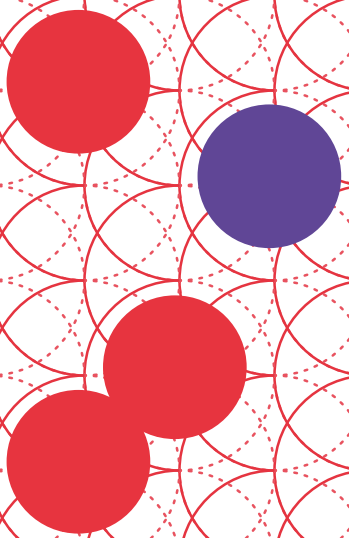
RECOVERING THE CYCLE OF WISDOM: BEACONS OF LIGHT TOWARD THE RIGHT TO SEEDS

Guide for the Implementation of Farmers' Rights



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This guide is based on the collective work of the IPC Working Group on Agricultural Biodiversity, in particular in the context of the International Treaty on Plant Genetic Resources for Food and Agriculture's (ITPGRFA) Ad-hoc Technical Expert Group on Farmers' Rights (AHTEG-FR). The IPC is an autonomous and self-organized global platform of small-scale food producers' and rural workers' organizations as well as grassroots/community based social movements to advance food sovereignty at the global and regional level.

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Embracing traditions
attached to the distant past,
burning incense and copal,
waiting for the answer of the Gods
in the depths of the nights,
in the mute of silence,
in the abandonment of our solitude
in front of the vastness of the universe,
recognizing our smallness
in the face of the mystery
of the stone altars.
That was the faith we inherited,
that is the rope of time
that ties us to the roots
of the tree of life
that the ancestors planted.

Humberto Ak'abal (1952 – 2019)[1]

1 Humberto Ak'abal was a poet from the K'iche' (Maya) People.

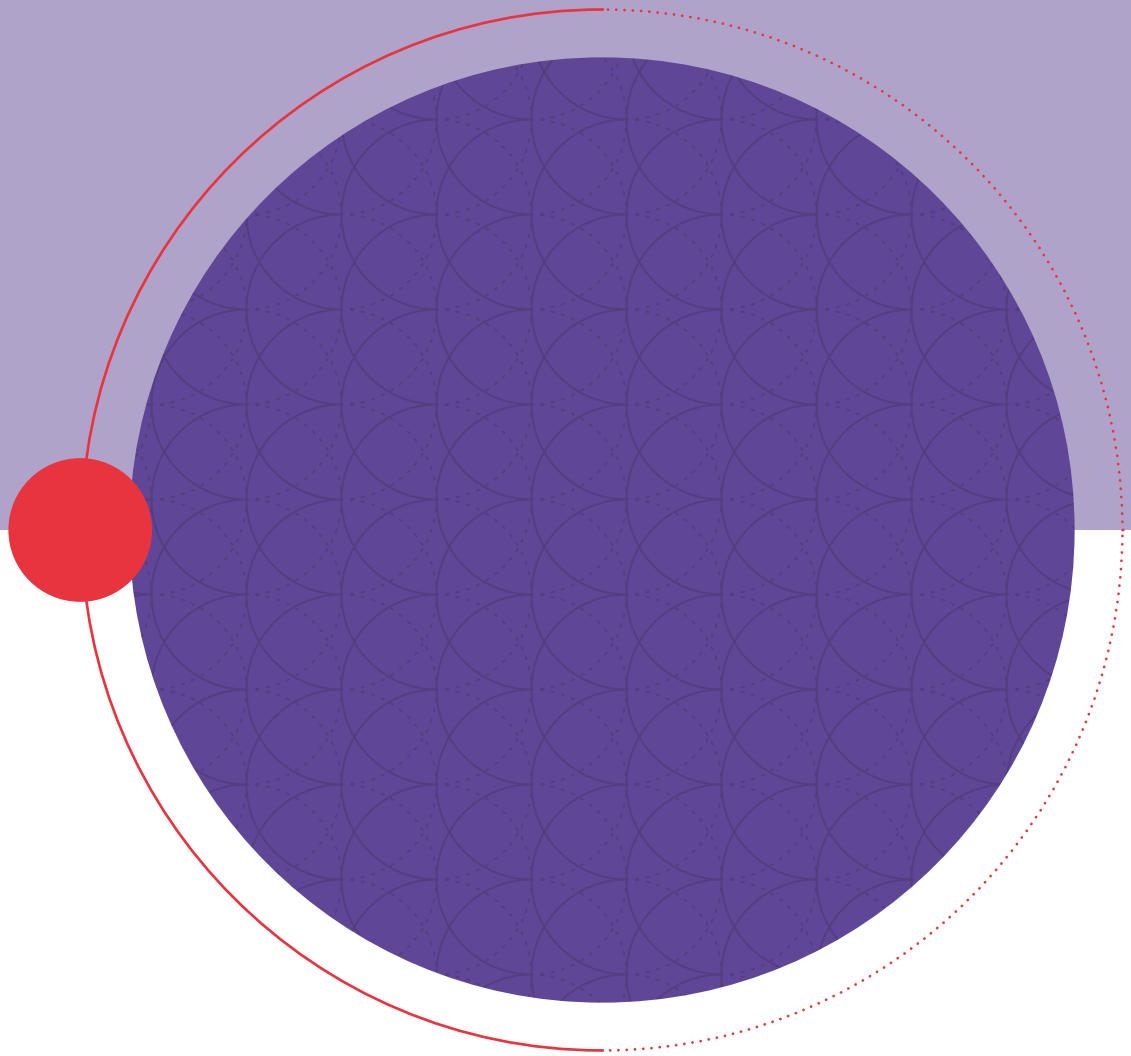
CONTENTS

LIST OF BOXES

ACRONYMS & ABBREVIATIONS

AHTEG	Ad Hoc Technical Expert Group
CBD	Convention on Biological Diversity
CESCR	UN Committee on Economic, Social and Cultural Rights
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CSB	Community Seed Bank
CSO	Civil Society Organization
DUS	Criteria of distinctiveness, uniformity and stability
DSI	Digital Sequence Information
FPIC	Free Prior and Informed Consent
GB	Governing Body
ICESCR	International Covenant on Economic, Social and Cultural Rights
IPC	International Planning Committee for Food Sovereignty
IPR	Intellectual Property Rights
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
NGO	Non-Governmental Organization
NBT	New Breeding Techniques
PGRFA	Plant Genetic Resources for Food and Agriculture
PVP	Plant Variety Protection
TRIPS	Trade Related Aspects of Intellectual Property Rights
UNDRIP	UN Declaration on the Rights of Indigenous Peoples
UNDROP	UN Declaration on the Rights of Peasants and Other People Working in Rural Areas
UPOV	International Union for the Protection of New Varieties of Plants
WTO	World Trade Organization

ABOUT THIS GUIDE



This guide aims to provide practical guidance for food producers' organizations, civil society organizations (CSOs) as well as governments and public institutions about how to implement peasants' and Indigenous Peoples' rights to seeds[2] (sometimes referred to as "farmers' rights") in national and regional policy frameworks. Its objective is to provide a useful tool for actors who engage in seed-related policy processes (revision of laws, drafting of new laws etc.) at national and/or regional level and who are eager to ensure that these respect, protect and promote peasants' and Indigenous Peoples' rights and autonomy over seeds. The authors are aware that the struggle for conserving and further developing agricultural biodiversity is not limited to legal strategies, but starts with the concrete, daily work of peasants and Indigenous Peoples to conserve, select, save, multiply, store, exchange, sell and further develop their seeds. However, peasants' and Indigenous Peoples' rights to seeds can only come into effect if they are recognized and enforceable through laws. Such laws must then be enforced by states through adequate institutional frameworks, while ensuring accountability and remedy for rights holders, i.e. peasants and Indigenous Peoples. Therefore, the struggle for human rights-based seed policies and laws is of crucial importance for the conservation of biodiversity and social justice.

This guide is based on the collective work that the Working Group (WG) on Agricultural Biodiversity of the International Planning Committee for Food Sovereignty (IPC) has been carrying out for many years, in particular since the adoption of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). IPC and its member organizations – representing peasants and Indigenous Peoples who conserve, sustainably use and constantly develop agricultural biodiversity – have demanded that governments and ITPGRFA promote and fully implement the right to seeds as recognized by ITPGRFA as well as other international instruments (see Chapter I).

