be given to those farmers in developing countries who implement agreed plans and programs to conserve and sustainably utilize plant genetic resources for food and agriculture. Finally, according to Article 21, the governing body is to ensure compliance with all of the provisions of the ITPGRFA (not only the obligations), and the preamble highlights the necessity of promoting farmers’ rights at the national as well as the international levels.

Two approaches to understanding farmers’ rights

One reason why the negotiators of the ITPGRFA were not able to agree on a definition of farmers’ rights was that the situations of farmers differ so greatly from country to country, as do the perceptions of farmers’ rights. With no official definition of farmers’ rights, there was an uncertainty over what the concept involved and, in connection, how these rights could be realized. Thus, it was important to establish a common ground of understanding in order to develop a fruitful dialogue among the stakeholders on the measures that needed to be taken. A point of departure for developing such an understanding was the attempt to understand all of the different perspectives on the subject. These perspectives generally fall under one of two specific approaches, or somewhere in between:

- The ownership approach refers to the right of farmers to be rewarded on an individual or collective basis for genetic material that has been 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 the equitable sharing of benefits arising from the use of agrobiodiversity and to establish an incentive structure for the continued maintenance of this diversity. Access and benefit-sharing legislation and farmers’ intellectual property rights are suggested as central instruments.

- The stewardship approach refers to the rights that farmers must be granted collectively in order to enable them to continue as stewards and innovators of agrobiodiversity. The idea is that the ‘legal space’ required for farmers to continue this role must be upheld and that farmers involved in the maintenance of agrobiodiversity – on behalf of their generation for the benefit of all mankind – should be rewarded and supported for their contributions.
In realizing farmers’ rights according to the measures suggested under the ITPGRFA, the goals for each of these two approaches are very different (Andersen, 2006). Table 8.1 illustrates these two approaches in detail.

**Protecting farmers’ traditional knowledge**

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 misappropriation and to decide over the use of their knowledge and related plant genetic resources. In Norway, farmers stress that their traditional knowledge is about to disappear. Therefore, protection, as they understand it, must be about ensuring that such knowledge does not die out (Andersen, 2010). In order to ensure such a thing, knowledge must be shared in the broadest manner possible. An ownership approach to protection could provide disincentives to sharing knowledge between and among farmers – as has been seen among potato farmers in Peru (Andersen, 2005). In contrast, the stewardship approach mandates that agricultural plant varieties and related knowledge should be shared among farming communities, and its

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**Table 8.1 Goals for the realization of farmers’ rights: two approaches**

<table>
<thead>
<tr>
<th>ITPGRFA measures</th>
<th>Stewardship approach</th>
<th>Ownership approach</th>
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</thead>
<tbody>
<tr>
<td>Protection of farmers’ traditional knowledge (para. 9.2(a))</td>
<td>The goals are to protect farmers’ knowledge from extinction and thus to encourage its further use.</td>
<td>The goals are to protect farmers’ knowledge from misappropriation and to enable its holders to make decisions over its use.</td>
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<tr>
<td>Equitable sharing of the benefits arising from the use of genetic resources (para. 9.2(b))</td>
<td>Benefits are to be shared between stewards of plant genetic resources and society at large – partly through the multilateral system and official development assistance.</td>
<td>Benefits are to be shared between purported ‘owners’ and ‘buyers’ of genetic resources upon prior informed consent on mutually agreed terms.</td>
</tr>
<tr>
<td>Participation in relevant decisions at the national level (para. 9.2(c))</td>
<td>Participation is important to ensure legal space and rewards for farmers’ contributions to the genetic pool.</td>
<td>Participation is important to ensure adequate legislation on access and intellectual property rights.</td>
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<tr>
<td>Farmers’ customary use of propagation material (saving, sharing and selling seeds) (para. 9.3)</td>
<td>The goal is to uphold the legal space to ensure that farmers continue to maintain plant genetic resources.</td>
<td>The goal is to balance intellectual property rights for farmers with breeders’ rights.</td>
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proponents insist that ownership in this context has been 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 of the two is chosen, it is important to ensure 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. Such activities would be against the intentions of the ITPGRFA.

Ensuring equitable benefit sharing

Measures to ensure the equitable sharing of benefits arising from the use of genetic resources can be designed in many ways. Under an ownership approach, these measures would mandate the development of direct benefit sharing in which the benefits would be shared directly between the purported ‘owners’ and ‘buyers’ of genetic resources – based on a prior informed consent on mutually agreed terms (as set out in the Convention on Biological Diversity [CBD]). In contrast, proponents of the stewardship approach would encourage an indirect means of benefit sharing – one in which the benefits are shared between ‘entire peoples,’ all stewards of plant genetic resources in agriculture and society at large. This line of thinking originates from the early days of negotiations in the Food and Agriculture Organization (FAO). The idea is that it is the legitimate right of farmers to be rewarded for their contribution to the global genetic pool, from which we all benefit, and that it is an obligation of the international community to ensure that they receive this reward. Benefit-sharing mechanisms would include the multilateral system of the ITPGRFA as well as official development assistance.

Proponents of the stewardship approach maintain that it would be difficult to identify exactly who should be rewarded if an ownership approach is used. In addition, they point out that the demand for farmers’ varieties among commercial breeders is limited and so relatively few farmers would benefit, while most of the contributors to the global pool of genetic resources would remain unrewarded. They continue in saying that the ownership approach to sharing benefits could lead to disincentives to sharing seeds and propagating material among farmers because of benefit expectations.

