



Background Study 8

Farmers' Rights in Peru

Farmers' Perspectives

By Maria Scurrah, Regine Andersen and Tone Winge



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The Farmers' Rights Project



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Farmers' Rights in Peru Farmers' Perspectives

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Abstract

The realization of Farmers' Rights is crucial to the maintenance of Peru's rich agro-biodiversity and for poverty alleviation. This report presents the perceptions and experiences of 180 farmers from various regions of the Peruvian Andes on issues related to Farmers' Rights as they are addressed in the International Treaty on Plant Genetic Resources for Food and Agriculture. A series of regional workshops were held in the Andes from March to May 2008 to map the views, experiences and suggestions of farmers on the realization of Farmers' Rights. Their views were presented at a national multi-stakeholder workshop in Lima in September 2008, where also central government institutions, NGOs, farmers' organizations, as well as gene bank officials and breeders were represented. In this report the results from these workshops are presented and analyzed as to how they can form the basis for future policies on Farmers' Rights in Peru. Central recommendations include documentation of traditional knowledge; the establishment of agro-biodiversity reserves; support to community gene banks, seed fairs and exchange visits; participatory research on traditional seed systems and participatory plant breeding; assistance in processing and marketing products made from traditional varieties; improved economic incentive structures for maintaining traditional crop varieties; and the establishment of pilot villages to bolster the conservation and exchange of genetic resources and traditional knowledge. Suggestions for activities to foster farmers' participation in decision-making are elaborated as well as institutional questions on how to coordinate the realization of Farmers' Rights.

Key Words

Farmers' Rights, plant genetic resources for food and agriculture, International Treaty on Plant Genetic Resources for Food and Agriculture, agro-biodiversity, Peru, farmers' perspectives, traditional knowledge, benefit sharing, participation in decision-making, seed-saving, seed-exchange, legal space

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Foreword

Peru is an important center of origin for a range of major agricultural plant species. These are species that have been domesticated, diversified and conserved by local farmers, a process that will continue into the future and that is central to the wellbeing of humanity. Furthermore, the wild species that grow around Peruvian farms represent an important gene reservoir for the improvement of plant varieties. The culture and traditional knowledge that have evolved with the crops have contributed to the development of management techniques that foster the sustainable use of genetic resources in harmony with the environment. To maintain the valuable genetic resources of Peru for future generations, this knowledge and the traditional techniques must be kept alive and used.

There are still many peasant and native communities in Peru that grow and use a wide variety of native crops, according to traditional methods and in a sustainable manner. The importance of this work is recognized in the International Treaty on Plant Genetic Resources for Food and Agriculture, which now needs to be implemented at the national and regional levels. The realization of Farmers' Rights is a central part of this process, because these rights are about creating the necessary conditions to allow farmers to continue their work maintaining biodiversity in agriculture, as well as rewarding them for their efforts.

In this context, five workshops were held with farmers from the highlands of Peru from March to May 2008 that were important, because understanding the views and experiences of farmers and promoting their participation is crucial to the successful realization of Farmers' Rights.

A national workshop on Farmers' Rights followed these farmer workshops in September 2008, which represents one of the first joint efforts by state institutions, civil society and NGOs with farmers' participation and international cooperation. This workshop tried to locate common ground among the participants and aimed to strengthen communication and links between the different stakeholders. The goal of this process is the development of common strategies that will lead to the realization of Farmers' Rights in Peru. I have enjoyed taking part in this process and look forward to continuing these collaborative efforts to realize Farmers' Rights in Peru. It is my belief that this report will be an important contribution to this work.

20 November 2008

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Executive Summary

Peru is a center of diversity for major food crops such as potato, mashua, oca, olluco, sweet potato, sweet corn (maize), cassava, and aracacha. Especially among small Andean and Amazon communities these crops are vital for food security: for example, potato, oca, olluco and mashua serve as vital sources of carbohydrates and other nutrients. As the main center of origin of the potato, Peru is home to seven domesticated potato species, one of which is *Solanum tuberosum*, which ranks as one of the five most important food crops in the world, and which has more than 3000 different varieties in Peru. However, diversity is rapidly deteriorating for various reasons, including climate change, the introduction of commercial crops, changed land-use and urbanization. If this rich diversity is to be maintained – for regional as well as international food security – the realization of Farmers’ Rights related to crop genetic diversity is crucial.

This is why Peru was chosen for this case study. The aim has been to contribute to the debate as well as to practical efforts aimed at realizing Farmers’ Rights in Peru, while also generating information useful for other countries. As such the report is a contribution to the implementation of the International Treaty on Plant Genetic Resources for Food and Agriculture (the Plant Treaty), which aims at the conservation and sustainable use of crop genetic resources, the fair and equitable sharing of the benefits arising from their use for sustainable agriculture and food security, and provides for the realization of Farmers’ Rights.

In the context of the Plant Treaty, realizing Farmers’ Rights means enabling farmers to maintain and continue to develop crop genetic diversity as they have done since the dawn of agriculture, as well as recognizing and rewarding them for their indispensable contribution to the global pool of genetic resources. The realization of Farmers’ Rights is a precondition for the maintenance of crop genetic resources, which in turn forms the basis of all food and agricultural production in the world. The continued maintenance of agricultural biodiversity is particularly important for traditional small-scale farming, on which large numbers of people in Peru and in other developing countries depend for their livelihoods. The realization of Farmers’ Rights is a central means to improving the livelihood of farming families and as such an important contribution to poverty alleviation in rural areas.

The Plant Treaty stipulates that governments are to protect and promote Farmers’ Rights and that they can choose measures appropriate to their own needs and priorities. Certain measures are suggested, covering the protection of traditional knowledge, benefit-sharing and participation in decision-making. The rights of farmers to save, use, exchange and sell farm-saved seeds and propagating material are also addressed, but the treaty provides no particular directions for implementation.

Because a central provision of the Plant Treaty on Farmers’ Rights deals with farmers’ participation in decision-making processes at the national level regarding the management of crop genetic diversity (Paragraph 9.2.c), this report takes the perceptions and experiences of 180 farmers in

various regions of the Peruvian Andes as its point of departure and analyzes how these can form the basis of future policies on Farmers' Rights in Peru.

From March to May 2008, Maria Scurrah of Grupo Yanapai organized and held a series of workshops with Peruvian farmers in order to map their views, experiences and suggestions with regard to the realization of Rights. The farmers of the workshops came from highland small-scale subsistence agriculture, as also the majority of farmers in the country do. These are custodians of the greatest crop genetic diversity of the country. Modern market and export oriented sectors, mainly on the irrigated coastal plains, where not included in the study, as they are largely not involved in the maintenance of crop genetic diversity. Farmers of the Peruvian Amazon could not be included due to financial limitations for the study. Representatives from some of the workshops and other farming groups were invited to a final workshop at Instituto Nacional de Investigación Agraria (INIA) in Lima in September 2008, together with practitioners and decision-makers in the field of genetic resources. The findings were analyzed by Regine Andersen and Tone Winge from the Farmers' Rights Project at the Fridtjof Nansen Institute, Norway, in collaboration with Maria Scurrah. The study has been carried out in collaboration with the Peruvian Society for Environmental Law (SPDA) in Lima and with the German Gesellschaft für Technische Zusammenarbeit (GTZ). It is part of a project on the implementation of the Plant Treaty in Peru, involving the SPDA, Grupo Yanapai, the Fridtjof Nansen Institute and the GTZ. The GTZ has been involved in crop genetic diversity and the implementation of Farmers' Rights for several years and has a long-standing involvement in development cooperation with Peru. We are grateful for the valuable advisory and financial support provided by the GTZ project *People Food and Biodiversity*, as well as helpful comments from the SPDA, and their collaboration regarding the workshops. We are also grateful to INIA for hosting the final national workshop.

This report presents the results of the five regional workshops with farmers as well as the national workshop, and analyzes the implications for Peruvian policies. The target groups are farmers, practitioners from various organizations involved in farming communities, and, importantly, decision-makers in the field of genetic resources.

During the workshops a range of measures for the realization of Farmers' Rights were discussed, including seed fairs, plant variety catalogs, local seed banks, access to varieties held by national and international gene banks, access to scientific knowledge, participatory breeding activities, sharing of local knowledge, mainstreaming of laws and regulations, market access, and conducive price policies. The issue of farmers' relationships with the authorities was addressed, and it was stressed that the authorities need to recognize and support farmers for their vital contributions to the genetic pool. It was evident that the farmers themselves have many ideas on how the realization of Farmers' Rights should be pursued. They are keen to be involved in and organize projects, as well as participate in the relevant decision-making processes.

The farmers were conscious of their role as custodians of a rich heritage of varieties and knowledge, and expressed worries about the disappearance of the old seed systems and the access to good-quality propagating material from a wide collection of varieties. In some areas, seed exchange is not as widespread as formerly. Several farmers stressed that there is too much focus on competitions and awards for farmers with the highest number of varieties at seed fairs, and that this can obstruct the sharing of knowledge and propagating material. Seed fairs need to focus more on the promotion of seed exchange and sharing of knowledge. Capacity-building efforts should also focus on the importance of seed exchange. The farmers were deeply concerned about the loss of varieties, and wanted this development halted. Local seed banks were suggested as a means to stop losses, and should receive financial and technical support. Catalogs that document traditional varieties and the associated knowledge were discussed as a means of maintaining traditional knowledge for future generations.

The workshops also revealed that the farmers felt that they had little influence over the selection criteria of professional breeders. Their experiences with participatory plant breeding were mixed. One of the challenges is slow diffusion of the resultant varieties. The farmers were also interested in collaborating with researchers; they wanted scientists to share their knowledge with them, and their own needs to form the basis of agricultural research.

Farmers generally displayed very little knowledge of the laws and regulations that affect them. There is a clear need to inform farmers and rural communities about such legislation and include them in future legislative processes. So far, legislation tends to favor export oriented large-scale agriculture, and does not meet needs of small-scale farmers. As a result of the recently signed Free Trade Agreement with the United States, Peru is amending many laws, and introducing new ones, some of which will negatively affect Farmers' Rights.

Various threats to farming practices and the maintenance of local varieties and the associated knowledge were discussed by the farmers. One threat is the increased dominance of commercial varieties, which limits the access to traditional varieties of seed potatoes. Climate change, with fast meltdown of glaciers in the Andes, is considered an even more serious threat in many areas. With climate zones changing rapidly, it is increasingly difficult to grow the traditional varieties of these areas, and genetic erosion might ensue. In such a situation, plant genetic diversity is crucial: it is the factor that enables adaptation to changing environmental conditions – provided that seed exchange can take place, and particularly so if backed by research to identify the varieties best suited to the new conditions. Other serious threats are interventions in farming areas, through the building of dams and the development of mining. Such interventions hinder the conservation of plant genetic diversity, because of the loss of land as well as the pollution caused by mining. The establishment of national agrobiodiversity reserves was proposed as one possible counter-measure.

Low prices for their products were cited by most farmers as the reason why they have remained subsistence farmers, and the wish for higher prices was a recurring topic in all workshops. In general, the farmers also wanted respect and recognition for their work, and they wanted to be informed and consulted on matters concerning them.

The feasibility of the suggestions made by the farmers has been further analyzed in the report, with a view to the current legal and political situation in Peru. The measures for the realization of Farmers' Rights provided in the Plant Treaty have been taken as points of departure for this analysis and for deriving recommendations.

To ensure the *maintenance of traditional knowledge* (Plant Treaty, Paragraph 9.2.a), measures are required to document such knowledge in such a way that it cannot be misappropriated, and to keep it alive by sharing it and teaching it to the next generation. Agro-biodiversity reserves could be introduced to protect the land most important for the cultivation of native varieties in as many communities as possible. This would help keep traditional farming practices and traditional knowledge alive. Redirecting aid and emergency practices towards a greater emphasis on buying locally and providing farmers with access to propagating material would also contribute. In addition, pilot villages should be considered as a measure to bolster the conservation and exchange of genetic resources and traditional knowledge.

To ensure *equitable benefit-sharing* (Plant Treaty, Paragraph 9.2.b), farmers' access to good-quality propagating material should be promoted by providing support to community gene banks, seed fairs and exchange visits, and participatory research on traditional seed systems. Farmers should also have access to research, technology and new techniques through information dissemination and collaboration with researchers. Agricultural research should be more informed from the ground, by bottom-up processes. Participatory plant breeding is a vital instrument to support farmers in their efforts, and could also be central in the context of such bottom-up processes. Here it is important that the resultant varieties are disseminated quickly. Farmers must to a greater extent be informed about existing possibilities and projects, such as the repatriation program of potato varieties by the International Potato Centre. Efforts should be made to ensure farmers higher prices for their crops, for example by assisting them with processing and marketing. A support system for Andean crops should be considered to ensure that the incentive system also promotes this type of agriculture.

A condition for the *participation of farmers in decision-making* (Plant Treaty, Paragraph 9.2.c) is the awareness on the importance and contents of Farmers' Rights. Relevant decision-makers must be made aware of why such participation is important, and what Farmers' Rights are about. The capacity of farmers to participate in decision-making also needs to be developed, as they have been excluded from such processes throughout history. Awareness-raising and capacity-building efforts like workshops and seminars should disseminate information about the genetic heritage of Peru, the Plant Treaty and its provisions on Farmers' Rights, existing laws and policies as well as political processes and ways to influence

them. At the national workshop in Lima a national conservationist farmers' organization was established in order to channel farmers' participation in decision-making processes at the national level. This organization will need support. In addition, farmers' organizations should be consulted both when laws and policies are made and when they are implemented.