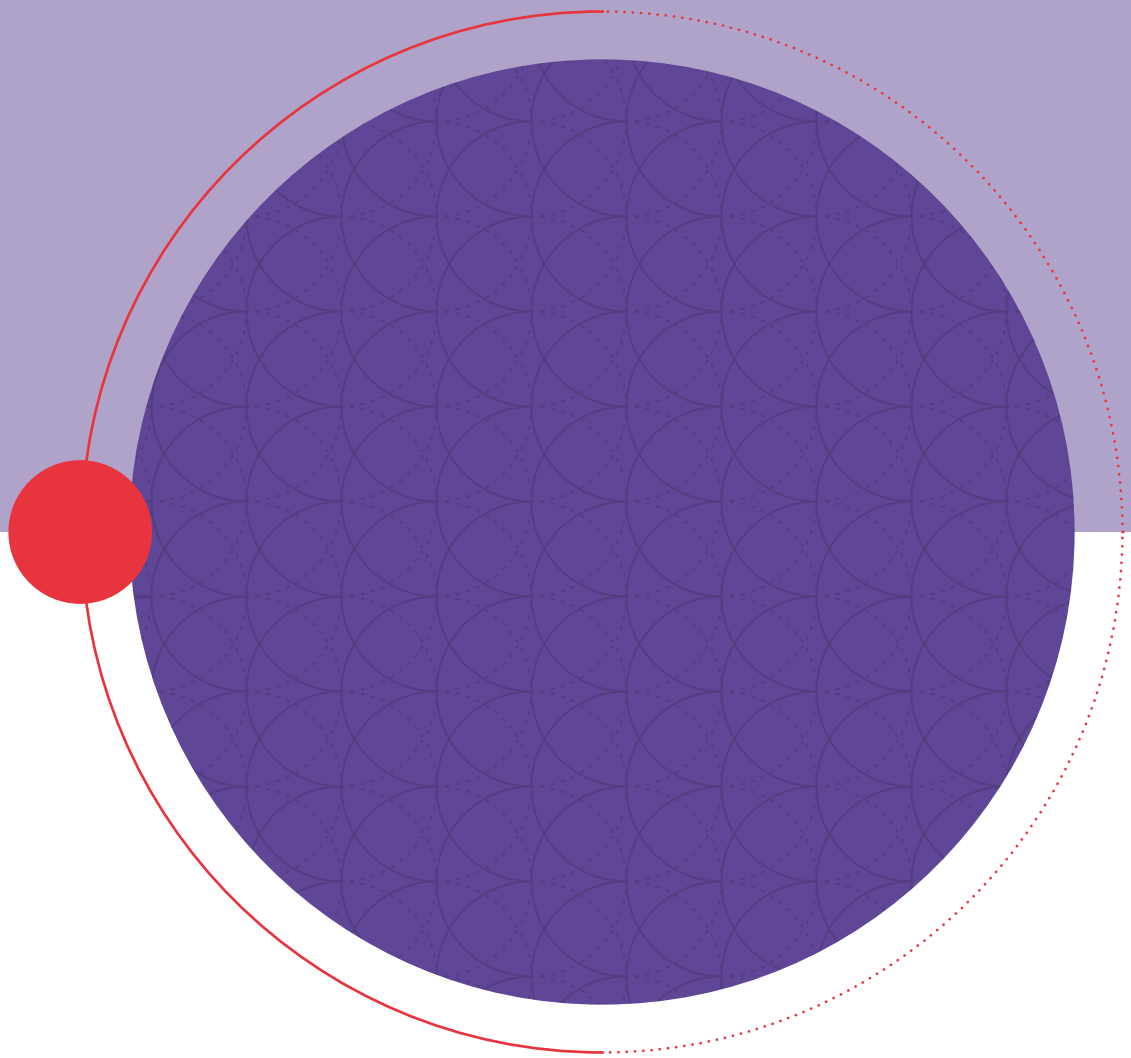
In recent years, the debate on the implementation of peasants' and Indigenous Peoples' right to seeds ("farmers' rights") has intensified, especially in international governance spaces of plant genetic resources and biodiversity. Constant pressure from peasants' and Indigenous Peoples' organizations gathered in IPC, coupled with the support of some governments, has led to the launch of a formal process within ITPGRFA. At its 7th session, the Governing Body of the Treaty established an Ad Hoc Technical Expert Group (AHTEG) on farmers' rights, with the mandate to provide guidance to close the implementation gap regarding farmers' rights.[3] The IPC has actively participated in this process, identified the main challenges to the realization of peasants' and Indigenous Peoples' right to seeds, and proposed solutions. Moreover, the importance of seeds and agricultural biodiversity has been increasingly recognized as a key issue in efforts to stop the rapid loss of biodiversity, including in the context of developing a new Global Biodiversity Framework under the Convention on Biological Diversity (CBD). Simultaneously, peasants' and Indigenous Peoples' organizations around the globe have been fighting for national and regional policy and legal frameworks that effectively protect their rights over seeds, and opposing laws that pave the way for ever-increasing seed grabbing.

2 People and communities around the world use different terms and concepts to self-identify and to refer to their seeds, which depend on their specific socio-cultural context, values and worldviews. This document does not intend to be prescriptive of the terms and concepts that people should use, but aims to address all people and communities who conserve and nurture biodiversity. These are therefore covered, even though the document mainly refers to "peasants" and "Indigenous Peoples". Please also see Box 1 of this paper. The term "seeds" includes vegetative propagation materials.

3 Resolution 7/2017. The Governing Body extended the mandate of AHTEG at its 8th session in 2019 (Resolution 6/2019). AHTEG is mandated to develop a) an inventory of existing measures to implement farmers' rights; and b) "options" that should guide states in their efforts to implement farmers' rights.

This document thus aims to connect two levels of food producers' organizations' struggles, namely national and international advocacy, so that they can mutually reinforce each other. The authors hope that this guide can serve as a tool to support peasants' and Indigenous Peoples' organizations as well as their allies in CSOs and governments to advance the full realization of the right to seeds.

INTRODUCTION



For peasants and Indigenous Peoples around the world, seeds are life. For many of them, their seeds are living beings that deserve respect, love and care. They are the basis of the food they produce for their communities and beyond, embody their close connection with their natural environment, and are critical for the social fabric of their communities and their cultural expressions. Seeds and agricultural biodiversity – i.e. the diversity of all living beings above and below ground and in waters within the productive ecosystem as well as the diversity of the ecosystems themselves – are the result of the interplay, across all ecosystems and over thousands of years, of cultural and biological diversity. Throughout the world, peasants and Indigenous Peoples have developed their own distinct systems through which they conserve, manage, nurture and further develop their seeds. These seed systems are inextricably linked to deep ancient, traditional knowledge, which continues to be passed on from one generation to the next, while being constantly enriched through peasants' and Indigenous Peoples' innovations.

Peasants' and Indigenous Peoples' seed systems and their agroecological farming and management practices are critical components of local food systems, which feed more than 70% of the world's population, contributing to improve human health and well-being, while respecting and sustaining the natural environment. They are thus a core pillar of people's food sovereignty and of peasants' and Indigenous Peoples' autonomy, ensuring resilience in the face of climate change, conflicts as well as different kinds of shocks and crises.[4]

No peasant or indigenous seed exists without a community that conserves, uses, nurtures and further develops it within its production system, its culture and the ecosystem it lives in. For this reason, seeds have been recognized as a human right of peasants and Indigenous Peoples, which is inherently collective and holistic.[5] Peasants and Indigenous Peoples thus have the right to continue sustaining their evolving relationship with plants, animals, microorganisms and all of nature, as a condition for their wellbeing and life in dignity. Their right to seeds is closely intertwined with a number of other human rights, such as the right to food and nutrition, the right to health, the right to work, and the right to culture and to self-determination.

Through their seed, management and production systems, peasants and Indigenous Peoples critically contribute to the conservation and sustainable use of biodiversity. In many instances, they are custodians and stewards of both natural and agricultural ecosystems, protecting, conserving and restoring them. Respecting, protecting and guaranteeing their rights is therefore a key contribution to halting biodiversity loss and protecting ecosystems.