Although several countries of the South – among them the Philippines, Peru, India and Ethiopia – have enacted legislation on direct benefit sharing, no countries so far have instituted direct monetary benefit sharing with regard to agrobiodiversity (Andersen, 2008, 2009, 6, addendum 3). In contrast, there are many examples of indirect benefit sharing, although these have usually been nonmonetary (see the next section in this chapter). It would seem that the transaction costs of establishing access and benefit-sharing legislation in many countries has been comprehensive. Thus, the ownership approach has not proven to be particularly promising with regard to benefit sharing, even though some stakeholders would say that it is the most fair and equitable approach. These concerns are serious and must be taken into account when designing measures to ensure that benefit sharing is in place that is in line with the intentions of the ITPGRFA.


**Participation in decision making**

Under the two approaches participation in relevant decision making is important, but for different reasons. With 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 as well as to safeguard farmers’ intellectual property rights to the genetic resources in their fields and related knowledge. It is clear that these two sets of objectives could be conflicting. However, the overall objectives of the ITPGRFA to conserve, sustainably use and share benefits from crop genetic resources for sustainable agriculture and food security may serve as guiding principles. Measures that limit a farmer’s ability to take part in these activities would go against the intentions of the treaty.

**Farmers’ rights to save, use, exchange and sell farm-saved seed**

Farmers’ customary use of propagating material – their right to save, use, exchange and sell farm-saved seed and propagating material – could likewise be handled in several different ways. Under the stewardship approach, it is vital to uphold the legal space for farmers to save, use, exchange and sell farm-saved seed and propagating material. Various forms of regulations, such as intellectual property rights legislation and plant variety release and seed marketing laws, are currently reducing this space, thereby threatening farmers’ ability to maintain and breed plant genetic resources as well as to sustain their very livelihoods. Under an ownership approach, the most important goal is to provide farmers with intellectual property rights on the varieties in their fields that are on an equal footing with breeders’ rights. Arguments related to this objective were discussed earlier in this chapter. India’s 2001 Protection of Plant Varieties and Farmers’ Rights Act represents a noteworthy example of an attempt at combining these two sets of objectives (Ramanna, 2006). Undoubtedly, there are many other means of combining these two approaches in order to realize farmers’ rights. What matters in this context is that the approach that is chosen must not conflict with the principles of the stewardship approach, which has been the primary goal of the FAO since the issue was first taken up as well as the rationale behind the ITPGRFA.

**Contents of farmers’ rights and experiences with their implementation**

In the discussion on farmers’ rights – as well as in the practice of realizing these rights – there is a growing understanding of the core issues and challenges, which often combine the stewardship and ownership approaches to a various extent. The next section will examine in detail the four issues addressed...
in Article 9, which are often referred to as the elements of farmers’ rights – namely, protection of traditional knowledge; benefit sharing; participation in decision making; and the rights to save, use, exchange and sell farm-saved seed.

Farmers’ rights related to the protection of traditional knowledge

Traditional knowledge is vital to understanding the properties of plants, their uses and how they are cultivated. Traditional knowledge includes knowledge of how to select seeds and propagating material, how to store them and how to use them for the next harvest. Thus, it comprises the basic necessities for farmers to be able to maintain crop genetic diversity in the fields. Article 9.2(a) is the only provision on traditional knowledge in the ITPGRFA; the treaty provides no further guidance on how this article can be interpreted and operationalized. However, since the objectives of the ITPGRFA are to be implemented in harmony with the CBD (Article 1), Article 8(j) of the CBD is also relevant in this context. According to this article, each contracting party shall – as far as possible and as appropriate and pursuant to national legislation – respect, maintain and preserve traditional knowledge, innovation and practices and promote their wider application. This activity should be done with the approval of the holders of such knowledge, innovations and practices. Moreover, the equitable sharing of benefits from its use should be encouraged.

Understanding the challenges that are related to the protection of traditional knowledge has significantly influenced the current views about how Article 9.2(a) of the ITPGRFA can be implemented. If we examine the contents of this right from a stewardship and an ownership approach, different possibilities appear:

1 Protection against extinction means ensuring that traditional knowledge is kept alive and can further develop among farmers. The best way to protect traditional knowledge from the threat of extinction is to share it – a widespread approach in the North – and, thus, the motto ‘protection by sharing.’ Measures for the sharing of traditional knowledge include:

- seminars and gatherings among farmers to share knowledge;
- seed fairs for the exchange of propagating material and associated knowledge;
- documentation of knowledge in seed catalogues and registries;
- documentation of knowledge in books, magazines and on websites;
- documentation of knowledge in gene banks and making such knowledge accessible.

2 Protection against misappropriation is a different approach. It is based on the anticipation that farmers’ varieties, together with associated knowledge, could be ‘discovered’ and developed by commercial actors as well as possibly by the use of intellectual property rights – without benefit-sharing mechanisms. Thus, under this approach, the sharing of knowledge should
not take place unless there are measures in place to avoid any misappropriation. This view is often accompanied by a widespread regret that the fear of misappropriation has made it necessary to be cautious concerning activities that are so vital to the availability of genetic resources and related knowledge. Measures for protection against misappropriation include:

- regulating access to genetic resources and associated traditional knowledge with measures on prior informed consent and mutually agreed terms;
- developing legal clauses in catalogues of genetic material and associated material in order to avoid misappropriation;
- introducing ‘user country measures’ such as conditions for intellectual property rights and certificates of origin for genetic resources and following the appropriate legal procedures for access to genetic resources in provider countries.