In order to mainstream legislation and policies with regard to *Farmers' Rights related to the use and exchange of seeds* (Plant Treaty, Paragraph 9.3), it is necessary to include a chapter on Farmers' Rights in the Seed Law, to create legal space for the continuation of traditional practices of seed-saving and exchange. Consideration should also be given to incorporating a wider farmers' exemption into the new law on plant variety protection resulting from the US-Free Trade Agreement. To promote seed exchange locally, projects in farming communities could increase their focus on networking and the building of trust among farmers.

In addition to these recommendations, the Peruvian government would probably be in a better position to promote Farmers' Rights and the implementation of the Plant Treaty if it made certain institutional changes. In particular, it is necessary to ensure that there is one focal point for the implementation of the Plant Treaty and Farmers' Rights, and not two, as the case is today. Vesting this responsibility with INIA seems likely to enable more action. A further measure would be for INIA to establish an interagency committee consisting of those government units that are relevant for carrying out measures for the implementation of Farmers' Rights. Such a committee would help promote activities, boost the ownership of such measures among the involved agencies and ensure coordination. Consideration should be given to the participation of farmers' organizations and NGOs in the committee.

The process of realizing Farmers' Rights is underway in Peru. According to the stakeholders, this report will be used as the process moves along, which will hopefully contribute to improving the food security of small-scale farmers and the continued maintenance of the country's rich agricultural biodiversity.

Acronyms and Abbreviations

CIRNMA	Centro de Investigacion de Recursos Naturales y Medio Ambiente, Peru
CIP	Centro Internacional de la Papa, Peru
FAO	Food and Agriculture Organization of the United Nations
FNI	Fridtjof Nansen Institute, Lysaker, Norway
INDECOPI	National Office for the Defense of Competence and Intellectual Property, Peru
INIA	Instituto Nacional de Innovacion Agraria, Ministry of Agriculture, Peru
Plant Treaty	The International Treaty on Plant Genetic Resources for Food and Agriculture
PPB	Participatory Plant Breeding
PRONAMACH	Ministry of Agriculture's National Program of Watershed and Soil Management, Peru
PVP	Plant Variety Protection
SENASA	Servicio Nacional de Sanidad Agraria, Ministry of Agriculture, Peru
SPDA	Peruvian Society for Environmental Law
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights (under the WTO)
UPOV	International Union for the Protection of New Varieties of Plants
WTO	World Trade Organization

1 Introduction

This report is about Farmers' Rights, as they are addressed in the International Treaty on Plant Genetic Resources for Food and Agriculture ('the Plant Treaty'). It takes the perceptions and experiences of 180 farmers in various regions of the Peruvian Andes as the point of departure and analyzes how these can form the basis of future policies on Farmers' Rights in Peru.

The target groups of this report are farmers, practitioners from various organizations involved in farming communities, and last but not least, decision-makers in the field of genetic resources. The aim is to contribute to the discussions as well as to practical efforts towards the realization of Farmers' Rights in Peru.

In the context of the Plant Treaty, realizing Farmers' Rights means enabling farmers to maintain and develop crop genetic diversity 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 the maintenance of crop genetic resources, which in turn is the basis of all food and agricultural production in the world. The continued maintenance of agricultural biodiversity is particularly important for traditional small-scale farming, on which large numbers of people in Peru depend for a livelihood. Therefore, the realization of Farmers' Rights is a central means to improving the livelihood of farming families and as such an important contribution to poverty alleviation in rural areas.

An important provision on Farmers' Rights in the Plant Treaty concerns the right of farmers to participate in decision-making processes regarding genetic resources at the national level. The views and experiences of farmers therefore form the basis of this report.

From March to May 2008, Maria Scurrah of Grupo Yanapai organized and held a series of workshops with Peruvian farmers in order to map their views, experiences and suggestions with regard to the realization of Farmers' Rights. Representatives from some of the workshops and other farming groups were invited to a final workshop at Instituto Nacional de Innovación Agraria (INIA) in Lima, together with practitioners and decision-makers in the field of genetic resources. This report presents the results of these workshops and analyzes the implications for Peruvian policies. It starts out with a brief introduction to the Plant Treaty and information on the farming situation in Peru, and concludes with some central recommendations.

The report is one of the end-products of a project on the implementation of the Plant Treaty in Peru, headed by the Peruvian Society for Environmental Law (SPDA), and carried out in collaboration with the Fridtjof Nansen Institute, Norway, and Grupo Yanapai, Peru. The authors would like to thank the German GTZ with its project 'People, Food and Biodiversity' for the support that made this report possible.

2 The Plant Treaty and Farmers' Rights

The International Treaty on Plant Genetic Resources for Food and Agriculture (the Plant Treaty) is the most important international instrument for realizing Farmers' Rights, and thus a central international means for ensuring food security and poverty alleviation in the world. Whether this possibility will be utilized to its full potential depends on political will and entrepreneurship.

The Plant Treaty was adopted at the Conference of the Food and Agriculture Organization of the United Nations (FAO) in 2001 and entered into force in 2004. It is the first legally binding agreement pertaining exclusively to the management of plant genetic resources for food and agriculture. The Plant Treaty has, as of September 2008, 119 contracting parties, i.e. countries committed to implementing its provisions. Peru ratified the Plant Treaty in 2003 and is thus a contracting party.

The objectives of the Plant Treaty are the conservation and sustainable use of plant genetic resources, and the fair and equitable sharing of the benefits arising from their use for sustainable agriculture and food security. The most important benefit is that of access to these vital resources for food and agriculture. No country is self-sufficient in plant genetic resources: all depend on plant genetic diversity from other countries and regions. International cooperation and open exchange of genetic resources are therefore essential for food security.

The core of the International Treaty is a Multilateral System of Access and Benefit Sharing covering 35 food crops and 29 forage plants that are under the management and control of the Contracting Parties and in the public domain. With this system, the fair sharing of benefits arising from the use of these resources has for the first time been practically implemented in legally binding terms at the international level. A Standard Material Transfer Agreement is the key in this system.¹

A Governing Body oversees the implementation of the Plant Treaty. It consists of representatives from all the contracting parties, and usually meets once every two years.

2.1 Recognition of farmers' contributions and provisions on Farmers' Rights

Farmers' Rights constitute a cornerstone of the Plant Treaty. In Article 9, the Contracting Parties recognize the enormous contribution that farmers of all regions of the world have made, and will continue to make, for the conservation and development of plant genetic resources as the basis of food and agriculture production throughout the world.

According to the treaty, governments are to protect and promote Farmers' Rights, but can choose the measures to do so according to their own

¹ More information is available on the website of the Plant Treaty: www.planttreaty.org/

needs and priorities. Certain measures are suggested, covering the protection of traditional knowledge, benefit-sharing and participation in decision-making. The rights of farmers to save, use, exchange and sell farm-saved seeds and propagating material are also addressed, but without giving any particular directions 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. In addition, a range of other articles in the Plant Treaty are important for the implementation of Farmers' Rights, particularly provisions on the conservation and sustainable use of crop genetic resources.

2.2 What does realizing Farmers' Rights mean in practice?

As there is no official definition of Farmers' Rights, countries are free to realize them according to their own needs and priorities. One reason why the negotiators of the Plant Treaty were not able to agree on a definition of Farmers' Rights was that the situation of farmers and perceptions of Farmers' Rights differs greatly from country to country. With no official definition of Farmers' Rights there is uncertainty as to what the concept involves and how these rights can be realized. It is therefore important to establish a common ground of understanding in order to develop fruitful dialog among stakeholders on necessary measures to be taken at the national level.

The measures suggested in Article 9 provide the clearest guidelines for member countries on how to define Farmers' Rights for their own contexts and implement them. Based on the research carried out as part of the Farmers' Rights Project at the Fridtjof Nansen Institute – and taking the Plant Treaty as the point of departure – realizing Farmers' Rights in practice may involve such activities as:²

- Evaluating seed laws and intellectual property legislation, as well as relevant policies and programs with a view to improvements needed for enabling and/or strengthening farmers' rights to save, use, exchange, and sell farm-saved seed (Para 9.3):
- Policies, projects or initiatives on traditional knowledge related to plant genetic resources for food and agriculture (Para 9.2.a) – such as projects to document traditional knowledge to be shared among farmers in order to avoid loss of such knowledge; projects to raise awareness of the value of traditional knowledge, and projects to protect farmers' traditional knowledge against misappropriation while also ensuring that it can be shared;
- Benefit-sharing measures (Para 9.2.b) – such as national-level funding mechanisms that support farmers in conserving and sustainably using plant genetic resources; participatory plant breeding projects resulting in added value to farmers' varieties; community gene banks that are effectively used in farmers' breeding strategies as well as in

² Based on findings from the Farmers' Rights Project. See Andersen (2005); Andersen and Winge (2008).

ensuring seed security; other means to ensure access to relevant seed; marketing strategies to create a demand for diverse crop products; other incentive structures to motivate conservation and sustainable use of genetic resources; recognition of farmers' contributions, for example in the form of awards, and other measures;

- Farmers' participation in decision-making (Para 9.2.c) – for example, involving farmers in national consultative processes related to the management of plant genetic resources for food and agriculture, or more specifically to Farmers' Rights, and in decision-making relative to the implementation of seed regulations and breeders' rights; capacity-building activities leading to greater involvement of farmers in relevant decision-making; and advocacy by farmers' organizations leading to improved policies on genetic resources and Farmers' Rights. Also awareness-raising on the important role played by farmers in conserving and developing PGRFA is relevant here.

As this list suggests, even though Farmers' Rights have not been officially defined, there is a considerable potential for taking action at the national level, according to the needs and priorities of the individual country.

2.3 What can we expect from the international level?

At its Second Session, the Governing Body of the Plant Treaty invited the member countries to submit their views and experiences on the implementation of the Treaty's provisions on Farmers' Rights. These views and experiences (Peru, as a contracting party, is also invited) are to be submitted to the Plant Treaty Secretariat as a basis for further steps, which will be discussed at the Third Session of the Governing Body in June 2009.

Each country is responsible for its own implementation of Farmers' Rights. However, there are some expectations regarding funds to be made available through the Plant Treaty for such implementation in developing countries and countries with economies in transition. As yet, the Governing Body is still discussing how to raise funds for implementation of the Treaty and how such funds should be distributed. Generating benefits to be shared from the Multilateral System will take time, and it is uncertain how much funds can be generated through this instrument. Another avenue is the funding strategy currently under negotiation in the Governing Body. This strategy is likely to prove central for the support of developing countries in their efforts to implement the Plant Treaty in terms of conservation, sustainable use and Farmers' Rights, once it is established and has begun to attract funds.

The Plant Treaty also encourages international cooperation on a bilateral basis. This means that resources should be made available through development cooperation. Currently, this might be the most viable option for financing measures for the conservation and sustainable use of plant genetic resources and the realization of Farmers' Rights.

3 Farming in Peru³

Unlike in many other developing countries, the agricultural sector in Peru does not employ the majority of the workforce, nor does it make a very large contribution to the Gross Domestic Product. The agricultural sector contributes only 8.4% to the GDP, while the industrial and service sectors contribute 25.6% and 66% respectively; these sectors also employ the majority of the workforce.⁴ However, about 44.5% of the total population of some 29 million people was estimated to live below the poverty line in 2006, and of the rural poor the majority depends on farming for their livelihoods. In 2003 about 35% of the population were living in rural areas, and estimates indicate that 64% of rural households depend on agriculture for most of their needs. For Andean and Amazon indigenous communities, farming is the central activity. Moreover, agricultural practices are part of their cultural heritage. These communities grow a variety of crops adapted to the local environment, and there are strong linkages between territory, culture, food security, and local knowledge.

3.1 Traditional and industrial farming systems in Peru

Less than 3% of Peru is arable land, and most of this is not irrigated.⁵ Along the coast there has been a growth of large agricultural complexes focused mainly on industrial crops for export, but in the rest of the country small-scale agriculture dominates and only 10% of the agricultural land is used for 'modern' farming on a large scale. The average farm in Peru covers less than 3 hectares.⁶ However, modern farming and its high-yielding varieties have made inroads into the traditional communities and their small-scale farming systems, at the expense of the large number of locally adapted varieties that traditionally have been used. This is happening as a result of new infrastructure and because the government is promoting modern agriculture as a way out of poverty.

According to the national strategic plan for the agricultural sector, *Plan Estratégico Sectorial Plurianual de Agricultura 2007–2011*, the high degree of land fragmentation in Peru represents an enormous barrier to agricultural profitability. This fragmentation is evident in the rather small size of most land holdings and is partly due to topographic reasons. In 2007 about 84% of farms were smaller than 10 ha and covered about 50% of the land used for agriculture. In the strategic plan this situation is seen as the main obstacle to the introduction of modern agriculture, obstructing the generation of economies of scale, cost minimization and access to credits. This assessment led the national government to adopt a set of

³ When not explicitly referenced, the information in this chapter has been gathered from the FNI report by Manuel Ruiz Muller (2006).

⁴ CIA-The World Factbook: www.cia.gov/library/publications/the-world-factbook/geos/pe.html

⁵ Coastal agriculture is irrigated, and makes up most of the industrial agriculture sector in Peru.

⁶ Due to inheritance laws, average farm size may become even smaller.

decrees⁷ aimed at shifting the agricultural sector away from small-scale agriculture. Peru's main agrarian association CONVEAGRO (Convención Nacional del Agro Peruano) sees these decrees as an attack on small-scale farmers.⁸ Many stakeholders anticipate that these new policies will have a negative impact on the future of agro-biodiversity and the recognition and promotion of traditional knowledge.⁹

In the Andean region of Peru, subsistence farming is the norm: only between 15% and 23% of the produce enters the market. It has been argued that the small size of the agrarian units and the lack of interaction with the market are major barriers to a more productive and competitive agricultural sector in this region. Section 4 will demonstrate that Andean farmers have some very specific reasons for being subsistence farmers, and that fair prices are one of the central issues.