Despite their importance for food and nutrition security, for the realization of human rights as well as for the conservation of biodiversity and ecosystems, peasants' and Indigenous Peoples' seed systems are increasingly marginalized and under threat. Dispossession of rural people and communities from their lands as well as ecosystem destruction through extractive activities such as industrial agriculture and mining entail conflicts and forced migration, while destroying the social fabric and the ways of life of millions of families. Intellectual property rights

4 Working Group on Agricultural Biodiversity of the International Planning Committee for Food Sovereignty (IPC). 2015. Biodiversity for Food and Agriculture: the perspectives of small-scale food providers. Contribution to FAO's report "State of the World's Biodiversity for Food and Agriculture" (SoW-BFA).

5 See Chapter I for more details.

(IPR) in the form of restrictive plant variety protection and/or patent laws, as well as increasingly rigid seed laws and seed marketing rules are substantially limiting peasants' and Indigenous Peoples' rights and seed management practices.[6] In several cases, these are outright criminalized, in a clear breach of states' human rights obligations.[7] Restrictive legal frameworks and measures that support the industrial/commercial seed sector are just some policies that promote an industrial model of agriculture. This model, in turn, is responsible for massive destruction of biodiversity and ecosystems through deforestation, depletion and pollution of soils, water and wildlife as well as consequent human rights violations. Industrial agriculture and the promotion, through public policies, of industrial, hybrid seeds of a limited number of homogeneous and uniform, high-yielding crops and varieties, as well as genetically modified organisms (GMOs), has led to the loss of some 75% of agricultural biodiversity over the last century.[8] New technologies such as gene editing and digital sequencing of genetic information are being used by corporations to further increase their monopolistic power over seeds and biodiversity, and to extract wealth from rural people.[9]

The disastrous consequences of the industrial agricultural and food systems are all too visible now to be further ignored. The deep ecological crises that the world is facing and whose most visible expressions are unprecedented climate change as well as the rapid loss of biodiversity requires states and societies to profoundly transform their agricultural and food systems. For peasants and Indigenous Peoples and their communities, the combination of erroneous policies and ecological crisis results in multiple shocks, which threaten their livelihoods and existence, thus jeopardizing world food and nutrition security. Over the last years, agroecology has become increasingly recognized as the appropriate response to the existential crisis that human societies are facing, which builds on peasants' and Indigenous Peoples' traditional knowledge and innovations while incorporating scientific advances.[10]

Whereas peasants and Indigenous Peoples are most affected by climate change and biodiversity destruction, they are also key to finding a solution to today's challenges. Their seed, management and production systems as well as their deep knowledge and their ability to innovate are critical to adapt crops and varieties to changing conditions, and to conserve, restore and further develop agricultural biodiversity. What is more, their close relationship with the natural world as well as the enormous amount of biodiversity that they nurture every day are essential to renew the ecological balance of our societies. In this sense, the respect and effective protection of their rights is a critical contribution to the transformative changes that are urgently needed today. Recognizing and supporting peasants' and Indigenous Peoples' seed systems therefore needs to be at the heart of strategies that aim to protect biodiversity and to realize human rights, as building blocks for a pathway into a different future.

This guide provides elements to guide discussions on how peasants' and Indig-

6 See Chapter II for more information.

7 La Via Campesina/GRAIN. 2015. Seed laws that criminalise farmers: resistance and fightback. Available at: viacampesina.org/en/seed-laws-that-criminalise-farmers-resistance-and-fightback.

8 FAO Commission on Genetic Resources for Food and Agriculture. 2019. The State of the World's Biodiversity for Food and Agriculture. Available at: www.fao.org/state-of-biodiversity-for-food-agriculture/en.

9 See Chapter II.5 for more details.

10 FAO Council. 2019. The Ten Elements of Agroecology. Available at: www.fao.org/3/ca7173en/ca7173en.pdf. See also: High Level Panel of Experts. Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. Available at: www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE_Reports/HLPE-Report-14_EN.pdf.

enous Peoples' right to seeds can be enshrined in national and regional legal frameworks, taking into account their distinct seed systems. Just as seed management is intrinsically collective, this guide is equally based on a collective effort. It condenses numerous discussions within the IPC WG on Agricultural Biodiversity and is therefore based, above all, on the inputs of peasants and Indigenous Peoples from all regions of the world. Further inputs have been provided by other CSOs who support the IPC, several of which provided comments on a draft version of this guide.

The authors hope that this guide can be useful for different actors, including for state authorities, international organizations and CSOs. First of all, however, this guide is intended to support the struggles of peasants and Indigenous Peoples around the world who cultivate and nurture biodiversity and life every day. This guide belongs to them.

THE INTERNATIONAL RECOGNITION OF PEASANTS' AND INDIGENOUS PEOPLES' RIGHTS TO SEEDS

Peasants and Indigenous Peoples – women and men – are the driving force behind the agricultural biodiversity that feeds the world. They select, save, multiply, store, nurture, exchange, sell and develop their seeds in a dynamic way, based on their collective knowledge, practices and innovations. The co-evolution of farming communities and their seeds (and animal breeds) is reflected in the inextricable link between the former and the latter: no peasant seed exists without the social group that cares for it. Contrary to what agribusiness companies and their allied scientists, governments and institutions want to make us believe, the role of peasant and Indigenous communities today is more crucial than ever: only they are able to adapt their seeds to the changing conditions induced by climate change and in a context of rapidly declining biodiversity.

Because of their past, present and future role in the development of biodiversity, peasants' and Indigenous Peoples' rights over seeds have been internationally recognized by states. This recognition is the result of many years of negotiations and pressure from peasants' and Indigenous Peoples' organizations, but also due to the unprecedented erosion of biodiversity that the world is facing.[11] Albeit not always explicit, the recognition of the right to seeds is also an acknowledgement of the industrial food system's unsustainability as well as of the systematic violations of rural communities' and people's human rights.

The following paragraphs provide an overview of the most relevant international instruments that recognize peasants' and Indigenous Peoples' right to seeds:

- The ***International Covenant on Economic, Social and Cultural Rights*** (ICESCR) Article 11 establishes the human right to adequate food and nutrition. The UN Committee on Economic, Social and Cultural Rights has clarified that this right is realized when every man, woman, and child, alone or in community with others, "has physical and economic access at all times to adequate food or means for its procurement".[12] The legal core contents of the right to food are availability, accessibility, adequacy, and sustainability. Not only does food need to be available from natural resources (through the production of food, fishing, hunting, or gathering) or sale in markets or shops, but it furthermore needs to be accessible to all, both economically and physically. In addition, food must be adequate, taking into account, for example, dietary needs (related to age, living conditions, occupation, gender etc.), safety factors, purity (i.e. free from harmful substances such as pathogens and contaminants coming from industrial or agricultural activities), and cultural acceptability. Finally, food production and consumption must be sustainable for both present and future generations.
  In view of the foregoing, it is clear that the direct availability of food obtained from agriculture is integral to the human right to food and nutrition for those who exercise their right in this way, i.e. through farming. The access to, use of, and control over the natural goods[13] required for this (in particular land, seeds, and water) is therefore a core component of the human right to food and nutrition.

11 The serious decline in global biodiversity is confirmed by several reports, such as: IPBES. 2019. Global Assessment Report on Biodiversity and Ecosystem Services. Available at: ipbes.net/global-assessment; or FAO. 2019. The State of the World's Biodiversity for Food And Agriculture. Available at: www.fao.org/state-of-biodiversity-for-food-agriculture/en.

12 UN Committee on Economic, Social and Cultural Rights, General Comment No. 12, para. 6. Available at: undocs.org/en/E/C.12/1999/5.

13 The term "natural resources" refers mainly to the economic aspects of peoples' and communities' relationship to their territories, whereas peasants' and Indigenous Peoples' conceptions of their natural environment place more importance on its social, cultural and spiritual components.