According to existing documentation, it would seem that, in developing new varieties, commercial plant breeders tend to use already improved varieties from their own stocks or from other plant breeders. Farmers’ varieties are generally regarded as being difficult to work with due to their genetic heterogeneity. Only when particular traits are sought – traits that cannot be found in their own stocks or among other improved varieties – are farmers’ varieties deemed to be necessary. When they are sought out, they are normally obtained from gene banks and not from the farmers’ fields or markets. In the gene banks, there is normally not much traditional knowledge included in the passport data. Thus, at this point in time, traditional knowledge related to crop genetic resources is rarely used in commercial breeding. Whether this will remain the case in the future is difficult to predict. Generally, the genetic foundation for commercial plant breeding appears to be getting increasingly narrow (Esquinas-Alcázar, 2005, 948). This situation, together with the effects of climate change, may very well change the demand for landraces and farmers’ varieties – together with their associated knowledge – and make them much more valuable in the future (ibid.).

Ultimately, the measures that are chosen should reflect the situation. What is most important today, with the rapid erosion of traditional knowledge, is to protect traditional knowledge related to crop genetic resources from becoming extinct. Relevant measures for avoiding misappropriation are second priority. What these secondary measures will be is another question, and to answer it we need to take a closer look at what misappropriation of traditional knowledge is actually about in the context of the ITPGRFA and the multilateral system on access and benefit sharing. There are essentially three forms of action that farmers tend to regard as misappropriation:

1. if farmers’ varieties and related knowledge are used in commercial plant breeding without recognizing the farmers in question;
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2. If plant breeders obtain intellectual property rights to farmers’ varieties, thereby removing the varieties from the public domain and the traditional uses of farmers;

3. If plant breeders profit from the use of farmers’ varieties and related knowledge without sharing the benefits with the farmers in question.

Measures to avoid such misappropriation could include:

- **Ensuring recognition**: Recognition is very important to many farmers, particularly in the South. Ways of showing recognition include naming varieties after the farmers or communities in question, providing information about the farmers on the wrapping of products and/or rewarding farmers for their contribution in terms of benefit sharing (see discussion later in this chapter) or with awards. With respect to the first measures, it may be difficult to identify the individual farmers in question since several farmers/communities/regions may have maintained a crop variety or contributed to its development. Awards are different in this regard since they can often be awarded for the maintenance of diversity and related knowledge as such, and not necessarily for specific varieties.

- **Countering breeders’ claims to intellectual property rights on farmers’ varieties**: Documenting plant varieties and their related knowledge is normally a useful way to establish prior art. It means that no one can claim intellectual property rights over those varieties in the form in which they are documented. This measure is to date the most promising means of ensuring protection against the misappropriation of genetic resources and associated traditional knowledge while, at the same time, promoting the sharing of knowledge. Plant variety registries have been established locally in many countries – for example, in the Philippines and in Nepal (Andersen and Winge, 2008).

- **Ensuring benefit sharing**: Under the ITPGRFA, benefit sharing is to take place according to the Standard Material Transfer Agreement (SMTA) in the multilateral system. The benefits should be shared with farmers in developing countries and in countries with economies in transition who conserve and sustainably use crop genetic diversity, not including any specific providers of genetic resources (and related knowledge). It should be noted, however, that there are many questions related to benefit sharing, which will be addressed in a later discussion.

There exist many useful and inspiring databases and catalogues on crop genetic resources and associated traditional knowledge around the world. These sources also establish prior art with regard to farmers’ varieties and contribute to benefit sharing by making the knowledge accessible. Some of them also give explicit recognition to farmers. An impressive example is the potato catalogue from Huancavelica, Peru (Centro Internacional de la Papa and Federación Departamental de Comunidades Campesinas, 2006; see also Andersen and Winge, 2008, 23–25).
Other success stories include in situ conservation in Switzerland, which has combined on-farm conservation of a huge number of crop varieties with a range of measures for the dissemination of information regarding the varieties and the associated traditional knowledge; the community registry at Bohol, the Philippines, which is helping to keep traditional knowledge alive and accessible; and information and seminar activities in Norway that are helping to disseminate traditional knowledge. These models have succeeded in implementing farmers’ rights with respect to traditional knowledge that is associated with crop genetic resources. However, they are only a beginning. Much more is needed to keep such knowledge alive among farmers and to promote its further development. In many countries, it would appear to be necessary to raise awareness about the importance of traditional knowledge related to crop genetic resources and to develop strategies on how to maintain and disseminate traditional knowledge in a systematic way before such knowledge is lost completely.

Farmers’ rights to participate equitably in benefit sharing

Article 9.2(b) concerns a farmer’s right to participate equitably in the sharing of benefits arising from the utilization of plant genetic resources for food and agriculture. To interpret this provision, some guidance can be found in Article 13 of the ITPGRFA on benefit sharing in the multilateral system. This article lists the most important benefits as: (1) facilitated access to plant genetic resources for food and agriculture; (2) the exchange of information; (3) access to and transfer of technology; (4) capacity building; and (5) the sharing of monetary and other benefits arising from commercialization. Moreover, it specifies that benefits arising from the use of plant genetic resources for food and agriculture that are shared under the multilateral system 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 plant genetic resources for food and agriculture.

Whereas these provisions all relate to the multilateral system and not directly to the provisions on farmers’ rights in the ITPGRFA, they reflect a line of thought on benefit sharing that is relevant for interpreting Article 9.2(b) as a measure to protect and promote farmers’ rights. First, it is clear that there are many forms of benefit sharing, of which monetary benefits are only a part. Second, the benefits are not only to be shared with those few farmers who happen to have plant varieties that are utilized by commercial breeding companies, but also with farmers in all countries that are engaged in the conservation and sustainable use of agrobiodiversity. This approach is consistent with the policy developed by the FAO after farmers’ rights and benefit sharing were first officially recognized in 1989. It differs from the bilateral and direct approach to benefit sharing that is mandated under the CBD, where benefits are to be shared between the purported ‘owners’ and buyers of the resources.