3.2 Crop genetic diversity in Peru

Due to its geographic location, natural and environmental features, Peru has many ecological and climatic zones and is therefore very rich in biodiversity, both agricultural and wild. Among Peru's 4400 native useful plants, 220 are domesticated¹⁰ and the country is the center of origin/diversity for a series of important food crops, including potato, mashua, oca, ulluco, sweet potato, sweet corn (maize), cassava, and aracacha. Especially among small Andean and Amazon communities these crops are very important for food security, with for example the Andean tubers potato, oca, ulluco and mashua being vital sources of carbohydrates. Peru is particularly known for its wide diversity of potato species and varieties. As the main center of origin and potato diversity, the country is home to seven domesticated potato species¹¹ and numerous different varieties. Only one of these species is cultivated to any extent elsewhere: the potato *Solanum tuberosum*, ranked as one of the five most important food crops in the world. Because of the country's rich agricultural biodiversity and its status as center of diversity/origin for important food crops, including the potato, *in situ* conservation and the realization of Farmers' Rights are very important in Peru.

3.3 Anticipated effects of the US–Peru Bilateral Free Trade Agreement

In 2006 Peru signed a bilateral free trade agreement with the United States. The agreement is currently under implementation, and many laws and regulations are being changed. It is likely that this will affect Peruvian farmers, and its opponents fear it will expose the country's small-

⁷ Adopting decrees is a right accorded to the government in line with the delegation of legislative power. This right has been approved by the Parliament regarding measures necessary for the implementation of the bilateral trade agreement with the USA. The Government has so far adopted 34 legislative decrees in this context.

⁸ CONVEAGRO (2008).

⁹ Isabel Lapeña from the SPDA contributed the information to this paragraph.

¹⁰ Brack (1999)

¹¹ CIP: <http://research.cip.cgiar.org/confluence/display/wpa/Peru>

scale farmers to heavy competition from agricultural products from the USA. In addition, as part of this agreement Peru has committed itself to adopt the 1991 version of the UPOV Convention, an international agreement for the protection of new varieties of plants, which entails that the country has to strengthen its plant variety protection law. As a result, farmers may not be allowed to use farm-saved seed from protected varieties any longer, and farmer-to-farmer exchange of farm-saved seeds from such varieties may be prohibited. In other words, Farmers' Rights may be negatively affected. However, as the farmers of Peru have generally not been informed about the laws governing agriculture, that also means they are normally not aware of committing violations.

The US-Peru Bilateral Free Trade Agreement will enter into force in January 2009, but adaptation of policies and legislation has started already. Recently, US representatives have opined that the main impediment is Peru's Intellectual Property Rights legislation, in particular the rules related to certificates of origin and traditional knowledge registers.¹² Working for the realization of Farmers' Rights is therefore particularly important in order to seek to balance the new policies resulting from the Free Trade Agreement..

¹² El Comercio, November 5, 2008: www.elcomercio.com.pe

4 Farmers' perceptions

In this section, the findings from the five workshops held in Peru in spring 2008 are presented in an effort to highlight the situation and views of Peruvian farmers, and their opinions on what should be done in Peru to implement the Plant Treaty and realize Farmers' Rights.

4.1 About the workshops

Five workshops were held in the period March to May 2008, with farmers from the southern and central highland of Peru. The workshops were conducted as a mixture between informal group interviews with open-ended questions and discussions, and the interests and concerns of the participants were allowed to steer the conversations. The issues and questions to be taken up had first been outlined in a meeting between Regine Andersen and Maria Scurrah in Oslo in February, with the provisions of the Plant Treaty as the point of departure, and then developed further after feedback from Manolo Ruiz, Isabel Lapeña, Willy Roca and Ilko Rogowich.

At all the workshops, a brief introduction to the Plant Treaty was provided, where the emphasis was on Article 9 and Farmers' Rights. This was done in order to explain the objectives of the workshops and what sort of issues would be addressed. Each of the workshops had a different dynamics and was attended by a different group of farmers, but in this report the findings are presented together, to allow for a clearer picture of the general views of Andean farmers. It is believed that the findings from these workshops are quite representative of the views and concerns of the local farmers. Unfortunately, however, attempts to organize workshops in the Peruvian Amazon region failed. Participants at the Andean workshops represented three main groups of farmers: highland communities, conservation farmers and organic Quinoa exporters.

4.2 About the participants

Of the two highland communities involved in the workshops, the one in Huancavelica is extremely poor, and they cultivated almost no native varieties. This community suffered a severe frost in 2007, and after that many of the farmers left the area temporarily. The farmers are now trying to rebuild their lost seed stock, but an Andean weevil epidemic threatens their efforts. The second highland community is located in the Mantaro Valley. Here, two systems are followed: one of improved varieties in the lower areas, and a traditional sectoral fallow system with native varieties higher up. The plots used for the improved varieties are 'owned' by families, and the surplus is sold at the market. In the late 1990s, potato prices dropped, and as a result many families stopped selling their potatoes. The community controls the sectoral fallow system. Under both systems, access to propagation material is an important issue. Whether there is any surplus to sell will depend on the size of the farm, and for many farmers the cash needed to buy seed and extra food comes mainly from selling some of their animals.

Two workshops were also held with conservation farmers. The term ‘conservation farmer’ was coined after the explosion of seed fairs in the 1990s: it refers to farmers who cultivate an above-average number of varieties and have special interest in and knowledge about the conservation of crop diversity. These farmers have been encouraged by seed-fair competitions where prizes have been awarded to those who maintain most varieties. The conservation farmers attending the workshop in Cuzco came from various communities in Cuzco, Apurimac and Ayacucho, while the farmers attending the workshop in Huancayo came from Huánuco, Huancavelica and Junín. All of them grew a large number of potato varieties. Access to propagating material was not an issue for these farmers in the same way it was for the other farmer groups, but the fact that they were among the few who maintained many of the varieties made it difficult to acquire propagating material from other locations.

The last group of farmers participating in the workshops was a group of organic quinoa exporters from communities on the shores of Lake Titicaca. These communities were in the process of adopting a more commercial farming system, but were still cultivating all their traditional crops.

Overview of workshops and participants

Date (2008)	Place	Key crops	Participants
March 6	held in Puno with farmers from 13 communities in the Altiplano	Quinoa, as well as cañihua, barley, oats, potatoes and other Andean tubers	30 farmers (16 women) and 10 NGO representatives
March 13	Junín, Comunidad Campesina de Quilcas held in the Municipality of Quilcas	Maize, potatoes, Andean tubers, faba beans	90 farmers (40 women) and 3 NGO representatives
March 29–30	held in Cuzco , with farmers from 13 communities in Cuzco Apurimac and Ayacucho	Conservation farmers, mainly from the In Situ project, cultivating many potato varieties	18 farmers (1 woman) 10 INIA scientists and technicians
April 4	Huancavelica Comunidad Campesina Choppcca, C.P Chucllaccasa	Potato, barley, faba beans	18 farmers (2 women) 3 NGO representatives and 1 visitor
May 20	held in Huancayo with farmers from 9 communities in Huánuco, Junín Huancavelica	Conservation farmers, many from the In Situ project, cultivating many potato varieties	24 farmers (7 women) 8 INIA scientists and technicians

4.3 Crops and agricultural practices

A range of different crops were cultivated by the participating farmers, among them potatoes, maize, faba beans, quinoa, kañiwa, lupines, oca, mashua, olluco (Andean tubers), barley and wheat. In addition, all the farmers also kept animals, and a majority grew fodder crops like oats and alfalfa because the area available for grazing was not sufficient. Potatoes were one of the main crops, and when native potato varieties are cultivated in the traditional way, a rotation system allows the land to be used for pasture during the fallow period.

Mostly, the farmers interviewed used farm-saved seeds and propagating material from their own harvest, but they also exchanged and bought seed to renew their breeding material. Other reasons for buying or exchanging seed could be the loss of varieties due to frost, or consumption of the part of the harvest meant to be used as propagating material. All of the potato farmers participating in the workshops were familiar with what they called 'tired seeds', or 'semilla cansada', believed to be caused by a virus and leading to the extinction of varieties of potato on each affected farm. The risk of infection has grown as a result of the extensive new network of roads that have increased access to markets while also opening up communities to propagating material of unknown origin. The emergence of new diseases, coupled with a rise in average temperatures,¹³ could have a catastrophic effect on the ability of farmers to keep their seeds disease-free using traditional methods.

4.4 Issues addressed at the workshops

The workshops focused on five issues. These were developed on the basis of the Plant Treaty, but the order and framing of the themes and questions took as their point of departure the actual situation of farmers and the issues relevant for their practice.

The first issue, and the most urgent among the farmers in the region, concerned access to adequate seeds and propagating material. This is not directly addressed in the provisions on Farmers' Rights in the Plant Treaty. However, the treaty clearly states that access to seeds and propagating material is the most important benefit (Article 13), and this issue is therefore relevant for the implementation of Article 9.2.b on farmers' rights to benefit-sharing. It is also relevant to another central component of Farmers' Rights (Article 9.3), which is a precondition for access to seed from other farms: the right to use, exchange and sell farm-saved seed. Participating farmers were asked whether they had access to the propagating material and varieties they want and need, whether they felt they had any influence over the selection criteria used by breeders, whether they had taken part in participatory plant breeding, their experiences of and views on seed banks, and about their practices regarding seed-saving and exchange.

¹³ While average temperatures are rising there has also been an increase in extreme events such as unseasonable frosts.

The next issue that was addressed, and a highly relevant topic in Peru after implementation of the Convention on Biological Diversity, was the strengthening of local knowledge. This is related to Article 9.2.a of the Plant Treaty on the protection of traditional knowledge. It is also relevant with regard to Article 9.2.c on the right of farmers to participate in decision-making at the national level, as it involves farmers' knowledge of laws and regulations of the country, an important indication of participation. The questions asked at the workshops addressed the farmers' traditional knowledge related to plant genetic resources, their views on the maintenance of agro-biodiversity and their knowledge about the laws and policies affecting them.

Following from this, the issue of market access for traditional varieties of crops was addressed. This is an important topic in a livelihood perspective, and for many farmers market access is vital for their efforts to conserve plant genetic diversity. Market access can be seen as a measure to create benefit-sharing (Article 9.2.b), as farmers will get benefits – normally in the form of money – in exchange for their crops.

Finally, the farmers were asked about their views on Farmers' Rights as addressed in the Plant Treaty, and their suggestions regarding the implementation of these provisions. Here the facilitator sought to determine what the farmers saw as Farmers' Rights and how they thought Farmers' Rights should be realized.

4.5 Farmers' views on access to seeds and propagating material

All the farmers participating in the workshops demonstrated an awareness of their rich heritage of varieties and knowledge, but they were also worried about the old seed systems disappearing. When asked whether they had access to the seed they need, and the varieties they would like to use, some answered that they were in need of a good seed source. Others said they did not have access to all the propagating material they would like to have, and that they needed new varieties, including varieties that they can harvest earlier. Some farmers stressed that although they mostly have access to the propagation material necessary for the varieties they grow, they need new and fresh material to stop their varieties from getting 'tired'. Many considered the seed quality to be good.

Some of the improved varieties on the market do not perform well in the highland climate, and some are highly susceptible to the Andean weevils. The farmers had heard about varieties they would like to try, but these were not available at the local markets. It was noted that decisions regarding the selection and naming of varieties were taken by the professionals/ the 'technical' people, and not after consultation with the farmers.

The farmers from Choppca described how they bought propagating material for new varieties in Paucará, and came back to buy more after testing them if the results were good. Propagating material of successful varieties would then be shared and exchanged. This illustrates how the farmers critically evaluate varieties and propagating material, and use only what satisfies their requirements.

In some areas, seed exchange is not practiced to the same degree as it used to be. Seed exchange used to be the norm in Quilcas, but now buying is more common. In Puno most of the seed used is farm-saved, and the farmers know how to select their own varieties. The farmers also plant some varieties solely for conservation purposes. When varieties are lost (the main causes are frost, weevils, flea beetles and virus) they buy or exchange propagating material. Seed exchange was seen as especially crucial after frosts, with locations that had escaped the frost providing new propagation material.¹⁴

The importance of maintaining local/native varieties was something of great concern to most of the participating farmers. They were highly aware of the loss of varieties occurring, and they expressed concern over how this could be halted and the native varieties maintained. The number of local varieties grown differed from area to area, with some farmers saying they grew 70 local varieties and other stating that they grew around 10. The organic quinoa growers were especially worried about the conservation of quinoa varieties, since the plots they use for local varieties grow smaller every year, and they use only one or two varieties when growing for sale.

With regard to propagation material obtained from external sources there was a certain amount of dissatisfaction. Some of the farmers claimed that only 40% of the quinoa seed they received from INIA germinated. There was more satisfaction with the seed obtained from CIRNMA, with about 70% germinating. Many farmers felt that there was a need for greater transparency in relation to INIA's work and varieties, and their products were considered too costly. Some farmers suggested that INIA should establish demonstration plots in their area, so they could see how the improved varieties adapt to the local environment without the high risk of failure of experimenting alone. The need for new varieties was perceived by the farmers to be constant because of the stable influx of new diseases and pests.

4.5.1 Strengths and weaknesses of seed fairs

Local and regional fairs and markets are important for access to seed, and were mentioned by farmers at all the workshops. In Cuzco and Puno, special fairs are held prior to the planting season where seed is sold and exchanged, but most farmers seemed to be of the opinion that these fairs no longer hold the position they used to. Some farmers also stressed how important it is to know the origin of propagating material. Interestingly, it was stated that 'in the old days' it was common knowledge which villages were good seed-potato growers, and the farmers thought that these good seed sources should be recreated and made more official.