→ The access to and sustainable use of seeds are recognized as key elements of food security in the ***International Treaty on Plant Genetic Resources for Food and Agriculture*** (ITPGRFA). This treaty is one of the most important international agreements relating to the recognition and protection of peasants' and Indigenous Peoples' rights over seeds. A central element of the Treaty is the explicit recognition of what is referred to as "farmers' rights" in its article 9. Because of the remarkable past, present and future role played by peasants and Indigenous Peoples in developing and maintaining biodiversity, the Treaty explicitly recognizes their rights to:

- protect their traditional knowledge;
- equitably participate in sharing the benefits from the utilization of plant genetic resources;
- participate in decision-making in matters relating to plant genetic resources;
- save farm-saved seeds and propagating material;[14]
- use farm-saved seeds and propagating material;
- exchange farm-saved seeds and propagating material;
- sell farm-saved seeds and propagating material.[15]

ITPGRFA entrusts the respect, protection and guarantee to states, based on their sovereignty over the resources present in their territory/jurisdiction. This implies, however, that states have wide discretion as to the effective application of the rights enshrined in Article 9 of the Treaty. In practice, this has led to a severe lack of effective implementation of peasants' and Indigenous Peoples' rights to seeds in national and regional legal and policy frameworks.

→ ITPGRFA is closely linked to the most important international convention on the conservation of biodiversity and its sustainable use, namely the ***Convention on Biological Diversity*** (CBD). The CBD explicitly acknowledges "the close and traditional dependence of many indigenous and local communities embodying traditional lifestyles on biological resources [...]" and recognizes "the vital role that women play in the conservation and sustainable use of biological diversity [...]."[16]

The CBD underscores the critical importance of in situ conservation, which for agricultural biodiversity means the conservation of biodiversity in peasants' and Indigenous Peoples' fields. Article 8(j) establishes that states shall "respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities [...] relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the

14 See Box 4 for more information on the concept of "farm-saved seeds".
15 ITPGRFA, art. 9.
16 CBD, Preamble.

utilization of such knowledge, innovations and practices."[17] Concerning the sustainable use of biodiversity and its components, the CBD requires states to "protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements."[18]

At the 10th Conference of the Parties to the CBD, in 2010, countries parties adopted a legally binding international protocol on access to genetic resources and benefit-sharing: the **Nagoya Protocol**. This Protocol entered into force in 2014 and aims to implement the third objective of the CBD on access and benefit-sharing, and is binding on both user and provider countries. The Protocol requires countries to take legislative, administrative or policy measures to ensure that the benefits arising from the use of genetic resources and associated traditional knowledge are shared fairly and equitably with the communities concerned, on mutually agreed terms.[19] States are further required to ensure that genetic resources and associated traditional knowledge are accessed on the basis of mutually agreed terms and with the involvement of indigenous and local communities.[20] It is also specified that governments are required to consider customary laws, community protocols and procedures of indigenous and local communities when implementing provisions related to traditional knowledge.[21]

A second protocol to the CBD is the **Cartagena Protocol**, which is the main international agreement on biosafety for GMOs. It further specifies states' obligation under the CBD to implement measures to regulate, manage and control the risks associated with the use and release of living modified organisms resulting from biotechnology.[22] It reaffirms the precautionary principle as one of the cornerstones of environmental laws[23] (Article 1) and contains provisions regarding the transboundary movement, transit, handling, and use of GMOs, as well as guidance on risk assessments, monitoring and safeguards for the environment and human health (Annex III, Article 4).[24]

→ As stated before, the role of Indigenous Peoples in the conservation, sustainable use and further development of biodiversity is vital. Their right to seeds has been confirmed by the **UN *Declaration on the Rights of Indigenous Peoples*** (UNDRIP), which protects the rights of Indigenous Peoples to their collective biocultural heritage, including traditional knowledge and resources, territories, cultural and spiritual values, and customary laws. The UNDRIP affirms Indigenous Peoples' right to "maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as their [...] human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora [...]."[25]

→ Peasants' and other rural people's rights to seeds and biodiversity have been

17 CBD, art. 8(j).
18 CBD, art. 10(c).
19 Nagoya Protocol, art. 5.
20 Nagoya Protocol, art. 6.
21 Nagoya Protocol, art. 12.
22 CBD, art. 8 (g).
23 Cartagena Protocol, art. 1.
24 Cartagena Protocol, Annex III, art. 4.
25 UNDRIP, art. 31.

reaffirmed recently by the **UN *Declaration on the Rights of Peasants and Other People Working in Rural Areas*** (UNDROP). This declaration reaffirms farmers' rights as contained in the ITPGRFA, recognizing them as inalienable human rights and making explicit the rights of rural people to "maintain, control, protect and develop their own seeds and traditional knowledge," and clarifying states' obligation to "take appropriate measures to support peasant seed systems and promote the use of peasant seeds and agrobiodiversity."[26] Importantly, UNDROP also underlines the importance of peasants and other rural people to conserve and sustainably use biodiversity, making explicit the obligation of states "to promote and protect the traditional knowledge, innovation and practices of peasants and other people working in rural areas, including traditional agrarian, pastoral, forestry, fisheries, livestock and agroecological systems relevant to the conservation and sustainable use of biological diversity."[27]

- The rights to seeds and biodiversity are closely linked to **women's rights.** The right of rural women to access and use seeds is recognized in Article 14 of the *Convention on the Elimination of All Forms of Discrimination against Women* (CEDAW). In March 2016, the UN Committee on the Elimination of Discrimination against Women, which oversees the application of CEDAW, approved General Recommendation no. 34 (GR 34) on the rights of rural women, which clarifies the content of this article. This document emphasizes women's fundamental role in "achieving food security, reducing poverty, malnutrition and hunger, and in promoting rural development," pointing out that "their contribution is often unpaid, unacknowledged, and poorly supported."[28] The Committee goes on to affirm that states Parties to the Convention are required to "ensure the realization of the right to food and nutrition of rural women within the framework of food sovereignty and that they have the authority to manage and control their natural resources."[29] Paragraph 56 affirms that "rural women's rights to land, natural resources, including water, seeds, forestry, as well as fisheries [are] fundamental human rights."[30] The document then clarifies that states are required to "implement agricultural policies which support rural women peasants, recognize and protect the natural commons, promote organic farming and protect rural women from harmful pesticides and fertilizers." In particular, states must "respect and protect rural women's traditional and eco-friendly agricultural knowledge and particularly the right of women to preserve, use, and exchange traditional and native seeds"; they must further "protect and conserve native and endemic plant species and varieties of food and medicinal resources, and prevent patenting by national and transnational companies to the extent that it threatens the rights of rural women."[31]

Although international law recognizes peasants' and Indigenous Peoples' rights over seeds, such recognition has not resulted in their effective application and implementation at local, national, and regional levels. At the same time, many states have put in place policies and laws that restrict these rights. Consequently, peasants' and Indigenous Peoples' seeds as well as their seed systems are under threat.

26 UNDROP, art. 19.
27 UNDROP, art. 20.2.
28 CEDAW, General Recommendation no. 34, par. 63.
29 Ibid., par. 64.
30 Ibid., par. 56.
31 Ibid., par. 62.

In order to comply with their human rights obligations as well as with their obligations to conserve biodiversity, states must therefore develop and implement adequate legal frameworks to effectively protect and promote peasants' and Indigenous Peoples' rights to seeds. Given that peasants and Indigenous Peoples exercise these rights primarily in a collective way and through their own seed systems, legal frameworks need to recognize and protect these systems. This should be ensured through specific frameworks that protect the practices and knowledge related to seed use, production and management, based on peasants' and Indigenous Peoples' customary and collective rights. Approaches that focus on the registration of peasant or indigenous "varieties" or those that try to find a place for peasant and indigenous seeds within the commercial/industrial seed and IPR system will fall short of realizing human rights and conserving biodiversity. These approaches do not allow for achieving the autonomy of peasants' and Indigenous Peoples' seed systems, which is at the root of their critical contribution to the conservation and further development of agricultural biodiversity and biodiversity in general.