In the South, policies on benefit sharing – if there are any – are normally present in the laws and regulations on access to biological resources, which are
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sometimes found in the national legislation on the protection of biological diversity. Countries with legislation on indigenous peoples’ rights often include provisions on benefit sharing in these laws, which then also cover indigenous farmers. Most of these regulations comprise forms of direct benefit sharing between the ‘owners’ and the ‘buyers’ of genetic resources, often based upon prior informed consent on mutually agreed terms, as set out in the CBD. However, despite all of these efforts, so far there have been no examples to date of direct monetary benefit sharing between the providers and recipients of plant genetic resources for food and agriculture as a result of such legislation.

There are, however, other ways of sharing benefits, which are often referred to as indirect methods of benefit sharing. These methods are in line with the FAO’s mandate in the early days of negotiations on farmers’ rights. As mentioned earlier, a basic principle was that benefits should be shared among ‘entire peoples,’ the stewards of plant genetic resources in agriculture and society at large (FAO, 1987, Appendix F, section 8). This principle is based on the idea that it is farmers’ legitimate right to be rewarded for their contributions to the global genetic pool from which we all benefit, and it is an obligation of the international community to ensure that such recognition and reward is provided.

Where should the funds come from to enable such benefit sharing? First of all, as we have already noted, the benefit-sharing mechanism under the multilateral system specifies that the benefits from the system should flow primarily to farmers in all countries, especially in developing countries and countries with economies in transition, who conserve and sustainably use crop genetic resources (Article 13.3). However, it is uncertain how much funding can be generated by this mechanism and even whether this mechanism will be successful and make a substantial difference to the farmers it is supposed to be helping (see the discussion in Chapter 3 of this volume).

The funding strategy of the ITPGRFA (as set out in Article 18) is another important source in so far as it supports the implementation of conservation (Article 5), sustainable use (Article 6) and farmers’ rights (Article 9), which would all greatly benefit diversity farmers. However, since there are to date no fixed mandatory contributions, it is uncertain how much money the fund can generate. Thus, for the time being, Article 7 on international cooperation and Article 8 on technical assistance are the primary documents on benefit sharing. In these articles, the contracting parties agree to promote the provision of technical assistance to developing countries and countries with economies in transition, with the objective of facilitating the implementation of the ITPGRFA.

The third source of benefit sharing, and the most successful at the present time, is official development assistance (Brush, 2005; Andersen, 2008). Official development assistance can be channelled through bilateral or multilateral cooperation or through NGOs. There are many examples of NGO-channelled support, which have greatly supported diversity farmers in the South and thus contributed to benefit sharing in many developing countries.
In an international stakeholder survey carried out in 2005, the most frequently mentioned nonmonetary benefits were:

- access to seeds and propagating material and related information;
- participation in the definition of breeding goals;
- participatory plant breeding with farmers and scientists collaborating;
- stronger and more effective farmers’ seed systems;
- conservation activities, including local gene banks;
- enhanced utilization of farmers’ varieties, including market access (Andersen, 2005).

This 2005 survey shows that, for many reasons, benefit sharing is more promising when the primary target for funding is the farming community that actually contributes to the maintenance of plant genetic diversity rather than the providers of genetic resources to commercial plant breeders. Still, the dominant view on benefit sharing in many countries, particularly in the South, is one of direct benefit sharing between the purported owners and buyers. While such an approach might seem to be fair and equitable as a point of departure, there are many difficulties with it, including that:

- it is difficult to identify exactly who should be rewarded;
- the demand for farmers’ varieties among commercial breeders is limited, so relatively few farmers would benefit and most of the contributors to the global pool of genetic resources would remain unrewarded;
- the approach could lead to disincentives to share seeds and propagating material among farmers because of the expectations of personal benefit or the benefit to a community;
- 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 agrobiodiversity;
- in many countries, the transaction costs of establishing access and benefit-sharing legislation have been considerable.

Thus, the direct benefit-sharing approach has not proven to be especially promising so far, and these concerns must be taken into account when measures are designed to ensure benefit sharing that is in line with the intentions of the ITPGRFA.

According to the findings of the Farmers’ Rights Project, three categories of measures appear to be particularly important when seeking to operationalize the concept of benefit sharing with regard to farmers’ rights (Andersen, 2009). The first category ensures that incentive structures in agriculture favour farmers who conserve and sustainably use plant genetic resources for food and agriculture on an equal footing with, or more than, farmers who are engaged in the monoculture production of genetically homogeneous plant varieties. Such incentive structures might include extension services to support particularly
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the farmers of the first group, loans on favourable conditions for the purchase of farm animals and other necessary input factors, the facilitation of marketing products from diverse varieties and other infrastructure measures. A strategy that would cover the incentive structures for each of these areas in combination would substantially support farmers who conserve and sustainably use agrobiodiversity. This has not been done in any country so far. In fact, existing incentive structures have generally proven to be detrimental to farmers’ customary practices. However, there are also many local-level initiatives that can provide good models of how incentive structures could be designed on a larger scale.