The seed/biodiversity fairs were in general liked by the farmers, but the winning of prizes, not seed exchange, was seen as the main purpose. Such competitions were thought to decrease the willingness of the competing

¹⁴ This topic was not pursued any further, but it would have been interesting to discover if there are local mechanisms to facilitate this.

farmers to share their propagation material. As a result, although the farmers appreciated the opportunity these fairs and competitions bring in terms of recognition, they felt there was a need to focus more on seed exchange and give more farmers the opportunity to attend. The conservation farmers from Huánuco and Huancavelica also noted that there was usually little seed exchange at 'diversity fairs', and even less knowledge exchange. Some farmers therefore felt that conservation farmers should change from focusing on winning competitions, and think more about sharing.

In Puno, the seed fairs have been experiencing problems because the farmers are unwilling to exchange their newest and best propagating material. Capacity-building was suggested as a solution, as well as going back to some of the traditional seed suppliers. Conservation farmers from Cuzco considered seed fairs to be important, and an essential source of seed. However, it was also noted, farmers living far away from where the seed fairs are held find it too costly to attend every year. The workshop created bonds of trust among the farmers and it was suggested to organize a seed fair for farmers in the Cuzco area. This shows that when farmers know and trust each other, the likelihood for seed exchange increases.

4.5.2 *Strengths and weaknesses of local seed banks*

Local seed banks were seen by some farmers as a good way to ensure that if loss occurred on the farms, there would be a way to get access to propagation material and the necessary varieties. At one workshop it was suggested that everybody should place their seeds in local seed banks, and that every community should have a seed bank. The perceived high risk of loss was one of the reasons this was felt to be important. Other farmers, however, feared the consequences if anything should happen to the seed bank, and felt that the best strategy to ensure access to propagating material was to plant the varieties in many different places.

4.5.3 *Farmers' participation in breeding activities*

The general perception among the farmers was that they cannot influence the selection criteria of the varieties bred by professional breeders. Most said they had never participated in varietal selection, but at the Cuzco workshop one of the participants from Chacllabamba defended participatory plant breeding. The reason for this was a successful project on participatory plant breeding that had been carried out in the Chacllabamba community in Cuzco from 2004 to 2007. This project resulted in two blight-resistant potato varieties, one of which was bred and named by women and one by men: *Puca Liclla* and *Pallay Poncho*. These varieties were registered by INIA, although the selections were made by farmers and CIP provided the propagating material. There is currently no system for registration of farmers' varieties. However, INIA has set up a registry for native varieties. This registry focuses on potato and maize because Peru is a center of diversity for these crops and because the country already has considerable expertise in this area.

Another participatory plant breeding project had been organized in the Anexo de Colpar of the Quilcas community from 1999 to 2001. As part

of this project, propagating material developed by CIP was evaluated by INIA with help from local farmers. The farmers were invited to visit the project site and select potatoes which were then evaluated by the community. The visits were facilitated by Grupo Yanapai. Two varieties were released by INIA as a result of this project: *Colparina* (frost-tolerant) and *Wankita* (resistant to potato cyst nematode). Eight years later the use of these varieties is not very widespread in the project area, and there was a sense of ambiguity towards the project among the farmers. However, the variety *Wankita* will be formally released by INIA by the end of 2008 and will then enter the variety register. It is hoped that this will foster interest in the community for this nematode-resistant variety.

4.5.4 Access to improved varieties and native varieties from gene banks

An issue that deserves attention in relation to breeding projects is access to the resultant varieties. Improved varieties may find their way to small and isolated communities through a process of diffusion as late as 10–15 years after being released. Efforts to speed up this process to give communities access to new breeding material would therefore be valuable.

Some farmers expressed an interest in receiving propagation material of native varieties from CIP. Through their 'repatriation' project, CIP returns varieties to the communities in the same area they were collected, but from where they might have disappeared since. The Potato Park constitutes the largest repatriation project, with 410¹⁵ varieties collected in the 1970s having been returned in the past five years. Because the propagating material the communities receive from CIP is virus-free, repatriation can lead to an increase in yields. When one of the conservation farmers said that they should demand access to the germplasm of CIP, the facilitator explained that CIP's repatriation project is for everyone, and that all they have to do is to send a letter, as a community or an organized group of farmers, to CIP. CIP will then consider the request, although they will not necessarily provide the specific varieties that were requested, but choose which varieties to provide. The varieties that are provided will usually not be accompanied by any additional information or name, only a CIP registration number. If the request is accepted, the farmers will receive 5 to 10 tubers of the variety in question. On the other hand, there is no guarantee that the variety will perform well in the area in question; furthermore, it will take some years of multiplying efforts before all the participating families will have received material from the variety that was provided. The fact that farmers at the workshops were unfamiliar with the CIP project shows that more work is needed to ensure the success of this and similar projects.

INIA also has a similar project, called 're poblamiento' (re-populating), to provide communities with their oca, mashua and ollucu varieties. However, they require the recipients to send back some propagation material from their harvest. Some of the farmers found this disappointing, as they had thought the community could keep the entire harvest.

¹⁵ Rene Gómez: personal communication with Maria Scurrah.

4.5.5 *Special needs of conservation farmers*

The needs and priorities of the conservation farmers were somewhat different from those of the other farmer groups. Because of the high number of varieties grown, they sometimes find it difficult to get access to the necessary propagating material, and several farmers mentioned that maintaining such a high number of varieties requires hard work. However, the enthusiasm for maintaining native varieties was strong among the conservation farmers, and they expressed an interest in help to form organizations that can rescue disappearing varieties and bring back the varieties that have already disappeared. These farmers felt that once they grow the varieties, and have adapted them to the local environment, they will be able to maintain these varieties for a long time. Some of the conservation farmers highlighted the importance of the *sectoral fallow system* (laymes) to the conservation of native varieties. It was said that without this traditional system, the Andean weevil and other soil-borne pests and diseases will likely become unmanageable. Currently, the number of farmers using these fallow systems is decreasing, but those who conserve many varieties usually come from communities where sectoral fallow is still practiced.

The financial viability of maintaining a high number of varieties was also a worry for conservation farmers, as some felt that cultivating so many varieties was not economically sustainable. This led many of them to reflect that between 50 or 60 varieties would cover their needs in terms of flavors and differing tolerances to climate and diseases, as well as the demand in the market. The conservation farmers from Cuzco also had a brief discussion on the use of wild species. Some of the wild species growing in the cornfields are harvested every year, and these are looked upon as an alternative and free source of food. None of the participating farmers reported that they had found new varieties this way.¹⁶ However, the habitats of many of the wild species are disappearing, and with them this important part of biodiversity, which is also sought after by plant breeders.

4.6 Farmers' views on local knowledge

Many of the farmers participating in the workshops felt maintaining crop genetic diversity requires lot of work, but that they possess the necessary knowledge. They stressed that greater recognition from the government would be helpful and motivating to their work.

4.6.1 *Access to scientific knowledge*

Many farmers would like to learn more about how to improve their farming practices without costly external inputs, and how to comply with organic specifications. They would therefore like to see that scientists share their knowledge with farmers. However, the work normally carried out in research institutes was thought to be irrelevant to their needs:

¹⁶ Because the seed balls drop to the ground, new varieties are probably picked up by farmers from time to time.

farmers suggested that agricultural research should take as its point of departure the problems formulated by farming communities. The farmers noted that they are usually not informed about the research that is going on, and they felt that they did not see any useful results.

Farmers were also interested in demonstration plots in order to learn about new scientific discoveries and achievements. In particular they expressed an interest in learning more about how to deal with virus infections and land degradation.

4.6.2 The need to share local knowledge

In addition to researchers and research institutions, the farmers also saw other communities as valuable sources of knowledge. Exchange visits to other communities were seen as beneficial, especially if seed and know-how could be exchanged.

The farmers enumerated various reasons for cultivating a high number of varieties. Some explained that they did so because it was the custom of their community, while others said it was important because of the culinary and nutritional qualities the different varieties bring or because the climate demands it. Sharing knowledge across community borders is regarded as promising and important.

4.6.3 Knowledge of laws and regulations affecting farming practices

The level of knowledge among the farmers about the laws affecting them was very low. None of the farmers at the workshops had heard about Law 27811 (which introduced a protection regime for the collective knowledge of indigenous peoples derived from biological resources) or seed laws, and as a result they had no particular opinion on what these laws meant for them and their livelihoods. Once the Plant Treaty had been introduced and explained, the farmers explained that they had not been informed about this previously. Farmers felt that although they are told that they are equal, they never get consulted or informed. This lack of knowledge about vital legal instruments shows how much they have been excluded from the process. It points up the clear need to inform farmers and rural communities about legislation that might affect them, and include them in future processes to ensure that their views are heard.

4.6.4 Catalogs as a means of maintaining traditional knowledge

Most of the conservation farmers participating in the Cuzco workshop had been working on catalogs with their communities in collaboration with NGOs or other institutions. These projects are usually attempts to document and preserve traditional knowledge and local varieties by collecting them in a catalog. In general, the farmers thought cataloguing was a good thing. It had been explained to them that the methods used, for example molecular markers, would mean that their varieties could be clearly identified. So far, three cataloging projects in Peru have used molecular markers. Two of these are connected to CIP: the catalog of Huancavelica varieties coordinated by Stef de Haan, and the projected catalog of the Potato Park, coordinated by Rene Gomez and Willy Roca.

The technique has also been used by the Agrarian College of the community of Pampa Corral. Molecular markers can be a very useful tool to prevent varieties from being confused with other similar ones or varieties with the same name. Because of this it can also serve as protection from unlawful appropriation by third parties.

These conservation farmers, many of them young, felt strongly about the conservation of their knowledge and the biological diversity they are maintaining. Workshop exercises showed that they knew a great deal about their varieties, although the names they used for them varied.

4.6.5 Threats to farming, local knowledge and conservation activities

Various situations were seen by the farmers as threatening their livelihoods and the maintenance of biodiversity. Farmers from the community of Palcoyo explained how mining companies are invading the area they use for potato cultivation. The farmers wanted mining companies to be refused entry to these areas, and suggested the creation of 'genetic resources reserves'. They expressed frustration with the normal government channels, which do not listen to them but tend to favor the mining sector instead.

The building of dams was also seen as a possible threat to areas used for potato cultivation and wild diversity. Some farmers believed that the government should never allow such developments in areas used for potato production, as that would pose a threat to their livelihoods. The issue of land rights was also raised, as some farmers held that these rights needed to be strengthened in order to protect the land needed for food production and conservation of genetic resources.

The farmers also expressed awareness of both the importance of their traditional knowledge and its vulnerability, as well as the vulnerability of the crop diversity they are maintaining. Factors mentioned as contributing to the loss of biological diversity and traditional knowledge included:

- the increasing number of frosts and weevils
- the introduction of chemical fertilizers and pesticides
- lack of interest among the young for learning about traditional agricultural systems
- out-migration of young men
- contamination of the environment from mining
- introduction of improved seed, reducing the areas grown to native varieties
- climate change and glacial melting
- overgrazing
- social weakening of communities
- the recent free trade agreement with the USA, which might limit farmers' market access

However, the threats were perceived differently in the various areas. For example, farmers at the Puno workshop did not think migration was a threat to their work of maintaining crop diversity, because the young people often return to the village. Other farmers noted how the decreasing size of farming plots makes it difficult to conserve and maintain a large number of local varieties. At high altitudes the main problem is frost, while diseases and pests are a problem at lower elevations.

Some farmers admitted that they do not pass on their knowledge about maintaining crop diversity to their children, because of the changes underway in agriculture, and the new practices of using chemical inputs. It was believed that these new practices had affected their knowledge, with some arguing that it contributes to the loss. It was mentioned that the knowledge is still there, but is not being used. There was a general awareness of the importance of genetic diversity. Farmers said that they often talked about crop diversity – in the fields, at meetings, at fairs, with different communities who keep varieties, and when making organic fertilizers.

Some farmers expressed uncertainty as to the best way to keep their potato varieties and propagating material healthy – which can be seen as a symptom of the loss of knowledge taking place in some areas.

4.7 Farmers' views on market access

Most of the farmers participating at the workshops were subsistence farmers. A main reason for this was apparently the low prices they would get if they sold their produce on the market. Many mentioned the need for fair prices as one of the most important measures to improve their livelihoods. Some farmers also expressed an interest in processing their produce, to command better prices. At harvest time prices tend to drop, and the farmers believed that if they had machines to process their harvest, they would earn more. The wish for better prices was one of the issues mentioned at all workshops and stressed by all the farmers participating.

Although the general knowledge about domestic laws and international agreements affecting them was low, some farmers had heard about Peru's bilateral free trade agreement with the USA and were worried about what this, as well as other free trade agreements, would mean for them. They were especially worried that the market might be flooded with cheap potatoes.

4.8 Farmers' views on the issues of Farmers' Rights

Among the farmers participating at the workshops there was a general feeling of marginalization, powerlessness and exclusion. They lamented the authorities' lack of interest in consulting them, and felt they should be allowed to participate when laws and policies were made. They felt that their knowledge of crop management and biodiversity conservation should matter, and that their traditional crops should be valued in the same way as imported varieties. Among other things they believed their crops should receive more recognition for their nutritional value, com-

pared to modern varieties. One farmer stated that a good and nutritious diet is the basis for good health; and that the government should recognize this and support farmers who produce nutritious food. Some also expressed the need to know more about the nutritional qualities of the food they produce in order to be able to put together a balanced diet. For this purpose they wanted a laboratory at their disposal where they could test the different varieties.