ELEMENTS FOR LEGAL AND POLICY FRAMEWORKS THAT RECOGNIZE AND PROTECT PEASANTS' AND INDIGENOUS PEOPLES' SEEDS AND SEED SYSTEMS

This chapter intends to provide concrete elements for all those engaged in policy processes related to seeds. It is organized according to the main elements of peasants' and Indigenous Peoples' right to seeds as defined by the ITPGRFA ("farmers' rights") and seeks to address topics that are particularly relevant for the realization of the rights to seeds and biodiversity. In order to make the use of this chapter as simple as possible, the authors have decided to use the same structure for each topic, namely:

- "***What is at stake?***": This section contains a brief presentation of the topic: why does it matter, what are potential risks and opportunities?

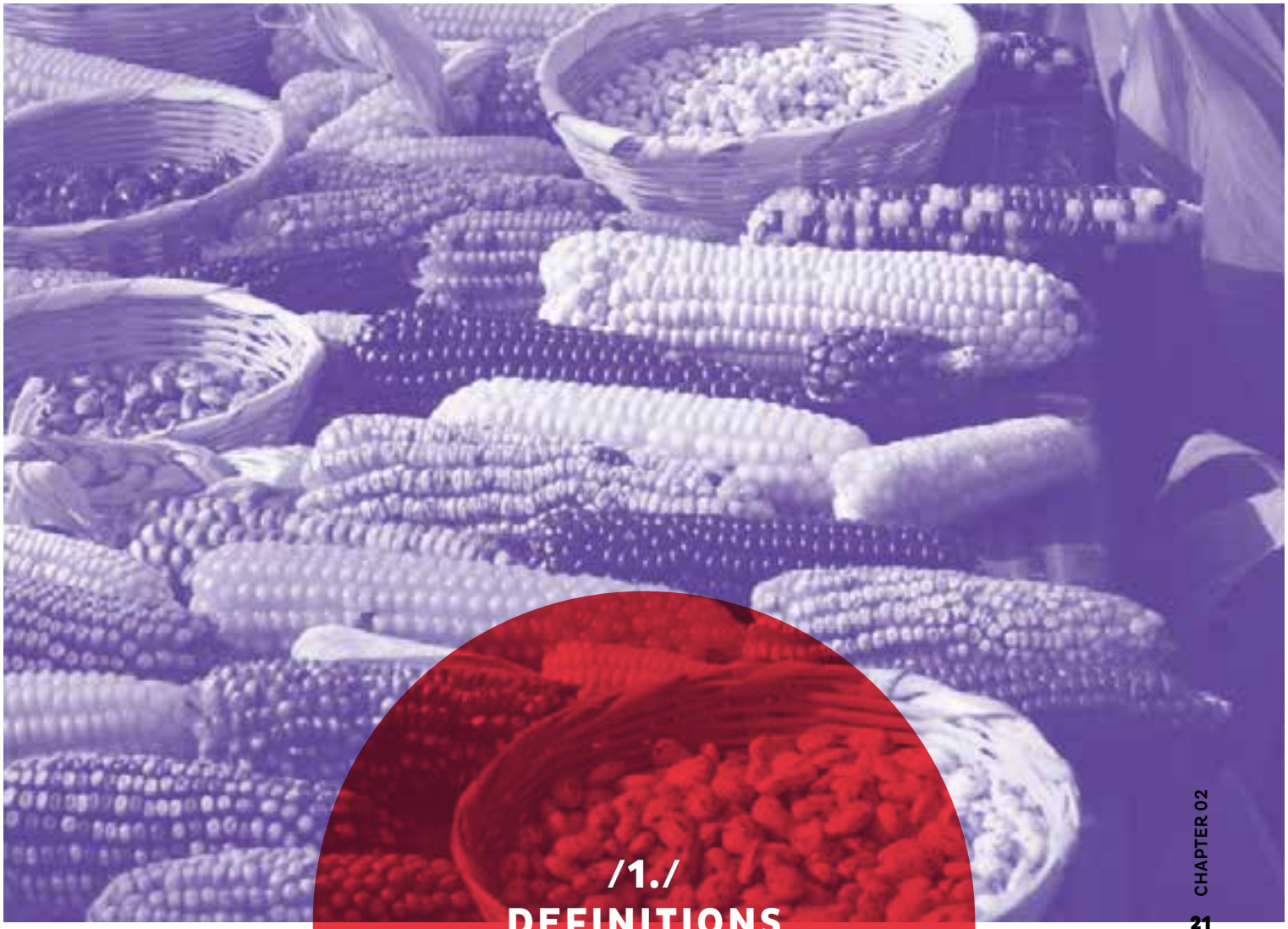
- "***Elements to guide discussions at national and/or regional level***": This section provides concrete proposals of how national and/or regional legal frameworks could address the respective issue. Wherever possible, there are proposals for formulations that could be included into national and/or regional laws.

  - **Please note:** This guide proposes some general guidance that could help different actors to advance peasants' and Indigenous Peoples' rights to seeds in legal frameworks. The authors are aware that the context can vary considerably between regions and countries, and that there is a great variety of legal traditions, cultures etc. Therefore, it is important that each region and country adapt the proposals to the local context.

- An annex to the guide contains references to existing laws from around the world, which could serve as further inspiration for the development of new legal frameworks.

  - **Please note:** Arguably, no country or region currently has a legal framework that protects and guarantees peasants' and Indigenous Peoples' rights to seeds in a comprehensive way. However, there are useful provisions in existing laws, which can be useful for ongoing policy processes. A reference to a specific provision or article in a given law does not imply an appreciation of other parts of the law or the law as such.

It is important to note that the work on seed-related legal frameworks strongly depends on the context in any given country or region, inasmuch as different laws are relevant and may enter into conflict: seed laws, plant variety protection (PVP) (including international agreements such as UPOV), patent laws, regulations on sanitary and/or health standards, trade agreements etc. The 'ideal' case where social organizations will engage in a policy process for an entirely new legal framework that specifically addresses farmers' rights will realistically be the exception. In most cases, existing laws and agreements may have provisions that need to be taken into account when proposing measures aimed at realizing the right to seeds. A careful analysis of the existing legal framework is therefore very important, as it may influence the provisions that can be included in a new framework, and may require the revision of other laws.



/1./ DEFINITIONS

A. What is at stake?

Terminology is a key issue, especially in the context of legal texts. Different actors define and interpret the various aspects of farmers' rights in different ways. This can lead to a limitation of peasants' and Indigenous Peoples' rights over seeds. For instance, there is a tendency by some actors to limit the scope of "farmers' rights" only to seeds that are referred to as local, traditional, peasant or native seeds, thus excluding seeds of all other varieties that peasants and Indigenous Peoples have selected in their fields, in particular those from varieties that are protected by IPR. Others widen the concept of "farmers' rights" so much that it potentially applies to all types of farmers, thus blurring the lines between industrial and peasant farmers, as well as between farmers and (commercial) breeders. These and other definition and approaches limit the scope and content of peasants' and Indigenous Peoples' right to seeds.

Therefore, the way in which key concepts and terms are defined in a law matters a lot. It is important that laws clearly define who the rights holders of the right to seeds/"farmers' rights" are, what the key content of those rights is, what their characteristics are, what peasant seeds and peasant seed systems are, etc. What follows are proposals for definitions of some key terms.

B. Elements to guide discussions at national and/or regional level

→ PEASANT/FARMER

It is important to clarify which farmers are holders of the rights defined in Article 9 of the ITPGRFA: does this refer to all those who farm, from small-scale peasant farmers to those who manage thousands of hectares of industrial monocultures, and even to urban gardeners? Or only some of them?

In Article 9.1, ITPGRFA recognizes "the enormous contribution that the 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 [...]." This resonates with the Treaty's objectives as defined in Article 1, namely the conservation and sustainable use of plant genetic resources for food and agriculture." The holders of farmers' rights, as enshrined in the ITPGRFA are therefore all those farmers who contribute to the conservation, sustainable use and further development of agricultural biodiversity. These are almost exclusively peasants and small-scale farmers as defined by UNDROP (see Box 1). Farmers who buy industrial/commercial seed every year and do not produce any seed or seedlings do not contribute to the conservation and further development of agricultural biodiversity and are therefore not concerned by these rights. With very few exceptions, large-scale farmers fall into this latter category.

Proposed definition:

"The holders of farmers' rights are all peasants and Indigenous Peoples who contribute to the conservation, sustainable use and further development of agricultural biodiversity, in accordance with ITPGRFA and its objectives."