The second category would create reward and support systems that would enable farmers to benefit significantly from their contributions to the global genetic pool, through added value to the crops they grow and through improved livelihoods and increased income. There currently exist many small-scale programs and projects that demonstrate the enormous potential in this regard, such as community gene banks, seed fairs and registries (to ensure access), dynamic conservation programs coupled with participatory plant breeding, plant breeding and farmers’ field schools, capacity building and various marketing activities. Today, however, the benefit of these programs reaches only a very limited number of farmers. A major challenge is to scale up these activities so that all farmers engaged in the maintenance of agrobiodiversity can share in these benefits.

The third category would ensure the recognition of farmers’ contributions to the global genetic pool in order to show that their contributions are valued by society. One form of recognition that is often discussed is the procurement of intellectual property rights for farmers. There are strong views for and against such rights. Proponents claim that farmers should be granted intellectual property rights on an equal footing with breeders as a matter of fairness. Opponents stress that such a system would create disincentives for farmers to share their seeds because of the expectations that the seeds could prove to be economically valuable. Such a development could be harmful to traditional seed systems and could negatively affect farmers’ rights to own, use and distribute their own seeds. However, since the idea of exclusive intellectual property rights for farmers is fairly new and largely unexplored (except for a few individual acts of legislation), we will not examine this topic in this chapter. Another means of recognizing farmers’ contributions could be to provide some sort of remuneration to those farmers who register varieties in seed catalogues for free distribution among farmers (this idea was suggested by Maria Scurrah at the Lusaka Consultation; see Andersen and Berge, 2007, 26). However, once again, this method has not been attempted in the field. A more usual way of granting recognition to farmers and farming communities is through awards for innovative practices, as has been done in several countries. Yet, this is not to say that farmers are not be entitled to intellectual property rights. Rather, it indicates where the greatest potential for benefit sharing may lie and what dangers should be avoided if countries are seeking to establish intellectual property rights for farmers.
The Farmers’ Rights Project, which revealed several success stories from the realization of farmers’ rights, presents many good examples of indirect forms of benefit sharing, including incentive structures in the Philippines; community seed fairs in Zimbabwe; community gene banks and on-farm conservation in India; dynamic conservation and participatory plant breeding in France; participatory plant breeding in Nepal, which is adding value to farmers’ varieties; capacity building for seed potato selection in Kenya; the development of a Peruvian Potato Park; and the reward for best farming practices in Norway (Andersen and Winge, 2008). These are all examples of programs and developments that provide models for the further implementation of farmers’ rights. The major challenge today is to find ways and means to scale up such activities – for example, through the national agricultural extension service systems which are being planned in Nepal. However, such initiatives are heavily dependent on political will, which is often lacking. In order to increase the political will, it will be necessary to raise awareness in society in general on the vital importance of agrobiodiversity and farmers’ rights (Andersen, 2005).

**Farmers’ rights to participate in decision making**

Article 9.2(c) deals with the right of farmers to participate in decision making at the national level on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture. However, no further guidance is provided in the ITPGRFA as to how such decision making can be implemented in practice. To operationalize this measure, it will be necessary to specify the ‘relevant matters’ in which farmers can have the right to participate as well as the way in which they can participate.

The development of laws and regulations related to the management of plant genetic diversity in agriculture is clearly relevant for farmers’ participation. At the current time, there are numerous examples of such laws and regulations, including seed acts, seed certification regulations, other regulations regarding seed distribution and trade, plant variety protection laws, patent laws, bioprospecting laws or regulations, laws on the conservation and sustainable use of biodiversity in general or crop genetic resources in particular (as well as on several specific crops) and legislation on the rights of indigenous peoples and traditional knowledge. In addition, it is also important to consider any legislation that regulates mainstream agriculture since such legislation tends to produce incentive structures that are often detrimental to farmers’ rights without providing any compensation. The extensive use of hearings at various stages in the process is an important measure to ensure participation. It is particularly important to ensure that farmers who are engaged in the management of plant genetic diversity are aware of the processes and are explicitly invited to participate through their organizations.

The implementation of laws and regulations is also relevant to farmers’ participation. The way in which these regulations are interpreted and implemented often has an enormous influence on a farmer’s management of these resources
and also on his or her livelihood. Normally, such acts and regulations establish boards and institutions to oversee and/or administer implementation. Farmers’ representation and participation in these bodies is therefore integral, and the means by which farmers are selected for membership is of crucial importance. If they are appointed by a government official, for example, they can hardly be said to represent the farmers of the country. If, however, they are appointed by farmers through their own organizations, it is more likely that they will be regarded as true representatives of the farming community – depending on the number of farmers that they represent and the process by which they were appointed. Again, it is essential to ensure that farmers are actually represented and engaged in agrobiodiversity conservation – there are too few success stories in this regard.

In addition, the development of policies and programs in agriculture, particularly in relation to the management of plant genetic resources for food and agriculture, also requires farmer participation. In order to create policies and programs that are valuable for farmers, they have to be targeted specifically at the situations that farmers are in, taking farmers’ perspectives as points of departure.

Ultimately, then, the implementation of farmers’ rights requires farmers’ participation. This is not only because of their unquestioned right in this regard, according to the ITPGRFA, but also because they are the ones who can best define the needs and priorities of farmers in the context of farmers’ rights and they are also the central actors in the implementation process. Comprehensive consultative processes of various kinds are relevant: the better represented farmers are, the greater legitimacy the results will have and the more likely it is that they will constitute effective measures for the realization of farmers’ rights. In particular, it is important for farmers to actually be involved in the management of plant genetic diversity in order to participate in such processes since they constitute the main target group of the ITPGRFA. The most comprehensive consultative process on the implementation of farmers’ rights to date was carried out in Peru in 2008, and it involved 180 farmers from many different regions as well as numerous central decision makers. It resulted in a report that currently forms the basis for the implementation of farmers’ rights in Peru (Scurrah, Andersen and Winge, 2008).