4.8.1 *Prices*

One issue the farmers were very concerned about was the market prices of their products. The prices received for agricultural products were thought to be too low to enable them to live with dignity. As mentioned, many of the participants are subsistence farmers because the prices their products can command on the market are too low for sales to be a viable option. The farmers wanted the government to recognize their suffering, and they wanted the local authorities to help them obtain better prices.

Some farmers felt that the mayors did not care about farmers, and that the municipal authorities were not involved. This situation could be improved, the farmers thought, if the mayors and other municipal authorities showed up at farmers' meetings. They also wanted financial help from the municipal budgets to conserve biodiversity, as well as with access to seed and capacity-building. One suggestion was subsidies for maintaining varieties. It was also noted how, in the case of natural disasters, food aid is brought from outside, instead of the relevant institutions using the opportunity to buy what they need locally, thereby empowering the local farmers.

4.8.2 *Relationship to INIA and other authorities*

Financial support for communal seed banks was mentioned as another measure the authorities could implement to strengthen Farmers' Rights. The farmers from Quilcas felt that the funds for INIA's seed banks should go directly to the communities, since INIA and PRONAMACH are not supporting many communities. These farmers also wanted help in securing the rights to their varieties, and thought it would be a good idea to have a committee that could articulate the needs of farmers in relation to the conservation of biodiversity and provide them with support.

4.8.3 *Recognition of and support to conservation farmers*

The conservation farmers were interested in receiving recognition and support for their work in maintaining such a high a number of varieties, and had many suggestions for how this could be done and their situation improved. One conservation farmer from Huánuco wanted conservation farmers to be recognized by a special law, while others suggested policies aimed at the maintenance and conservation of agro-biodiversity, and rules and regulations for conservation farmers.

Some farmers expressed their interest in being able to receive loans/credits from the Agrarian Bank. They felt that there should be an emergency fund for crop failure and that farmers should participate in the

decision-making for this fund. It was also suggested that the government should arrange for a quota of guano fertilizer to be distributed to them as organic fertilizer.

The conservation farmers of Huánuco and Cuzco wanted financial support from the Ministry of Agriculture for seed exchange fairs, in addition to health insurance, fair prices and greater recognition.

It was also suggested that the registry of native varieties should be the responsibility of communities or conservation farmers themselves but that the country data could be managed by INIA, which should provide recognition to the contributors. Access to genetic resources was important to these farmers, and they felt that they should also have access to the *ex situ* resources kept by various institutions.

4.8.4 *The need to form an own organization for conservation farming*

Many conservation farmers believed that the communities especially concerned with conserving native varieties should work together and form an organization, but they also stressed that the communities needed to collaborate with the authorities. Among other things they wanted their land to be protected, and for this the cooperation of the authorities would be necessary. Many also felt that the land they use in their conservation work should be categorized as a type of biological reserve.

4.9 Farmers' suggestions

When asked about what they thought the government should do to realize Farmers' Rights, promote sustainable use of genetic resources and protect traditional knowledge, the farmers participating in the different workshops had a range of suggestions in addition to those already mentioned and partly underlining points made:

- respect for farmers and their work
- recognition of, and support to, farmers and farmers' organizations on the part of local, regional and national authorities
- recognition of the importance and value of native crops, instead of replacing them with imported crops
- underline the importance of biological diversity in relation to climate change
- support for *in situ* conservation, in the same way as *ex situ* conservation is supported
- disseminate information, including research results based on material collected from communities
- disseminate information about the laws that affect them
- health insurance for farmers
- subsidies to farmers who grow Andean crops

- fair prices – enough to live a dignified life (some indicated that they would be able to lift themselves out of poverty if potatoes could be sold for S/5.00 (2.5US) for one kilo)
- help to improve their products so they can get better prices for them
- recognition of the importance of transmitting knowledge to the younger generations
- easier access to long-term loans/credit (with low interest rates)
- irrigation
- exchange visits
- research on soil fertility
- support for seed fairs with native varieties, and help to cover the costs of attending fairs
- reforestation
- improved homes
- making organic fertilizers and guano available at special rates, or for free
- advertising for native potato varieties
- help with procedures for certification of organic products
- policies targeted at small-scale farmers
- machinery for processing
- recognition of the knowledge farmers possess and of their culture
- a change of relief/aid practices: good-quality seed and propagation material should be distributed on time and instead of rice
- a register for native potato varieties
- law that favors/protects/recognizes conservation farmers
- crop insurance/agricultural insurance for emergencies
- protection of areas used for cultivation of native crops (agro-biodiversity reserves)
- access to virus-free native varieties
- access to propagation material and relevant information from gene banks
- access to information about varieties
- the Ministry of Agriculture should consult farmers when drawing up seed laws and other legislation affecting farmers – a more bottom-up approach when designing laws
- facilitate the creation of an organization for all conservation farmers, with its own bylaws.

4.10 Summary of central suggestions

The five workshops provided valuable insights into the realities and challenges of farming in the exceptionally diverse Andes region. The farmers consulted were deeply concerned about the situation and prospects for further maintenance of their crop diversity. They had a wealth of reflections and suggestions as to necessary measures, many of which are relevant in a Farmers' Rights perspective. In a preparatory workshop prior to the national workshop on Farmers' Rights held in Lima in September 2008, representatives from the five workshops came together to work out the main suggestions to present to decision-makers in the country. These suggestions are covered in the following list, which also summarizes other central points voiced in the workshops:

Access to seed:

- Seed exchange should be promoted through seed fairs, which should focus on the sharing of seeds and knowledge, rather than prizes.
- Capacity-building efforts should focus on the importance of seed exchange.
- Activities should be organized (for example by local and regional authorities) that bring farmers together so they can get to know and trust each other, which in turn will foster seed exchange.
- Old seed sources known for their high-quality seed should be revived and made official.
- Farmers should be provided with the opportunity to participate in activities targeted at removing virus from native varieties and capacity-building should be initiated to keep the varieties virus-free.
- Farmers should have access to seeds from INIA and CIP, and information about this possibility should be widely disseminated.
- Communal seed banks should receive financial and technical support.
- The authorities should develop incentives for conservation and sustainable use of crop genetic resources.

Strengthening of local knowledge:

- The value of traditional knowledge should be recognized. In particular the traditional management of seeds should receive greater attention and recognition.
- Initiatives to foster exchange of knowledge, through exchange visits and the like, should be promoted and supported.
- Capacity-building should target the young, so that they can learn more about ancestral farming techniques and traditional knowledge.
- Cooperation with scientific research should take as their point of departure farmers' realities, and support farmers in their efforts to improve their varieties and farming systems.

- As part of the cooperation between farmers and research institutions, farm children should be offered access to higher education in agriculture.
- A national coordinating agency should be established for the management of agricultural biodiversity and Farmers' Rights.

Access to markets:

- Fair prices should be offered for native varieties, to make them competitive with improved varieties.
- Conservation farmers should have access to special low-interest loans through the Agrarian Bank, as well to agricultural insurance.
- When varieties are lost, through for example drought, frost or hail, the authorities should have a ready course of action to enable farmers to access emergency funding. This funding should help them buy local propagating material and ensure that they can retrieve their varieties.

Other suggestions regarding Farmers' Rights:

- National agro-biodiversity reserves should be established in order to protect these areas from the threat of mining and other pollution or destruction, and to ensure that Farmers' Rights are respected particularly in these reserves.
- Farmers should be compensated for maintaining crop diversity. The funding should be at an equal level with *ex situ* facilities.
- Farmers' varieties should be registered by the farmers or farming communities themselves.
- Information about relevant laws and policies should be disseminated in farming communities.
- Farmers should be included in relevant decision-making processes.

5 Results from the national-level workshop on Farmers' Rights

In September 2008, a two-day workshop was held at the premises of INIA, organized by the SPDA, INIA, Grupo Yanapai and the FNI. The goal of the workshop was to establish the elements of a strategy for the realization of Farmers' Rights in Peru. Among the participants were central decision-makers, farmers, breeders and non-governmental organizations. Several introductions were made on the contents of Farmers' Rights, achievements in Peru so far, on the role of gene banks such as CIP, and on the role of the authorities, such as INIA. Most importantly, however, the farmers from the five workshops in the Andes presented the results of this consultative process. Their presentation had been prepared in a workshop with the invited farmers the day before.¹⁷

The introductions were followed by group work, leading to concrete proposals regarding the realization of Farmers' Rights in Peru. The groups focused on two issues each. The first group worked on recommendations regarding farmers' customary rights to use, exchange and sell farm-saved seed (legal space) (Article 9.3) and on their right to participate in decision-making at the national level (Article 9.2.c). The second group concentrated on the issues of traditional knowledge (Article 9.2.a) and benefit-sharing (Article 9.2.b). Each group had broad representation from the various categories of stakeholders attending the workshop.

5.1 The roles of CIP and INIA

The contents of Farmers' Rights as well as farmers' perspectives have already been presented in this study. The roles of CIP and INIA will now be briefly explained.

CIP's most important contribution to the realization of Farmers' Rights is their maintenance of seeds and related knowledge for repatriation on request. This functions as a form of insurance for farmers. In addition, there is scope for technological cooperation, for example targeted at the production of clean seeds. And finally, CIP can contribute with capacity-building and participatory improvement of seeds, seed systems and farming techniques.

CIP representatives attending the workshop felt that it was possible to make progress with regard to Farmers' Rights by improving productivity and reaching markets through funded projects and participative research. These CIP staff felt that the focus should not be on the protection of farmers, but on empowerment.

As for INIA, it can develop participative projects with communities and NGOs, for example for the registration of traditional knowledge and participatory breeding aimed at adding value to farmers' varieties. For this

¹⁷ Some farmers were invited by INIA to attend only the main workshop. These farmers participated in the workshop in Lima but were not involved in the farmers' meeting the previous day.

purpose, INIA can provide capacity-building. INIA can also promote seed fairs and the establishment of communal gene banks. Finally, INIA should become the sole focal point for the implementation of the Plant Treaty, with clear authority in this regard.

It can be argued that Peru's new seed law (Law No.1080), which was introduced to fulfill the commitments of the bilateral trade agreement with the USA, and Supreme Decree No. 20-2008-AG create conflicting interests for INIA because they name it the only 'Autoridad en Semillas'/ Seed Authority. Such a situation would be detrimental to small-scale farmers, especially since there are no provisions to ensure their participation in any of the relevant decision-making processes. Thus, it is important to ensure that this new responsibility is balanced with the responsibility for the implementation of the Plant Treaty in such a way that farmers can be included in decision making processes and that the two functions can be balanced in a way that is conducive to the realization of Farmers' Rights.

5.2 Recommendations regarding farmers' legal space to use and exchange farm-saved seed and their participation in decision-making

A first measure to ensure farmers' legal space to use, exchange and sell seed is to include this in the Seed Law, through a chapter covering Farmers' Rights. There was broad consensus that such a chapter is required and that it should ensure that any procedures regarding plant health and seed quality do not conflict with the aim of ensuring the legal space required for the conservation and sustainable use of crop genetic resources. In particular, procedures must be simple, and they must not serve to discourage seed use, exchange and sales.

In addition, INIA and SENASA should simplify the procedures for registering native varieties of crops for commercial use. Such registration should be free.

The new law on the protection of new varieties of plants was also discussed. Here a farmers' exemption is expected, but only regarding the use of farm-saved seed on that farmer's own land holdings. Exchange and sale would be prohibited. Thus, farmers would not be allowed to share seeds from protected varieties during the sowing and planting season, something which conflicts with long-established traditions. One way to prevent this situation would be to ensure that, under the new law, exchange is still possible among farmers. The farmers in the workshop group felt that this issue was not very relevant to them, as long as they did not use improved varieties, as is currently the case. They were, however, open to such a change in light of situations that may arise in the future. Decision-makers should therefore ensure seed exchange among farmers as a precautionary measure.

Another measure to ensure farmers' continued contribution to the conservation and sustainable use of crop genetic resources would be to establish agro-biodiversity reserves in which mining and other polluting/disturbing practices would be prohibited. Such reserves are highly needed throughout the Andes as well in the Peruvian Amazon.

To ensure farmers' participation in decision-making at the national level, two measures were proposed. First, it is important to establish a national level agency for *in situ* conservation, sustainable use and Farmers' Rights, in order to ensure implementation of measures within these areas and build trust with regard to the authorities. Presence in communities would be vital to establishing trust to such a new agency. The agency should be established under INIA, but social science expertise would be needed in addition to agronomic knowledge. In general, INIA should be strengthened. Second, farmers need their own organization at the national level to channel their interests, demands and suggestions to the national authorities, and for their own empowerment.

An interagency committee should be established to coordinate implementation of Farmers' Rights among the various government units.

More capacity-building on relevant issues for farmers and authorities was regarded as necessary – along with awareness-raising and information work, from the local and regional to the national levels.

5.3 Recommendations regarding traditional knowledge and benefit-sharing

The group discussed whether 'protection' was the right approach to the issue of traditional knowledge, as it is addressed in the Plant Treaty. Perhaps it would be more relevant to ensure empowerment with regard to traditional knowledge, in an effort to encourage self-esteem within this area. Compared to modern science, traditional knowledge is regarded as rather backward by young people in many regions, especially when they move to the cities to lead 'modern' lives. Because traditional knowledge is threatened in many areas, greater empowerment and self-esteem with regard to such knowledge is vital to save it from extinction. However, it is also necessary to make sure that traditional knowledge is not misappropriated. The registration of native varieties is one measure to avoid misappropriation. In addition, prior informed consent was regarded as important when national and international gene banks collect information on traditional knowledge. Most importantly, the objectives of the collectors and the planned use of the resources and the information must be clearly made known among the involved parties, and the communities (present and future generations) must be ensured access to the genetic resources and traditional knowledge, now and in the future.