Box1

Peasants or farmers...?

For a long time, the term 'peasant' was used in many regions in a pejorative way to denigrate rural people. As part of the struggle for their rights, some rural movements, such as the transnational peasant movement La Via Campesina, use this term deliberately to define its members and reaffirm their dignity and pride. In some cases, 'peasant' has been used, among other terms, as a way to distinguish small-scale food producers from big industrial 'farmers'. Over the years, 'peasant' has become a widely used term and has eventually been taken up in official UN language with the adoption of the UN Declaration on the Rights of Peasants and Other People Working in Rural Areas (UNDROP). However, small-scale food producers in some regions of the world continue to prefer other terms to self-define, such as 'smallholder farmers'.

UNDROP defines peasants as follows: "A peasant/farmer is any person who engages or who seeks to engage, alone, or in association with others or as a community, in small-scale agricultural production for subsistence and/or for the market, and who relies significantly, though not necessarily exclusively, on family or household labour and other non-monetized ways of organizing labour, and who has a special dependency on and attachment to the land."[32]

This guide does not aim to be prescriptive of the term that small-scale food producers use to describe themselves. Rather, the authors consider that organizations should decide the term that is most appropriate in their context. It should also be noted that the language used by the UN has evolved: while the recent UNDROP refers to 'peasants', the rights enshrined in ITPGRFA are codified as "farmers' rights." In the present document, we use the terms 'peasants' and 'farmers' interchangeably.

... and Indigenous Peoples?

Although the adopted terminology in ITPGRFA is "farmers' rights", there is no doubt that Indigenous Peoples are included as holders of these rights, based on their special relationship with their territories and nature, and as recognized in UNDRIP (see chapter 1). Indigenous communities are mentioned explicitly in Article 9.1 of the Treaty. The specific legal status that Indigenous Peoples have differs widely between regions and countries, and it is up to Indigenous Peoples and their organizations as well as policy makers to find the most appropriate and inclusive definition and formulation in each setting.

32 UNDROP, art. 1.1.

→ PEASANTS' AND INDIGENOUS PEOPLES' RIGHT TO SEEDS ("FARMERS' RIGHTS") AND THEIR CHARACTERISTICS

Proposed definition:

"Farmers' rights are the rights that peasants and Indigenous Peoples have over seeds, based on their past, present and future contribution to the conservation, development, and sustainable use of biodiversity. ITPGRFA explicitly recognizes farmers' and Indigenous Peoples' rights to:

- protect their traditional knowledge;
- equitably participate in sharing the benefits from the utilization of plant genetic resources;
- participate in decision-making in matters relating to plant genetic resources;
- save farm-saved seeds and propagating material;[33]
- use farm-saved seeds and propagating material;
- exchange farm-saved seeds and propagating material;
- sell farm-saved seeds and propagating material.[34]

These rights have been reaffirmed by several instruments of international human rights law, including the *International Covenant on Economic, Social and Cultural Rights,* the UN *Declaration on the Rights of Peasants and Other People Working in Rural Areas* as well as the UN *Declaration on the Rights of Indigenous Peoples*.

Peasants' and Indigenous Peoples' rights to seeds ('"farmers' rights') have the following fundamental characteristics:

- They are collective rights: Peasant and indigenous seeds and "varieties"/ populations are inextricably linked to a particular human community with its way of life and social organization, its cosmovision and culture, its production system and the ecosystem it lives in. Seeds are managed through peasants' and Indigenous Peoples' seed systems, which are based on collectively defined rules and collective knowledge systems.
- They are human rights: The identity of peasants and Indigenous Peoples as well as the social fabric of their communities are deeply intertwined with the seeds, plants and animals they live with. Seeds therefore have an inalienable character for them and are necessary to realize a number of other human rights."

33 The phrase "farm-saved seed and propagating material" refers to the seeds and propagating material that peasants and Indigenous Peoples select in their fields.

34 Based on ITPGRFA, art. 9.

Box 2

Farmers and breeders: two different realities

Through their agricultural practices and innovations as well as their seed management systems, peasants and Indigenous Peoples select diverse and adaptable plant populations. They have carried out this kind of breeding work for more than 10,000 years. However, in the industrial seed sector, plant breeders' rights (PBR) – i.e. intellectual property rights (IPR), such as those under the UPOV system (see Box 6) – are granted to breeders who develop homogeneous and stable varieties. Peasants' and Indigenous Peoples' seeds/populations are neither homogeneous nor stable and can therefore not be considered as bred varieties. Consequently, peasants and Indigenous Peoples are not plant breeders in the sense of instruments like UPOV.

Thus, while peasants and Indigenous Peoples are certainly more than mere users of seeds; caution is required whenever the categories 'farmers' and 'breeders' are mixed up. Indeed, this is a deliberate strategy used by the seed industry and some states to blur the lines between commercial/industrial breeders on the one hand, and peasants and Indigenous Peoples on the other. This confusion weakens the scope of the latter's right to seeds in two ways. Firstly, it extends 'farmers' rights' to commercial breeders and seed companies, thus ignoring the fundamental difference between them and peasants and Indigenous Peoples, as well as between commercial seeds and the seeds that peasants and Indigenous Peoples select in their fields. Secondly, it lays the basis for questioning the fact that peasants and Indigenous Peoples have distinct rights that are fundamentally different from commercial breeders and seed companies. In such an interpretation, they end up being a somewhat particular kind of plant breeders. Following this kind of argumentation, small exceptions in otherwise draconian IPR and seed laws would be sufficient to safeguard their rights.

However, peasants and Indigenous Peoples have distinct rights over seeds, which have been explicitly recognized as human rights (see Chapter I). These and their seed systems therefore need specific legal recognition and protection.

→ PEASANT, FARMER AND INDIGENOUS PEOPLES' SEEDS

The following proposed definition emphasizes the process through which peasants and Indigenous Peoples produce/select their seeds, instead of focusing on the original material (peasant 'variety', local variety, variety protected by intellectual property rights etc.). This takes into account the real life of farming communities and resonates with the term "farm-saved seeds" (i.e. seeds that are produced, selected and conserved by peasants and Indigenous Peoples in their fields) from ITPGRFA Article 9. In addition, the proposed definition clearly separates peasant and indigenous seed from seeds that have been manipulated in laboratories and biotechnologies, including genetic techniques.

It is very important to acknowledge that peasants and Indigenous Peoples from different parts of the world use different concepts and terms to refer to and describe their seeds, which correspond to their specific cultural, social and environmental context. While the proposed definition intends to capture the essence of the way in which peasants and Indigenous Peoples around the world select and manage their seeds, there may be specific terms and definitions that are more appropriate in a given context.

Proposed definition:

"Peasant/Indigenous Peoples' seeds (and seedlings) are conserved, selected, developed and multiplied, by peasant/Indigenous Peoples' communities or collectives in their fields, with peasant methods that are non-transgressive of the plant cell and within the reach of the end user. These seeds and plants are renewed by successive multiplications in free pollination and/or in mass selection. They can be exchanged freely and put into circulation as long as the rights of use defined by the communities or collectives that give life to them are respected. Peasant/Indigenous Peoples' seeds are under constant development and therefore belong to the peasants/Indigenous Peoples or communities who develop them."

Box 3

Native seeds and Creole seeds

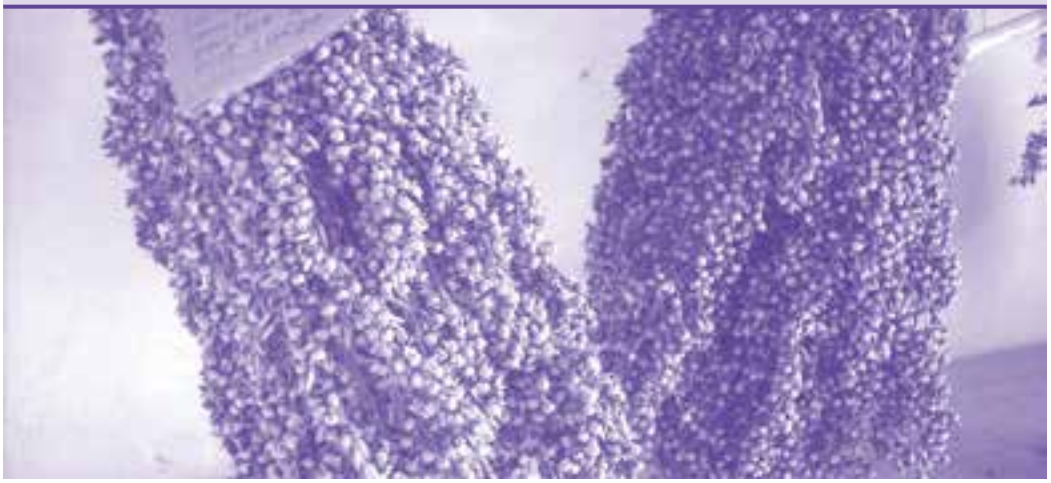
In Central and South America, some Indigenous Peoples speak of 'native seeds' and 'creole seeds' to refer to the plants and seeds they use.