There are two major preconditions for the increased participation of farmers in decision making. First, decision makers need to be aware of the role that is played by farmers in conserving and developing plant genetic resources for food and agriculture, and thus in contributing to national food security, in order to understand why their participation is so important. Second, without prior capacity building, many of the world’s farmers would not be in a position to participate effectively in complicated decision-making processes. Hence, it is essential to raise awareness among decision makers on the role of farmers in agrobiodiversity management and to build the capacity of farmers’ organizations. While there is not much evidence of the former to date, there has been much more activity in the latter goal.

In general, we find few examples of legislation on farmers’ participation, although some countries in the South have extensive legislation on farmers’
participation in decision making (Andersen, 2005). All the same, the actual participation of farmers in decision-making processes seems marginal and is often limited 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 common, even if diversity farmers are rarely represented, but such participation does not usually involve specific laws or policies. It should be noted that farmers in the North claim that their influence is now decreasing, due to their countries’ commitments to regional and international organizations and agreements such as the World Trade Organization (WTO) and the European Union (EU) (ibid.). While the process of implementing participation has been slow, there have been a few success stories, including the implementation of farmers’ rights in Peru (see the earlier discussion); various capacity-building measures to prepare farmers for participating in decision making in Malawi, Zimbabwe, the Philippines and Peru; and several successful advocacy campaigns regarding the implementation of elements of farmers’ rights, where farmers have been directly involved (e.g. in India, Norway and Nepal). More successes are on the way.

Farmers’ rights to save, use, exchange and sell farm-saved seed

The IPGRFA is vague on farmers’ rights to save, use, exchange and sell farm-saved seed. Section 9.3 of the treaty states that nothing in the relevant article (Article 9 on farmers’ rights) ‘shall be interpreted to limit any rights that farmers have to save, use, exchange and sell farm-saved seed, subject to national law and as appropriate,’ but this article does not really offer much direction, except for labelling these practices as ‘rights.’ The preamble notes that ‘the rights recognized in this Treaty to save, use, exchange and sell farm-saved seed and other propagating material . . . are fundamental to the realization of Farmers’ Rights.’ This statement indicates the importance of these rights, but it does not give much guidance since the rights to which it refers are only vaguely addressed. Despite this lack of precision, the general line of thought would seem clear. It is important to grant their rights in this subject area, but individual countries are free to define the legal space that they deem to be sufficient for farmers regarding their rights to save, use, exchange and sell farm-saved seed.

The freedom to define such legal space for farmers is also restricted by other international commitments. Most countries in the world are members of the WTO and are thus obliged to implement the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement).10 According to the TRIPS Agreement, all WTO member countries must protect plant varieties either by patents, by an effective sui generis system (a system of its own kind), or a combination of both (Article 27.3.b). The limits to a sui generis system and the meaning of an ‘effective’ sui generis system are not explicitly defined in the text. In other words, countries have to introduce some sort of plant breeders’ rights.

The Union for the Protection of New Varieties of Plants (UPOV) explains that the most effective way to comply with the provision concerning an
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The effective *sui generis* system is to follow the model of the International Convention for the Protection of New Varieties of Plants (UPOV Convention). There are several versions of the UPOV model. The most recent one (the 1991 Act of the UPOV Convention) provides that plant breeders are to be granted comprehensive rights – to the detriment of farmers’ customary rights to save, reuse, exchange and sell seeds. It is still possible to make exceptions for small-scale farmers in order to enable them to save and reuse seeds, but only within strict limits. The exchange and sale of seeds among farmers is prohibited. It should be noted, however, that all of these regulations apply only to seeds protected by plant breeders’ rights and not to traditional varieties.

The UPOV model has met with resistance from some countries and many organizations that fear that their ratification of the treaty would be detrimental to the rights of farmers to save and share propagating material. The TRIPS Agreement provides only minimum standards, leaving enough scope for the development of other solutions that are more compatible with the demand for farmers’ rights. The challenge in the context of the ITPGRFA is thus for WTO member countries to meet their TRIPS obligations regarding plant breeders’ rights, while at the same time maintaining the necessary legal space to realize farmers’ rights to propagating material. It will be questionable how much room will be left for countries to manoeuvre within the framework of their international obligations in order to grant farmers the right to save, use, exchange and sell seeds.

A further constraint to farmers’ rights in many countries is the introduction of seed laws that affect all propagating material, whether it is protected with intellectual property rights or not. The most important factor is that these laws also affect traditional varieties and farmers’ varieties. They require that all varieties be officially approved for release and that seed and propagating material be certified before they are offered on the market. The original reason for these regulations was to ensure plant health and seed quality. However, in many countries, the regulations have gone so far that they now hinder the maintenance of crop genetic resources in the fields in two ways. First, since traditional varieties are normally not genetically homogeneous enough to meet the requirements for approval and certification, these varieties are excluded from the market and gradually disappear from active use when those farmers who currently use them begin to give them up. Second, many seed laws also stipulate that only authorized seed shops are allowed to sell seeds, and they prohibit all other seed exchange (sometimes with exceptions for horticultural plants or certain other species). This is the case in most of Europe. Such regulation means the end of a 10,000-year-old tradition of seed exchange that made possible the development of today’s rich agrobiodiversity.