The group discussed how seed registries could be used as a possible way of rewarding farmers who submit seed, for example by providing them with agreed benefits as compensation for the work they have done and for delivering the seed. INIA could develop such a concept, prepare formats and train farmers and community leaders in how to use these.

New forms of collaboration with research and education institutions were suggested. The needs of the farmers should be the point of departure for crop research and breeding, so that the resultant propagating material and management techniques can be truly useful for the farmers. Participatory plant breeding is central in this context. In addition, the collaboration should provide scholarships to enable children from farming communities

to complete higher education. Taking the idea of agro-biodiversity reserves as the point of departure, the proposed collaboration could be established in these reserves as a beginning, to draw lessons and further develop the approach. Alliances or networks with universities and research institutions could be developed with further components.

Another important issue stressed at the workshop was that farmers should have access to virus-free seeds and knowledge on how to clean and keep clean their own propagating material. Also of potential value are the old traditional techniques used for these purposes, with which fewer and fewer are familiar today. However, more research is needed to validate the usefulness of these techniques. Organic fertilizers (like guano) could be part of benefit-sharing arrangements.

Furthermore, funding for community gene banks was highlighted as an important step, and particularly so when the stored seed is accompanied by good documentation. Seed fairs were also seen as very useful and were often mentioned by the conservation farmers. It is particularly important to ensure that innovative ideas regarding seed fairs are spread so that these fairs can fulfill the need of supplying new seeds.

It was also suggested that INIA and SENAS should eliminate or simplify the requirements for registration of commercial native seed, as well as facilitate certification mechanisms.

Finally, capacity-building for farmers was regarded as important, in order to enable them to participate on a better-informed basis in decision-making at the national level. In particular, farmers need to become familiar with the laws and regulations, in order to know where they stand with regard to national policies.

5.4 Conclusions from the national workshop

The farmers present at the national workshop decided that the time had come for them to organize the first national-level organization for conservation farmers, in order to enable them to voice their needs and demands at the national level – and for mutual support. Towards the end of the workshop they went into a separate room and made all the decisions required for the new organization to be established. They afterwards announced the establishment of a transitional board: “Comite Nacional Transitorio sobre Derechos de Agricultor”, which will be headed by a group of farmers selected at the workshop until a meeting can be held where more farming communities are represented. A more permanent committee to represent farmers will then be elected.

This was a solemn moment.

Manuel Siguéñas from INIA, who had facilitated the workshop, concluded with the commitment to carrying out the following further steps:

- INIA will produce a plan for the realization of Farmers’ Rights in Peru based on the recommendations provided by the workshop, and with a particular view to the suggestions made by farmers.

- A multi-sectoral group will be established to further develop and implement the plan.
- INIA will also suggest the inclusion in the Seed Law of a chapter on Farmers' Rights to use, exchange and sell farm-saved seed.

Based on the plan, a pilot project will be developed with several components, including conservation and sustainable use of genetic resources, the adding of value to farmers' varieties, and capacity-building – in collaboration with the new farmers' organization. This project, if financed, will be piloted in the communities of the farmers attending the workshop. A project proposal will be developed and sent to potential donors.

6 Implications for the implementation of Farmers' Rights in Peru

What are the prospects for realizing Farmers' Rights according to the suggestions made by the farmers themselves? How can these suggestions be taken into account when implementing Article 9 of the Plant Treaty in Peru? In this section, these questions will be investigated further, while keeping in mind the results from the national-level workshop.

The suggestions of the farmers participating in the workshops can be sorted into four categories based on the measures suggested for implementation of Farmers' Rights in the Plant Treaty: the protection of traditional knowledge related to plant genetic resources, the right to participate equitably in benefit-sharing, the right to participate in relevant decision-making processes, and the protection of legal space ensuring the right of farmers to continue their practices of seed-saving and exchange. Some of the practical measures suggested by the farmers, and discussed below, contribute to the realization of Farmers' Rights in more ways than one, but in this analysis they will generally be discussed under one category.

Under each category the suggested measures are discussed in relation to the existing laws, policies and institutions in Peru, in order to ascertain whether they can be implemented under the current framework or if changes are needed. Where changes are deemed necessary, suggestions are made regarding suitable options. The challenges and possibilities related to each of the farmers' suggestions will also be discussed.

6.1 The protection of traditional knowledge

Traditional knowledge related to agro-biodiversity is vital to understanding the properties of plants, their uses and how to cultivate them. The protection of this knowledge is therefore a central part of realizing Farmers' Rights. When parts of this knowledge disappear, there is the danger that crop varieties may disappear with it, which in turn affects the farmers who rely on agricultural biodiversity and the associated traditional knowledge for their livelihoods. Although the Plant Treaty mentions the protection of traditional knowledge as one of the measures governments should employ to protect and promote Farmers' Rights (Article 9.2(a)), it does not specify in further detail what this entails, or provide practical recommendations for its realization.

6.1.1 Documenting traditional knowledge

Many different proposals for protecting traditional knowledge have been offered and discussed by the stakeholders, with various forms of documentation being among the most important. In order to ensure that traditional knowledge is shared and does not disappear, farmers' varieties and the associated knowledge should be documented and stored in the same way seeds are stored in gene banks. Cataloguing has previously been successful in Peru, with the Peruvian Potato Catalog documenting varieties from Huancavelica as the most prominent example. As noted in

section 4, many of the farmers who participated in the workshops were taking part in cataloguing projects. For cataloguing of farmers' varieties to be successful, the techniques used must be able to capture the distinguishing qualities of the different varieties, which tend to be more heterogeneous than modern high-yielding varieties. For this purpose 25 descriptors have been agreed on after consultations at technical workshops. However, these workshops did not include any farmers. Lately, techniques based on molecular markers have been used and proven suitable. Unfortunately, these procedures are quite costly.

The legal status of such catalog collections is an issue that needs to be considered, and measures to avoid misappropriation might be necessary in most circumstances. Striking the right balance with regard to the facilitation of sharing and protection against misappropriation is a challenge for stakeholders in Peru. The Potato Catalog provides inspiration in this regard. It is linked up to Law No. 27811 (protection regime for the collective knowledge of indigenous peoples derived from biological resources) through a legal clause that places the content of the catalog in the public domain and as a result protects it from misappropriation. Thereby prior art is established with regard to these varieties and intellectual property rights can not be claimed to them in their existing forms. If they give commercial entities or others access to the varieties and/or associated knowledge, the communities can use the rights they have according to the said law to ensure prior informed consent on mutually agreed terms.

The register of traditional knowledge INDECOPI (National Office for the Defense of Competence and Intellectual Property) is in charge of covers traditional knowledge considered to be in the public domain and registered by indigenous community's initiatives. This information is considered confidential, and the registered traditional knowledge would not be provided publicly to third parties. INDECOPI is currently considering how this information can be provided to other patent offices to prevent misappropriation.¹⁸ As can be seen, this system is only aimed at protection against misappropriation, and does not facilitate the sharing of traditional knowledge so important for its maintenance.

A system for free and simple registration of traditional varieties, as was discussed and suggested at the national-level workshop, can also be useful in preventing misappropriation. Commercial breeders and other industrial actors cannot claim that a variety fulfills the novelty requirement if it has already been registered. Such a system would combine the demand for protection against misappropriation with the need for sharing of knowledge and propagating material.

It is hoped that the new registry for native varieties may prove helpful in this regard. It might even lead to a country-wide catalogue by providing farmers with the opportunity to approach INIA with their varieties.

¹⁸ This information was provided by Isabel Lapeña from the SPDA.

6.1.2 *Keeping traditional knowledge alive*

To keep the traditional knowledge of farming communities alive, teaching this knowledge in the local schools, for example through practical agricultural classes, might be an option. Some of the farmers found it difficult to pass their knowledge on to the next generation, whereas if traditional knowledge were taught at school that might make it more acceptable to young people. This would require the cooperation of the educational authorities and to a certain degree a reform of the school system, at least at the local level. Knowledgeable teachers would also be needed. The success of this proposal would also depend on the school enrollment ratio in the relevant regions.

6.1.3 *Pilot villages*

To address the farmers' concern about the disappearance of acknowledged sources of good propagating material, pilot villages could be introduced. In the past, some areas and villages were known for the diversity they could offer in terms of varieties and propagating material and the knowledge they possessed about cultivating them, but these places have either disappeared or are no longer well-known. Many Andean farmers therefore wanted such places to be accessible again and suggested making them more official. The introduction of pilot villages that are recognized and supported by the authorities could facilitate farmers' access to good-quality propagating material and the associated knowledge on its cultivation.

These villages would be places rich in agro-biodiversity and traditional knowledge. Giving them the status of pilot villages and supporting them in their efforts to conserve this diversity and knowledge would contribute to keeping alive the traditional knowledge, as well as spreading it to other villages through exchange. This initiative could be implemented under the current legal framework, and would not necessarily demand a lot of resources. In the initial stages, a program for selecting the villages, making their status known, and providing some support to their efforts could be enough. The introduction of pilot villages could have a significant positive impact on the conservation of traditional varieties and the sharing of traditional knowledge, but success would depend, among other things, on making local farmers aware of the existence of these pilot villages, and that they actually make use of them. Information would therefore be essential. In addition, certain cultural and environmental requirements should be met. Perhaps it would be possible for the villages that used to function as seed sources to regain their former status.

6.1.4 *Agro-biodiversity reserves*

Establishing national agro-biodiversity reserves to protect the land used for maintaining important plant genetic resources for food and agriculture, just as nature reserves protect the habitats of wild animals, could be an approach worth exploring. The main point would be to ensure that plant genetic diversity and traditional knowledge is not lost because valuable land is expropriated for mining and dam-construction, or harmed by the resultant pollution. This approach was mentioned both at the

national workshop and at the regional ones preceding it. The establishment and protection of such reserves would need to be covered in relevant laws and regulations, so it is important to have enough politicians in favor of such a measure.

Securing their support would probably entail information campaigns highlighting the importance of plant genetic diversity and Farmers' Rights. It is likely that some stakeholders, notably within the industries seeking more land for their operations, would oppose the establishment of genetic resources reserves, but this could be overcome if other stakeholders unite behind it.

The Supreme Decree N° 068-2001-PCM that introduces Law 26839 on Biodiversity Conservation and Sustainable Use highlights the possibility of establishing agrobiodiversity areas aimed at native species conservation and sustainable use by indigenous peoples (Articles 38 and 39). It is also stated that such areas would solely be aimed at the conservation of native species and indigenous cultures. The areas should promote and create awareness on native agrobiodiversity and indigenous communities' traditional practices and costumes, such as seed fairs and other mechanisms. The Ministry of Agriculture is responsible for the designation of such areas.¹⁹

In addition to this possibility, stronger legal protection could also be granted by reforming current legislation, such as Law 26839 on the conservation of biological diversity or Law 27811 introducing a protection regime for the collective knowledge of indigenous peoples derived from biological resources, or by drawing up a separate law on agro-biodiversity reserves.

Successful introduction of agro-biodiversity reserves would safeguard land needed for the conservation of genetic diversity and to keep traditional knowledge alive, and it would also protect the resources that farmers depend on for their livelihood.

6.1.5 *Emergency aid and development practices*

Agriculture and farmers' practices are affected by the aid strategies employed during emergencies. As noted in section 4, the farmers wanted these strategies to be more focused on and make more use of local supplies, rather than bringing in food from external sources. Buying locally, and providing farmers with access to propagating material, would empower farmers in the area and strengthen their ability to continue cultivating their crop diversity and keeping their traditional knowledge alive. Both governmental and non-governmental actors would have to be involved in such a change of aid practice for it to be effective. They would have to employ a more bottom-up approach in determining where food and propagating material should be accessed and how it should be distributed. While a change to this effect would necessitate a certain

¹⁹ There have also been some initiatives by Regional Governments in relation to agrobiodiversity conservation areas (see: Lapeña 2008).

degree of organizational reform, and perhaps the introduction of guidelines from the authorities, new legislation or amendments to the current laws would not be needed. It would be more a question of getting the necessary organizations interested in the concept and learning from institutions and areas already employing such an approach to emergency aid, than a far-reaching political and legislative process.

6.2 Equitable sharing of benefits

The right of farmers to participate equitably in the sharing of benefits arising from the utilization of plant genetic resources for food and agriculture is one of the measures mentioned in Article 9.2 of the Plant Treaty as part of the realization of Farmers' Rights. No further details as to what this might mean in practice are provided in Article 9, but elsewhere in the Plant Treaty benefit-sharing is dealt with in the context of the Multilateral System of Access and Benefit Sharing, and these provisions can be assumed to be of relevance to benefit-sharing in relation to Farmers' Rights as well. Facilitated access to plant genetic resources, exchange of information, access to and transfer of technology, capacity-building, and the sharing of monetary and other benefits arising from commercialization are the most important benefits listed in Article 18. It is also specified that the benefits should flow primarily to farmers who conserve and sustainably use plant genetic resources. Benefit-sharing may take a range of forms, not only monetary; moreover, benefits are not only to be shared with those farmers who happen to have plant varieties that are utilized by commercial companies, but with farmers in general who are engaged in the conservation and sustainable use of agrobiodiversity. All the benefit-sharing measures proposed by the farmers participating in the workshop fall in the last category, and most of them are non-monetary.