The term 'native seeds' refers to those seeds and plants that originate in a specific territory and have been improved by Indigenous Peoples and peasants in a natural way, thus adapting it to the environment and each culture in time and space. Examples are maize in Mesoamerica and potatoes in the Andean region. Native seeds are part of a process of co-evolution that keeps an ancestral legacy, a historical memory that prevails as the heart of the millenary indigenous and peasant cultures. They are the basis of communities' agricultural and food systems as well as of their social fabric and local economies. A critical element is the reference to the origin of the people whose life is connected to these

seeds as well as an understanding that the seeds are living beings.

'Creole seeds' are all those seeds that have moved from their center of origin to other places and territories, adopted by the people, and integrated into the local food, economic, social and cultural system. During this process, the seeds are adapted to the local conditions as well as to peasants' and Indigenous Peoples' farming practices. Among many other examples, vegetables such as carrots and onion, which originate in Asia but have been adopted in America, Africa and Europe.

These concepts and terminology have also been included in some countries' legal frameworks.



→ PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE (PGRFA)

PGRFA is a term used in many international and national governance spaces in discussions about seeds. However, the concept of PGRFA covers only a fraction of what seeds actually are. ITPGRFA defines PGRFA as "any genetic material of plant origin of actual or potential value for food and agriculture."[35] This definition focuses on the genetic characteristics as well as their value as an (economic) resource. However, no living organism or being can be reduced solely to its genetic and economic dimensions. This is why seeds are much more than a marketable resource for peasants and Indigenous Peoples and their holistic worldviews. For them, seeds are as much a part of the living world as humans, from which they are inseparable, and are therefore associated with deep social and cultural values.

In addition, their genetic diversity and constant evolution are key characteristics of peasant/farmer/ Indigenous Peoples' seeds. Fixing the genetic and phenotypic qualities of varieties is an objective of industrial/commercial plant breeding only because they are the precondition for the protection of varieties with intellectual property rights, which, in turn, is the basis of the seed industry's business model.

Therefore, it is preferable to use the term 'seeds', rather than PGRFA, in the context of peasants' and Indigenous Peoples' rights to seeds ("farmers' rights") and in legal frameworks that aim to guarantee these.

35 ITPGRFA, art. 2.

→ PEASANT, FARMER AND INDIGENOUS "VARIETIES"

Some countries' legal frameworks recognize peasant/farmer/native/indigenous/creole/traditional/local varieties as a distinct category, in addition to the varieties developed through the commercial/industrial and/or formal seed sector. Peasants and Indigenous Peoples – who, as mentioned above, use a range of different denominations when referring to their seeds, depending on the regional and local context – also sometimes use the term 'variety'. However, this can be misleading because the term is mainly used to refer to industrial/commercial seed, where varieties are defined based on criteria, which have been developed for the industrial seed sector (in particular the criteria of distinctiveness, uniformity and stability (DUS), see Chapter II.D and Box 6). Peasants' and Indigenous Peoples' seeds do not correspond to these criteria because they are constantly evolving and developing in their fields. Their 'intra-varietal' diversity and their ability to evolve are characteristics deliberately sought by peasants and Indigenous Peoples because they enable constant adaptation to changes in growing conditions. They are also the basis for peasants' and Indigenous Peoples' seeds' great resilience, which is crucial if they wish to ensure regular harvests in increasingly irregular climatic conditions. For these reasons, it is better to speak of peasant/farmer/indigenous 'populations', since this term underlines the fundamentally evolutionary nature of peasants' and Indigenous Peoples seeds, acknowledging that these contain a great amount of genetic diversity.

Regarding legal frameworks that respect and protect peasants' and Indigenous Peoples' seeds and seed systems, focusing on peasant or indigenous populations/'varieties' risks limiting the scope of their rights. Article 9 of ITPGRFA refers to farmers' rights over "farm-saved seeds and propagating material", thus not limiting it to seeds selected from their own populations only. Legal frameworks should therefore clarify that peasants' and Indigenous Peoples' rights to seeds apply to all seeds that they select in their fields (see definition of peasant and Indigenous Peoples' seeds above).

Box 4

"Farm-saved seed"

Some legal frameworks, particularly those of UPOV member countries, consider that farm-saved seed is the reproduction of commercial varieties, which are covered by private intellectual property rights (PVP and/or patents), and that such seed therefore remains subject to these IPR. This view, however, is contrary to reality. Firstly, the majority of farm-saved seed in the world is not derived from industrial/commercial varieties, but are seeds that peasants and Indigenous Peoples select in their fields from 'varieties'/populations, which they have selected and conserved over generations. Secondly, as soon as a peasant or Indigenous farmer who has purchased commercial

seed reproduces his seed or seedlings in his/her field, these evolve by adaptation to local growing conditions. Only farmers who multiply commercial seed on behalf of industry and those who claim a protected variety denomination to market their crop reproduce the breeder's variety and/or denomination. They are therefore required to respect the strict standards of maintenance of the characteristics that define the concerned commercial/industrial variety.

The vast majority of peasants and Indigenous Peoples who use their farm-saved seed do not reproduce it, but instead select new traits for local adaptation, often mixing several varieties to speed up this adaptation. They thus produce new peasant or Indigenous Peoples' seed and, within a few years, new 'varieties'/populations. Professional breeders and seed companies who produce new commercial/industrial varieties by homogenizing and stabilizing lines, or as a result of crossing several lines from diversified peasant or indigenous seed, have never paid or sought the advice of the peasants or Indigenous Peoples concerned. Equity in benefit sharing requires that peasants and Indigenous Peoples be able to do the same with the varieties developed by breeders.

→ PEASANT, FARMER OR INDIGENOUS PEOPLES' SEED SYSTEMS

Farming communities manage their seeds though their distinct seed systems, i.e. a set of community practices and knowledge systems related to seeds. This means that they realize their rights to seeds through these systems. Recognizing and providing legal protection to peasant and Indigenous Peoples' seed systems is therefore the best way to implement and guarantee peasants' and Indigenous Peoples' rights. Such an approach captures the complex and multifaceted relationship between peasants and Indigenous Peoples and their seeds. It takes into account that seed management is based on collective rules that are embedded in social relations and cultural values, and avoids the risks of approaches that focus only on specific aspects of the right to seeds (such as the protection of farmers' "varieties", among others).

Proposed definition:

"Peasant and Indigenous Peoples' seed systems refer to the collective rules and practices through which peasant communities and Indigenous Peoples access, use and manage their seeds, and realize their right to seeds. These systems are based on the collective and/or customary rights of farming communities or Indigenous Peoples. Peasant and Indigenous Peoples' seed systems incorporate several components that are closely linked, including:

- Farming practices: seed production by peasants and Indigenous Peoples is integrated into their agricultural activities. Seeds are carefully selected by them in their fields based on their knowledge systems and according to their own criteria and needs. This allows them to select seeds that are adapted to their local conditions and their farming practices.

- Ancestral/traditional indigenous and peasant knowledge: farming communities have profound knowledge of plants and how to conserve, grow and further develop them as well as of their fields, soil and natural environment. Such knowledge is embedded in a social system, has been built in a community over time, is passed on from generation to generation, and is continuously enriched by peasant and indigenous innovations, which facilitate the adaptation of their seeds to natural and social developments.