When combined, these two processes – restrictions on plant variety release and seed marketing laws – may constitute serious obstacles to the implementation of the ITPGRFA in terms of *in situ* on-farm conservation and sustainable use as well as to farmers’ rights. It is a paradox that rules originally intended to protect plant health have, in fact, contributed to removing the very basis for
ensuring plant health in the future – namely, the diversity of genetic resources. Seed laws, together with strict plant breeders’ rights, represent a major obstacle to farmers’ rights to save, use, exchange and sell seeds. What possibilities are there to make such laws more compatible with these customary rights of farmers, which are so crucial to the maintenance of agrobiodiversity for food security, today and in the future? The EU has tried to solve the problem with a specific directive on conservation varieties. However, EC Directive 62/2008 Providing Certain Derogations for Acceptance of Agricultural Landraces and Varieties Which Are Naturally Adapted to the Local and Regional Conditions and Threatened by Genetic Erosion and for Marketing of Seed and Seed Potatoes of Those Landraces and Varieties (EU Conservation Varieties Directive) is not adequate to solve these new hurdles for the implementation of the ITPGRFA. This directive is inadequate for the following reasons:

1. seed exchange and sale is still prohibited among farmers under the new directive;
2. only varieties deemed interesting for conservation and sustainable use by certain authorities can be covered by the system, which limits diversity;
3. the variety release and certification criteria are still too strict to allow for the release of many traditional and farmers’ varieties;
4. the marketing and use of the varieties are limited to the regions of origin;
5. only limited quantities may be used;
6. the conservation varieties may not be further developed by farmers.

These provisions do not encourage the conservation and sustainable use of crop genetic diversity, and they pose serious barriers to the implementation of Articles 5, 6 and 9 of the ITPGRFA. An ultimate objective from the perspective of farmers’ rights would be to grant the rights to save, use, exchange and sell farm-saved seed, whether it is from varieties protected with intellectual property rights or not. Other solutions would be needed in order to compensate plant breeders for their efforts and to solve the issue relating to plant health concerns. Due to the different forms of existing legislation, however, the challenge should rather be to uphold or reestablish sufficient legal space for farmers to continue their crucial role as custodians and innovators of crop genetic diversity within the existing legal framework on plant breeders’ rights, variety release and seed distribution.

Generally, legislation on intellectual property rights, variety release and seed certification are most restrictive in the North and least restrictive in Africa, while countries in Asia and Latin America fall somewhere in the middle. In the EU, for example, farmers are not allowed to use farm-saved seed from protected varieties on their own holdings or they must pay a license fee to do so. With respect to nonprotected varieties, they are not allowed to exchange seed or even to give it away. These are major hurdles for the proponents of farmers’ rights and the implementation of the ITPGRFA in terms of on-farm conservation and sustainable use. The Farmers’ Rights Project of the Fridtjof Nansen
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Institute has gathered several pertinent stories on how legal space for farmers’ rights can be established and maintained in order to allow farmers to maintain their traditional practices and innovation in agriculture (see e.g. Andersen and Winge, 2008). The report provides several examples, including India’s 2001 Protection of Plant Varieties and Farmers’ Rights Act, and Norway’s ‘No’ to stricter plant breeders’ rights in order to maintain the balance with farmers’ rights and the ways in which farmers are circumventing the law in the Basque Country in Spain. Nevertheless, establishing and maintaining legal space for farmers’ rights to save, use, exchange and sell farm-saved seed constitutes the main barrier to implementing the ITPGRFA in terms of the conservation and sustainable use of crop genetic diversity and of the realization of farmers’ rights. Solutions are urgently needed.

Achievements at the international level

A resolution on farmers’ rights was adopted at the third session of the Governing Body to the ITPGRFA in Tunis on 4 June 2009. The resolution marks a substantial step forwards in the implementation of Article 9 of the treaty. This achievement was not only due to the contents of the resolution (see discussion later in this chapter) but also because of the broad consensus that was reached among the contracting parties at an early stage in discussions on the proposed text. The issue of farmers’ rights has proven to be a difficult topic at earlier Governing Body sessions. In fact, at the second session of the Governing Body in 2007, there was substantial resistance among several industrialized countries to the resolution text proposed by the developing countries (the G-77 and China). Only through intense negotiations in a contact group was it possible to arrive at a consensus text in that session. By the time of the third session, however, the situation had changed. The only substantial resistance against the resolution on farmers’ rights came from Canada, whereas all other contracting parties were largely united. This marks the beginning of an emerging understanding across the regions of the crucial importance of farmers’ rights for the implementation of the ITPGRFA as well for other various challenges in the field.

The 2009 resolution was proposed by Brazil on behalf of Africa, Latin America and the Caribbean countries. It contained the following operational provisions:

- The contracting parties are invited to consider reviewing and, if necessary, adjusting their national measures affecting the realization of farmers’ rights as set out in Article 9 of the ITPGRFA in order to protect and promote farmers’ rights.
- The contracting parties and other relevant organizations are encouraged to continue to submit views and experiences on the implementation of farmers’ rights as set out in Article 9 of the ITPGRFA, involving, as appropriate, farmers’ organizations and other stakeholders.
The Secretariat is requested to convene regional workshops on farmers’ rights, subject to the agreed priorities of the program of work, the budget and the availability of financial resources, that will be aimed at discussing national experiences on the implementation of farmers’ rights as set out Article 9 of the ITPGRFA, involving, as appropriate, farmers’ organizations and other stakeholders.

The Secretariat is requested to collect the views and experiences submitted by contracting parties and other relevant organizations and the reports of the regional workshops, as a basis for an agenda item that is to be considered by the Governing Body at its fourth session and to disseminate relevant information through the website of the ITPGRFA, where appropriate.