6.2.1 Access to plant genetic resources

One benefit-sharing measure suggested by the farmers was support for conservation farmers and *in situ* and on-farm conservation in the same way *ex situ* conservation is supported and receives resources. This can be done in various ways, for example by initiating and supporting efforts that promote farmers' access to good-quality propagating material and the associated traditional knowledge. Community seed banks can both store seeds and have a field gene bank. Storing seed in this manner functions as a backup to the normal seed-exchange networks, and is especially valuable in areas where these networks are eroding and where environmental factors may cause loss of crops and propagating material. These seed banks normally provide farmers with access to propagating material from local varieties that are adapted to the local environment, and can serve as important tools to avoid loss of genetic diversity. The Andean farmers who took part in the workshops were interested in the possibility of establishing community seed banks, and mentioned this as a way of securing their access to seed. However, to establish such banks, the farming communities would need external support, whether from government agencies or non-governmental organizations. This could be done within the existing legal and political framework, but would require the allocation of the necessary resources.

The organization of seed fairs is another measure that promotes access to seeds and seed exchange. Many of the workshop farmers displayed an interest in attending seed fairs, but quite a few found it difficult to do so due to the transportation costs. Support not only for the seed fairs themselves, but for the travel costs of farmers lacking the means to go, would therefore be a valuable contribution to higher attendance. Organizing seed fairs does not require a lot of resources or system reform, but some form of coordination by an institution or farmers' organization is needed, and if support is to be channeled to those farmers who need assistance to attend these fairs, funding will be necessary. Such funding could come from, for example, government agencies or NGOs.

Exchange visits between farming communities is a related strategy on a slightly smaller scale. Such visits, where farmers go to other villages to exchange seeds and knowledge, and where social ties and bonds of trust are created, can be very positive for farmers' access to seed. With seed exchange less common than it used to be, and with the bonds of trust between villages eroding, initiating exchange visits where farmers can meet, learn from each other and exchange seeds, can be a project worth exploring for NGOs and state agencies working on conservation and sustainable use of genetic resources. As broad a range of participants from the villages as possible would be beneficial to the success of such projects. Especially in the initial stages of the process, some encouragement and information would probably be needed to ensure that the various groups of farmers are represented. The goal of exchange-visit projects should be to enable the communities to continue with the visits once the project is over. Participatory processes are necessary, with farmers involved in all aspects. The attitudes and wishes of the workshop farmers indicate that projects targeting facilitated access to good-quality seeds and relevant knowledge would be welcomed by the farming communities, and that they would be willing to contribute to and eventually organize both seed fairs and exchange visits.

Some argue that farmers and their practices regarding exchange of seed and knowledge should be left alone without external interference. In this view, the "artificial" creation of forms of seed exchange among farmers from different parts of the country could mean that pests and diseases are brought into areas where they were previously unknown. Such risks would also apply to seed fairs. On the other hand, since all the farmers participating in the various workshops wanted better access to seed fairs, this measure should not be abandoned due to these concerns. Rather, considerations should be made as to whether seed fairs and exchange visits would better be kept within eco-regions, and simple guidelines aimed at hindering the spread of pests and diseases could be developed.

6.2.2 Research and dissemination of information

Research, dissemination of research results and access to technology is another important type of benefit-sharing. The workshop farmers were keen to receive information about agricultural research and they wanted to learn about new techniques and technologies, for example through demonstration plots. However, they also felt that the needs and priorities of farmers should influence research priorities to a larger degree than

what was perceived to be the case today. Agricultural researchers must let bottom-up approaches inform their research questions, and they need to involve farmers in setting the research agenda. One way to ensure that the priorities and needs of farmers are taken into consideration is to initiate more participatory plant breeding (PPB) projects. For such PPB projects to be successful, farmers need to be involved in the planning process of developing varieties, to ensure that they actually benefit from contributing and that the local communities get access to the resultant varieties. Slow diffusion of new breeding material has been a problem in many areas of Peru, both for commercial varieties and those developed as part of PPB projects. This process will have to be speeded up if these projects are to have a positive impact on farming communities. The institutions involved in PPB projects must therefore introduce new measures to spread the results.

Legislative Decree No. 1060 (of June 28, 2008 on the implementation of the bilateral trade agreement with the USA) establishes a National System for Agricultural Innovation and suggests the creation of a National Commission (*Comisión Nacional para la Innovación y Capacitación en el Agro*) with the authority to decide on agricultural investments to support agricultural research, innovation, technology and capacity building. This National Commission would be composed of 10 members, nominated by the Ministry of Agriculture and various other stakeholders. However, no mention is made regarding the representation of small-scale farmers, the Ministry of Environment, SENASA, or consumer associations. There is very little participation of small-scale farmers in decision-making related to research priorities for the agriculture sector, and as a result their needs are not properly taken into account.²⁰ This problem needs to be addressed by including farmers in the National Commission, and by the measures noted above.

Although most farmers wanted access to the resources held by research institutions and gene banks, and the importance of access to virus-free propagating material came up at the national workshop as well as the regional ones, few were actually aware of the possibility of getting access to the propagating material held by CIP. A central measure for facilitating access to the genetic resources held by CIP and gene banks is therefore informing farmers about this possibility, and of the necessary procedures.

In addition, the farmers were interested in learning more about the varieties they grow, and wanted access to laboratories to test their varieties for nutritional qualities, etc. Testing of this type could be included in PPB projects, or it could function as a form of compensation as part of other projects where farming communities work together with researchers.

6.2.3 Improving prices

Benefit-sharing measures that could improve the prices received for their produce were cited as very important by most farmers. Higher prices would mean easier access to cash for farming families, which would

²⁰ The information in this paragraph was provided by Isabel Lapeña

improve their living situation, as well as benefit their efforts toward the maintenance of agro-biodiversity by increasing the resources available to spend on input factors like new propagating material. Approached through traditional small-scale benefit-sharing measures, however, higher prices might be difficult to achieve. Single projects, in the tradition of fair trade, would give some farmers better prices, but would not address the underlying market mechanisms that produce the price levels. That would require market reforms, government involvement and nationwide adjustments. In some countries, the farmers' organizations and the government hold annual negotiations where the economic framework for agriculture for the coming year and the prices for agricultural products are set. This guarantees the farmers a certain price, and contributes to stability during times of drastic price changes in the world market. However, apart from relying on well-organized farmers' organizations and cooperatives, a solution inspired by such systems would also require political will and ability to reform the current system in Peru, and even then the outcome for the farmers would depend on their negotiating power. A smaller-scale measure that could give farmers better prices is assistance with processing. If farmers are provided with the necessary help to process their produce, they might be able to command higher prices. Projects targeted at this could be implemented on the local level, without necessarily requiring government involvement.²¹

6.2.4 Support mechanisms for Andean crops

Benefit-sharing can be achieved through the creation of incentive structures. Such structures can be important to ensure that farmers and farming communities continue to conserve and develop crop genetic resources. Introducing support mechanisms for farmers cultivating Andean crops was suggested as a desirable measure by the workshop farmers. It could function as an incentive for continuing the cultivation of the Andean crops, and help to halt the erosion of these crops that is currently taking place. This type of benefit-sharing might include production subsidies for Andean varieties and an advertising system for the resultant products. A register of native varieties would be beneficial for the practical implementation of such mechanisms, by listing the varieties classified as native, as well as valuable in itself as a way of recognizing the efforts of farmers and protecting their varieties against misappropriation.

To be effective on a national scale, such support mechanisms for the cultivation of native crops would need to have government support and to be implemented as a national strategy. This would involve changing agricultural policies so that they consciously promote the maintenance of agro-biodiversity, and include and take into consideration small-scale farmers to a greater degree than is currently the case. Such a change would have to balance the needs of small-scale farmers and the incentive structures necessary to the maintenance of agro-biodiversity, with the

²¹ Colored potato chips ('crisps') from a range of varieties have been one such idea, and there are now seven different companies selling such chips. But even though there is one in Sicuani it was not mentioned by the farmers in the workshop.

needs of the 'modern' farming sector focused on industrial crops for export. If a measure like subsidies is chosen, Peru, as a WTO member, would have to ensure that these arrangements do not violate the Agriculture Agreement and its provisions on subsidies. Since it is mainly export subsidies that are prohibited in most cases,²² this should not pose an insurmountable obstacle. Creating a system for advertising and promoting native varieties would impose fewer problems related to international obligations and national laws. Promoting native varieties can be done through a national branding system for these varieties. Information about this system to make customers familiar with the brand and the benefits of buying these products would be required.

6.2.5 Other measures

Various other measures not directly related to Farmers' Rights and the conservation and sustainable use of genetic resources were also mentioned as desirable by the farmers. These measures would improve the livelihoods and living conditions of farmers who work for crop diversity and could be envisioned as part of a broader definition of benefit-sharing. Some of the measures mentioned were: health insurance, irrigation, reforestation, house improvement, crop insurance, a certification system for organic products, cheap fertilizers/guano, education support for farmers' children so they can complete higher education, and easier access to low-interest loans.

In some circles, the consolidation of land-tenure rights by *campesino* and indigenous communities is also seen as an important prerequisite for *in situ* conservation. Access to credit depends on having land property titles.

6.3 Participation of farmers in decision-making

As was the case with the two previous categories, advancing the right of farmers to participate in decision-making on matters related to the conservation and sustainable use of genetic resources for food and agriculture is also mentioned in Article 9.2 in the Plant Treaty as one of the measures governments should take to protect and promote Farmers' Rights. Since the Plant Treaty does not specify what this might mean in practice, the countries must make their own decisions regarding the measures they choose to employ. However, it is possible to make some assumptions with regard to both the relevant matters and the form of participation. In addition to the implementation of the Plant Treaty, relevant areas for farmer participation include the development of national laws and regulations related to the management of plant genetic diversity in agriculture, such as seed laws, plant variety protection laws, patent laws and bioprospecting laws; the implementation of these laws and regulations; and the development of policies and agricultural programs. It is important to ensure that, barring direct participation, the farmers' representatives have been appointed in a way that provides legitimate representatives of farmer interests, for example by appointment through the farmers' own organizations. It is also important to make sure that the views of farmers actually engaged in agro-biodiversity conservation are represented.

²² WTO: www.wto.org/english/thewto_e/whatis_e/tif_e/agrm3_e.htm

For the Peruvian farmers who took part in the workshops, the right to participate in decision-making processes, especially when laws and policies are made, was very important. Because none of the participating farmers felt that this right was being upheld currently – quite the opposite: they felt ignored and left out – the system in Peru must be reformed so as to facilitate the real involvement of farmers in the decision-making processes mentioned above.

6.3.1 Preconditions for increased farmers' participation

There are two preconditions for increased participation of farmers in decision-making processes. First, decision-makers need to recognize the important role played by farmers in conserving and developing plant genetic diversity, in order to understand why their participation is central. Of course, this also means that they must be aware of the importance of conserving these resources and interested in developing laws and policies targeted at the continued maintenance of them. Second, farmers are often not in a position to participate effectively in complicated decision-making processes without prior capacity-building. Since action seems to be needed with regard to both of these preconditions in Peru, the country should implement measures for awareness-raising among decision-makers on the role of farmers in agro-biodiversity management, and capacity-building among farmers.

Such awareness-raising efforts should target all central decision-makers within agriculture and related areas, and could for example take the form of workshops. It is of course possible to choose other measures as well, but a workshop offers the advantage of letting the participants engage actively with each other and the issues, and might therefore be more likely to succeed than a more passive approach. On the other hand, traditional information campaigns offering for example written materials might require fewer resources and be easier to organize. Such awareness-raising projects could be initiated and implemented by a government agency like INIA, or an institution from the non-governmental sector could take the lead. What is important is that the institution in question is acknowledged by the decision-makers as a credible source of information.

Part of the capacity-building efforts targeted at farmers should focus on disseminating information on existing laws and policies. The acute need for this type of information is shown by the fact that the farmers attending the workshops knew almost nothing about the laws and policies affecting them. However, they expressed an interest in learning and taking part in the decision-making processes – which indicates that if the necessary measures are put in place, farmers' participation in Peru might succeed and have an impact on how genetic resources are managed. It is also important that the capacity-building efforts focus on how laws and policies are made, because the farmers need to be familiar with the political process to be able to participate effectively. This also means that they must know when, how and where to target their influence, which would be made easier if a specialized agency for *in situ* conservation could be established under INIA. This agency would coordinate *in situ* conservation efforts, would communicate with farmers and collect their

views on relevant matters. Having one specific agency to relate to would also make it easier for farming communities to communicate their concerns to the authorities

6.3.2 *Farmers' organizations*

In Peru, the lack of farmers' organizations suitable for representing farmers in decision-making processes is another obstacle to farmers' participation. At the regional workshops, farmers expressed an interest in establishing an organization for farmers engaged in the management of agricultural biodiversity, and wanted help to do so. Such an organization could advocate the interests of these farmers and represent them in dealings with the authorities, and would probably be beneficial to the participation of farmers in decision-making, and therefore also to the realization of Farmers' Rights. It is to be hoped that the forming of a new nationwide organization for conservation farmers at the end of the national workshop represents a step in the right direction towards remedying the lack of organizations for channeling farmers' participation. As yet, it remains to be seen whether this new organization will have a real impact and succeed in organizing the majority of farmers engaged in the maintenance of agro-biodiversity. Information campaigns telling farmers about the new organization, what it wants to do and why they should join, will be important to achieve this. Measures to create awareness and capacity on the issue of Farmers' Rights, are other central challenges for the new organization.

6.4 Ensuring legal space for traditional practices of seed-saving and exchange

The right of farmers to save, use, exchange and sell farm-saved propagating material is addressed in Article 9.3 of the Plant Treaty, which states that nothing in Article 9 should be interpreted as limiting this right. The Preamble urges that ensuring the necessary legal space for farmers to continue their traditional practices of seed-saving and exchange is crucial to the realization of Farmers' Rights. The workshops held with Andean farmers in Peru showed that seed-saving and exchange still take place in many communities, but that these traditional practices have come under pressure with the introduction of new agricultural practices, the erosion of genetic diversity and the loss of traditional knowledge.

6.4.1 *Building trust for the purpose of seed exchange*

The workshops demonstrated that seed exchange is more likely to occur when farmers know and trust each other, so efforts to build trust among communities in order to foster seed exchange could be useful. Such measures could be implemented at the local level; they would be possible within the existing legal and political framework and would not require a lot of resources. Civil society organizations could be instrumental in initiating and organizing activities where farmers can meet and get to know each other. A bottom-up approach would be crucial to ensure that the activities would be continued in the long run. The earlier-mentioned exchange visits could be one of the measures employed to this end.

6.4.2 *Reforming legislation and policies*

The plant variety protection and seed laws of Peru were not well-known among the farmers. Most had never heard about these laws, and as a result the impacts of both the Seed Law and the Plant Variety Protection (PVP) Law have so far been limited on these farming communities. At the national workshop it was suggested that a chapter on Farmers' Rights should be included in the Seed Law and that a stronger farmers' exemption should be part of the PVP law.

That INIA has already said that it will propose the inclusion of a chapter on Farmers' Rights in the Seed Law, outlining the rights of farmers to use and exchange farm-saved seed, is an important step towards making this a reality. There was widespread agreement at the national workshop that such a chapter is necessary, and that one of the main purposes should be to make sure that concerns regarding and procedures to ensure plant health and seed quality do not erect barriers to the traditional practices of seed-saving and exchange. The procedures related to plant health and seed quality should be simplified to avoid discouraging farmers. As part of this process, the suggestion from the national workshop of making the process of registering native varieties more straightforward should also be implemented. Especially if registration is free, this should enable farmers to sell their seeds commercially more easily.

Changing the legal framework in this manner will require the cooperation and consent of a majority of the political decision-makers, but the consensus surrounding this measure at the national workshop, where a wide range of different stakeholder groups and decision-makers were present, suggests that it can be done. If so, Peru might take an important step toward the realization of Farmers' Rights.

It might be more difficult to incorporate a wider farmers' exemption into the new PVP law. An exemption for farmers that allows them not only to use farm-saved seed from protected varieties on their own land (which should be interpreted as the land they till), but also to exchange and sell such seed would likely meet with opposition from actors in the breeding industry. It would also be difficult due to the country's international commitments. Peru is currently not a member of UPOV, but the country has committed itself to adopt the 1991 version of the UPOV Convention through its recent bilateral trade agreement with the USA. Exemptions for farmers and breeders have been restricted in the 1991 UPOV Act compared to that of 1978, and the trade agreement would therefore have direct consequences for the realization of Farmers' Rights in the country.

Because the workshop farmers are not currently using improved varieties, they did not see this issue as very relevant to them, so they are unlikely to exert any pressure on the government with regard to this issue. Since knowledge about these laws is almost non-existent in many areas of Peru, it is also likely that farmers will continue with their traditional practices even if they use some protected varieties on their holdings. That will become a problem the day breeding companies decide to take these farmers to court. The government should therefore try to protect farmers from liability in such cases by making the farmers' exemptions as wide as

possible in the new PVP Law, in terms of small-scale farmers customary rights to maintain their traditional practices of using, exchanging and selling seeds and propagating material.

7 Conclusions and recommendations

This study on farmers' perceptions and Farmers' Rights in Peru is based on the workshops held by Maria Scurrah in Peru from March to May, 2008, and the national workshop held in Lima in September, 2008. The goal of both the workshops and the report is to support the process of implementing the Plant Treaty in Peru, with a particular focus on the realization of Farmers' Rights. The approach has been to look into the situations and views of farmers and then develop recommendations based on the implication of these.

The realization of Farmers' Rights is a highly relevant issue in Peru due to the country's rich agro-biodiversity and the relative poverty and marginalization of Peruvian farmers. The workshops showed that the farmers themselves have many ideas as to how this can be done. They are interested in taking part in and organizing projects, as well as participating in the relevant decision-making processes.

The measures needed for realizing Farmers' Rights can be grouped into four categories:

- protection of traditional knowledge,
- equitable benefit-sharing,
- participation of farmers in decision-making processes
- providing the legal space necessary for farmers to continue their traditional practices of seed-saving and exchange.

The following core strategies build on the perceptions and suggestions of the farmers participating in the workshops and the implications of these as analyzed in section 6. For the purpose of realizing Farmers' Rights in Peru these measures from the four different categories are recommended:

Protection of traditional knowledge:

- Efforts should be made both to document traditional knowledge in such a way that it cannot be misappropriated, and to keep it alive by sharing it and teaching it to the next generation.
- Agro-biodiversity reserves should be introduced to protect the land most important for the cultivation of native varieties in as many communities as possible. This would help keep traditional farming practices and traditional knowledge alive.

Equitable benefit-sharing:

- Farmers' access to suitable propagating material of good quality should be promoted by providing support to community gene banks, seed fairs and exchange visits, and research into seed systems.
- Farmers should have access to research, technology and new techniques through information dissemination and collaboration with researchers. Bottom-up approaches should inform agricultural research, PPB should be central, and it is important that the resultant varieties are disseminated quickly.

- Farmers must to a greater extent be informed about existing possibilities and projects, such as the CIP's repatriation program.
- Efforts should be made to get higher prices for farmers' crops, for example by initiating projects providing assistance with processing and marketing.
- A support system for Andean crops should be considered to ensure that the incentive system also promotes this type of agriculture.
- Pilot villages should be considered as a measure to bolster the conservation and exchange of genetic resources and traditional knowledge.

Participation of farmers in decision-making:

- Awareness-raising efforts should be implemented targeting all relevant decision-makers, for example through workshops.
- Capacity-building efforts should be implemented targeting farmers in all regions, disseminating information about existing laws and policies as well as political processes and ways to influence the outcome.
- The national farmers' organization that was established at the workshop should be supported in its efforts to organize conservation farmers engaged in the management of plant genetic resources for food and agriculture to influence legislative and policy processes.
- Farmers' organizations should be consulted as part of legislative and policy processes and during their implementation.

Providing legal space for the continuation of traditional practices:

- A chapter on Farmers' Rights should be included in the Seed Law.
- A wider farmers' exemption should be tried incorporated into the new PVP law.
- Projects in farming communities should focus on networking and building trust, to promote seed exchange.

In addition to these recommendations, the Peruvian government should also consider making some institutional changes to facilitate the realization of Farmers' Rights. A central recommendation resulting from the discussions in the workshops is that the role of INIA should be clarified. This can be done by making INIA the sole focal point for implementation of the Plant Treaty at the national level in Peru. Another measure in the category of institutional reform would be to establish an interagency committee to coordinate the different measures for realizing Farmers' Rights launched by various government units.

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Annex 1:

National Workshop on Farmers Rights and their Implementation in the Context of the FAO International Treaty: PROGRAM

INIA, Lima 24 – 25 September 2008

Day 1 (September 24)

Chair: Manuel Sigueñas, INIA

- 0900 – 0915: Welcome address
Dr. Juan José Risi Carbone, Director, INIA
- 0915 – 0945: Introduction to the workshop and to the International Treaty
Manuel Ruiz Muller, Director, SPDA
- 0945 – 1030: The FAO IT and the Multilateral System with the SMTA in the light of intellectual property and other relevant issues: challenges for Peru
Ing. Manuel Sigueñas, INIA
- 1030 – 1115: Discussion
- 1115 – 1130: Coffee break
- 1130 – 1215: The FAO IT and Farmers Rights
Dr. Regine Andersen, Senior Research Fellow and Director of the Farmers' Rights Project, the Fridtjof Nansen Institute, Norway
- 1215 – 1300: Discussion
- 1300 – 1500: LUNCH

Afternoon session

Chair: Isabel Lapeña, SPDA

- 1500 – 1530: Perceptions on Farmers Rights from the point of view of farmers
Farmer representatives from the regional workshops together with Maria Scurrah, President, Grupo Yanapai
- 1530 – 1600: Advances in the implementation of Farmers Rights in Peru
Manuel Ruiz Muller, Director, SPDA
- 1600 – 1630: Discussion

- 1630 – 1645: Coffee break
- 1645 – 1815: Working Groups: What needs to be done to implement Farmers' Rights in Peru?

Day 2 (September 25)

Chair: Manuel Sigueñas, INIA

- 0090 – 0930: Summary of Day 1
- 0930 – 1045: Presentation of working group results from Day 1 and discussion
- 1045 – 1100: Coffee break
- 1100 – 1145: The role of the public sector in implementing Farmers' Rights in Peru
Ing. Manuel Sigueñas, INIA
- 1145 – 1230: The role of ex situ conservation centres in implementing Farmers' Rights
Dr. Willy Roca, CIP
- 1230 – 1300: Discussion
- 1300 – 1430: LUNCH
- 1430 – 1600: Working groups: Elements of a strategy for the implementation of Farmers' Rights in Peru
- 1600 – 1700: Presentation of working group results and recommendations on how to move forward
- 1700: Closing remarks
Farmer representatives from the regional workshops together with Manuel Sigueñas, INIA

Annex 2: **Participants at the national workshop in Lima**

Name	Institution/Community
Juan Rissi	INIA
Manuel Sigueñas	INIA
Tulio Medina	INIA
Agripina Roldan	INIA
Roger Becerra Gallardo	INIA
Julio Cesar Aroni Huamán	INIA-SUDIRGEB
Victoriano Fernandez Morales	Farmer, Monte Azul-Huanuco
Constantina Quecaño	Farmer, Ticahuanca-Puno
Miguel Soto Meneses	Farmer, Chopca-Huancayo
Petronila Neira Apaza	Farmer, CIRNMA-Puno
Damaso Pariona Ordoñez	Farmer, Laria-Huancayo
German Briones Bolaños	Farmer, Tangayoc-Cajamarca
Yuve Mauricio Sanchez	Farmer, Parihuanca-Huancayo
Armando Zenteno Flores	Farmer, FERCCONJ
Aurora Ortega	INDECOPI
Margarita Valladares	INDECOPI
Willy Roca	CIP
Enrique Chujoy	CIP
Ricardo Sevilla	CGIAR
Ramiro Ortega	CRIBA-Cusco
Santiago Pastor	MINAM/Consultor
Manuel Ruiz	SPDA
Isabel Lapeña	SPDA
Ilko Rogovich	SPDA
Maria Scurrah	Grupo Yanapai
Regine Andersen	FNI
Nicole Gonzalez del Riego	Traductora

Annex 3: Excerpts from the ITPGRFA

PROVISIONS PERTAINING TO FARMERS' RIGHTS IN THE INTERNATIONAL TREATY ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

From the *Preamble*

The Contracting Parties,

(...) *Affirming* that the past, present and future contributions of farmers in all regions of the world, particularly those in centres of origin and diversity, in conserving, improving and making available these resources, is the basis of Farmers' Rights.

Affirming also that the rights recognised in this Treaty to save, use, exchange and sell farm-saved seed and other propagating material, and to participate in decision-making regarding, and in the fair and equitable sharing of the benefits arising from, the use of plant genetic resources for food and agriculture, are fundamental to the realisation of Farmers' Rights, as well as the promotion of Farmers' Rights at national and international levels.

Article 9 – *Farmers' Rights*

9.1 The Contracting Parties recognise 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 realising 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 the sharing of benefits arising from the utilisation 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 seeds/ propagating material, subject to national law as appropriate.

From Article 13 – Benefit Sharing in the Multilateral System

13.3 The Contracting Parties agree 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 utilise plant genetic resources for food and agriculture.

From Article 18 – Financial Resources

18.5 The Contracting Parties agree that priority will be given to the implementation of agreed plans and programmes for farmers in developing countries, especially in the least developed countries, and in countries with economies in transition, who conserve and sustainably utilise plant genetic resources for food and agriculture.

In addition, several other provisions are relevant, particularly on conservation (Art. 5), sustainable use (Art 6) and on the multilateral system (Part IV).

Annex 4: Resolution on Farmers' Rights

Resolution on Farmers' Rights,

adopted by the Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture at its Second Session (29 October–2 November 2007), Thursday, 1 November.

THE GOVERNING BODY,

Recalling the recognition in the International Treaty of the enormous contribution that local and indigenous communities and farmers of all regions of the world have made, and will continue to make, for the conservation and development of plant genetic resources as the basis of food and agriculture production throughout the world;

Recalling the importance of fully implementing Article 9 of the International Treaty;

Recalling also that according to Article 9 of the International Treaty, the responsibility for realizing Farmer' Rights, as they relate to plant genetic resources for food and agriculture, rests with national governments;

Acknowledging that there is uncertainty in many countries as to how Farmers' Rights can be implemented and that the challenges related to the realization of Farmers' Rights are likely to vary from country to country;

Recognizing that exchange of experiences and mutual assistance between Contracting Parties can significantly contribute in making progress in the implementation of the provisions on Farmers' Rights in the International Treaty;

Recognizing the contribution the Governing Body may give in support of the implementation of Farmers' Rights;

Encourages Contracting Parties and other relevant organizations to submit views and experiences on the implementation of Farmers' Rights as set out in Article 9 of the International Treaty, involving, as appropriate farmers' organizations and other stakeholders;

Request the Secretariat to collect these views and experiences as a basis for an agenda item for consideration by the Governing Body at its Third Session to promote the realization of Farmers' Rights at the national level, and to disseminate relevant information through the website of the International Treaty, where appropriate;

Appreciates the involvement of farmers' organizations at this Second Session and affirms its commitment to continue to involve farmers' organizations in its further work, as appropriate, according to the Rules of Procedures established by the Governing Body.

The Fridtjof Nansen Institute is a non-profit, independent research institute focusing on international environmental, energy, and resource management. The institute has a multi-disciplinary approach, with main emphasis on political science, economics, and international law. It collaborates extensively with other research institutions in Norway and abroad.



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