The Governing Body appreciates the involvement of farmers’ organizations in its further work, as appropriate, according to the rules of procedure established by the Governing Body.

The 2009 resolution and later resolutions following in the same lines have great potential for the realization of farmers’ rights. If the contracting parties review and adjust their seed regulations and other national measures to promote farmers’ rights, and thereby enable farmers to continue to conserve and sustainably use crop genetic diversity, it would represent a major step forward. If they present these views to the Governing Body, it may provide a solid basis for identifying further steps that could be made at the fourth session. In addition, regional workshops will be instrumental in promoting the realization of farmers’ rights at the national level as well in providing input to the Governing Body. If the Secretariat makes all of the submissions and reports from the regional workshops available on the Internet, it will facilitate an exchange of experiences across countries and regions and enable an external analysis of potential steps that can be taken in the future – steps that could feed into the Secretariat’s own preparations for the agenda item on farmers’ rights at the fourth session. The participation of farmers’ organizations at the Governing Body sessions will be important to demonstrate that farmers are participating in the decision making on farmers’ rights. Whether these potentials will materialize depends, as always, on the political will of the contracting parties and on the engagement of the involved organizations.

Conclusions

Over the last few years, discussions in the Governing Body, as well as various informal consultations in various forums, have contributed to shaping the elements of a common understanding of farmers’ rights. There is a general recognition that farmers need legal space to continue to perform their role as custodians of crop genetic diversity, although there are many different opinions on what this legal space should cover. There is also a common understanding that farmers need to be recognized and rewarded for their contribution to the global genetic pool and that they have a right to participate in decision making. As we have seen in this chapter, there
are many efforts around the world in this direction, in line with Article 9 of the ITPGRFA. These are often small-scale local initiatives, but many of them provide models that have the potential to develop into something bigger. A key challenge is to find ways and means to scale them up to the national level.

Nevertheless, there are also substantial obstacles in the way of these goals. Overcoming these hurdles will require the development of various common solutions:

- Variety release and seed certification regulations pose serious hurdles to farmers’ rights to exchange and sell farm-saved seed as well as to the marketing of landraces and many farmers’ varieties. This constitutes a serious obstacle to on-farm conservation and the sustainable use of crop genetic diversity. In order to overcome this hurdle, shared norms need to be developed on how seed laws can be designed so as to ensure adequate legal space for farmers. The 2009 resolution on farmers’ rights by the Governing Body of the ITPGRFA marks a promising start in this regard.

- Intellectual property rights constitute hurdles to the realization of farmers’ rights to various degrees. In some countries, the balance between farmers’ and breeders’ rights is seen as being acceptable, such as in India and Norway. In other countries, however, plant breeders’ rights and patents are more problematic since they prohibit customary uses of seed. It is necessary to discuss what kind of legal space farmers should be ensured with regard to plant breeders’ rights and patents, with a view to developing shared norms. Norway’s decision in regard to plant breeders’ rights may provide some inspiration.

- Fear of misappropriation of farmers’ varieties and associated traditional knowledge has led to protectionism with regard to seeds and knowledge among farmers in several countries. Such a tendency is detrimental to the sharing of seed and knowledge among farmers as well as to ex situ conservation measures. Ways and means must be found to ensure that farmers do not need to fear misappropriation. One challenge is to identify efficient measures to establish prior art for landraces and farmers’ varieties in order to ensure that these cannot be made subject to intellectual property rights. Another challenge is to include provisions in intellectual property rights legislation on the disclosure of origin of resources and legal provenance in order to ensure that no misappropriation takes place. Norms and rules in this regard need consideration.

- There are many good examples of farmers’ rights being realized, and many of these have the potential to be scaled up to the national level, such as through extension service systems. To date, however, there have been no examples of such efforts being made. More consideration is required in order understand how to facilitate such an effort.

- Participation in decision making is an issue with many facets. The general picture is that in countries where farmers are granted some sort of participation, farmers engaged in the conservation and sustainable use of crop genetic diversity are often not represented. Ways of identifying such farmers and involving them in decision-making processes are needed.
Much has already been achieved with regard to developing a joint understanding of farmers’ rights, their importance and the steps required for their realization, and there are many success stories. These are all important achievements. However, much still remains to be done to ensure that these rights are realized on the same scale that is required to enable farmers to continue to maintain and further develop the crop genetic diversity that is the basis of local and global food security and to recognize and reward them for their contributions to the global genetic pool. Awareness of the challenges, the political priority, and international cooperation are required to make farmers’ rights a reality.

Notes

1 This chapter is based on the results of the Farmers’ Rights Project of the Fridtjof Nansen Institute, an international project designed to support the implementation of farmers’ rights as they are addressed in the ITPGRFA. Started in 2005, it has been a long-term project with many different components, comprising research and surveys as well as policy guidance, facilitation of consultations, information, and capacity building. For an overview of the research reports and activities, see <www.farmersrights.org>. The author of this chapter led the Farmers’ Rights Project until she went on leave from the Fridtjof Nansen Institute. She maintains the responsibility of the website from her new affiliation.

2 International Treaty on Plant Genetic Resources for Food and Agriculture, 29 June 2004, online: <www.planttreaty.org/texts_en.htm> (last accessed 15 June 2012) [ITPGRFA].

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

4 This concept was first used in connection with this requirement in Andersen (2006). It will be further explained later in this chapter.

5 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. Since no other term was found that could sufficiently cover farmers’ maintenance work and innovations, the term was kept, with this footnote as an explanation of its contents.


8 FAO Conference Resolution 5/89.

9 Progress is slow, however, due to a lack of resources and political attention.


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