- Use, conservation and exchange: based on their traditional knowledge, peasants and Indigenous Peoples have developed practices for the storing, managing and transporting their seeds, and for ensuring good seed quality. The exchange of seeds – which may include the selling and buying of seeds – is an important component of peasant and Indigenous Peoples' seed systems, and contributes to ensuring the renewal of the genetic diversity of their seeds and 'varieties'/populations. The rules for such exchange are determined by the communities. They are essential to fighting against the erosion of seed stock diversity without suppressing its local adaptation.

- Culture: for peasants and Indigenous Peoples, seed is not primarily and not exclusively a resource, nor an external agricultural input. Seeds are part of their culture and their seed management practices have spiritual and cultural expressions."

→ ANCESTRAL, TRADITIONAL, INDIGENOUS AND PEASANT KNOWLEDGE

As mentioned above, peasant and Indigenous Peoples' seeds, seed management practices and seed systems are inextricably based on and linked to their traditional knowledge, practices and innovations, as well as to the relationships within their community and the natural environment. While ITPGRFA, UNDROP and UNDRIP refer to "traditional knowledge", the CBD recognizes – more accurately – Indigenous Peoples' and local communities' "traditional knowledge, innovations and practices" as key elements for the conservation and sustainable use of biological diversity for the conservation and sustainable use of biological diversity.[36] It is important to note that such knowledge is not restricted to genetic information about a specific crop or variety or specific plant characteristics. Rather, it encompasses knowledge on how these plants relate with their environment and all other organisms or living beings that constitute the local ecosystem and, based on this, the ways in which they interact with other plants, animals and microorganisms, whether cultivated or wild, and the care to be taken in the event of problems related to the plants' health, their nutritional and cultural use by human communities, etc.

Furthermore, it is crucial to understand that such knowledge is embedded in a social system, meaning that it has been built in a community, and that it is con-

36 CBD, art. 8 j).

tinuously shared and enriched within this community.

Proposed definition:

"Peasant and Indigenous Peoples' traditional knowledge encompasses all knowledge, innovations and practices that peasant communities and Indigenous Peoples have developed over time, and continue to develop in the present and future, in order to preserve and develop biodiversity and to use it sustainably. Traditional knowledge has the following key characteristics:

- It is based on oral transmission;
- It encompasses dynamic knowledge that is constantly enriched by peasant and indigenous innovations;
- It is essentially collective knowledge that is embedded in a social system of communities.

All measures to protect traditional knowledge need to take into account these criteria.

/2./ RECOGNITION OF PEASANTS' AND INDIGENOUS PEOPLES' RIGHTS TO SEEDS

A. What is at stake?

Given that the recognition of peasants' and Indigenous Peoples' rights to seeds at international level (see Chapter I) has not translated into corresponding provisions at national and regional levels, a first important measure to take by states is to explicitly recognize and guarantee the right to seeds in their legal frameworks. This is all the more important because the private intellectual property regime over seeds has been further strengthened at national, regional and international levels since the adoption of ITPGRFA and several countries have adopted seed laws that restrict peasants' and Indigenous Peoples' rights and practices. Given that peasants and indigenous peoples realize their rights over seeds primarily through their own seed systems, national and regional legal frameworks should also explicitly recognize their importance in order to protect and promote them.

Whereas such recognition is of great importance, it will not be sufficient to realize peasants' and Indigenous Peoples' rights to seeds and to promote their role in conserving biodiversity. As the following sections will explain, this further requires measures that ensure that intellectual property, seed marketing and other laws and policies do not restrict these rights.

B. Elements to guide discussions at national and/or regional level

National and/or regional legal frameworks should:

- Recognize, protect and guarantee peasants' and Indigenous Peoples' rights to seeds ("farmers' rights"), as recognized by ITPGRFA and reaffirmed by other instruments of international law, in particular UNDROP and UNDRIP.

- Emphasize the fundamental role of peasants' and Indigenous Peoples' rights to seeds ("farmers' rights") for the realization of the human right to adequate food and nutrition, the conservation, sustainable use and further development of biodiversity, addressing climate change, and ensuring sustainable development and sustainable rural livelihoods through peasant agroecology.

- Recognize the importance of peasants' and Indigenous Peoples' seed systems, as well as their traditional knowledge, practices and innovations upon which they are based for the realization of peasants' and Indigenous Peoples' rights to seeds ("farmers' rights"), and establish their protection and promotion as key objectives of legal and policy frameworks.

- Recognize and support the crucial role of peasant and indigenous women in the conservation, use, selection, storage, exchange and further development of seeds within peasant and Indigenous Peoples' seed systems, and emphasize that the right to seeds is a core component of rural women's rights.

- Contain provisions ensuring that peasant and Indigenous Peoples' seed systems are not discriminated against vis-à-vis the commercial/industrial and formal seed sectors, and receive adequate public support, including research, extension services and funding.

/3./ RIGHTS TO SAVE AND USE SEEDS

A. What is at stake?

Peasants and Indigenous Peoples use and manage their seeds in a dynamic way, through their own seed systems. This way of managing seeds is the basis of agricultural biodiversity, which has been developed by farming communities over centuries and which is the basis of their food sovereignty, their autonomy, as well as their resilience in the face of climate change and other shocks and crises.

The selection, conservation, production and use of their seeds are intrinsically related to peasants' and Indigenous Peoples' farming practices, their knowledge and innovations as well as their ways of living, including culture and spiritual values. Importantly, seed production is not separated from farming activities, and seed is selected in their fields. Peasants and Indigenous Peoples have developed sophisticated ways of selecting, conserving and storing seeds, which are adapted to each species as well as to local climatic and social conditions, amongst other

conditions. Sowing, harvesting, selecting, conserving and re-sowing seeds, are a never-ending cycle that embodies the co-evolution of farming communities and their seeds as living beings. Regularly exchanging small amounts of seeds between farmers and the occasional introduction of new varieties – including varieties developed through commercial breeding – enrich the diversity of the seed stock without suppressing its local adaptation, which is based on locally produced seeds, increasing instead its capacity to constantly adapt to changing agro-ecological and climatic conditions.

Peasant and Indigenous Peoples' seed systems are therefore crucial for the realization of their rights to seeds, as well as for the sustainable use of biodiversity.[37] Similarly, the collective rights of peasants and Indigenous Peoples can only be fully realized within the framework of these collective seed systems.

In practice, peasants' and Indigenous Peoples' rights to save and use their seeds, however, are often limited by national laws. This particularly concerns their right to exchange and sell seeds that they have selected in their fields ("farm-saved seeds") as well as to use them, especially in situations where they have introduced seeds of varieties that are protected under IPR regimes (see Chapter II.D). The seed industry has put pressure on lawmakers to restrict the use and re-use of seeds by peasants and Indigenous Peoples, thus limiting cultivated biodiversity. Ensuring their rights to use and re-use all seed that they have selected in their fields increases agricultural biodiversity and contributes to increasing the resilience of agricultural systems. As such, the re-sowing of seed is not a commercial activity for peasants and Indigenous Peoples, but a fundamental activity for humans and nature.

B. Elements to guide discussions at national and/or regional level

To ensure peasants' and Indigenous Peoples' rights to save and use their seeds, legal frameworks should:

- Recognize, protect and guarantee peasants' and Indigenous Peoples' rights to decide on the crops and varieties that they wish to grow, save, use, exchange and sell seeds from as essential components of peasant and Indigenous Peoples' seed systems. They should clarify that these rights apply without restrictions to all seeds that peasants and Indigenous Peoples select in their fields, including seeds selected from varieties that are protected by IPR, if they are the result of an evolutionary and non-conservative adaptive selection and do not claim a protected name.

- Clarify peasants' and Indigenous Peoples' rights to select seeds in their fields and to re-sow them without any restriction, including seeds selected from varieties that are protected by IPR. In addition, legal frameworks should explicitly state that there are no restrictions regarding the marketing of peasants' and Indigenous Peoples' harvest or of any products that are derived from it.

37 ITPGRFA, art. 6.

- Recognize peasants and Indigenous Peoples' practices of storing seeds and ensuring seed quality. Local authorities should guarantee that quality control and certification requirements that have been developed for the commercial/industrial seed sector do not limit peasants' and Indigenous Peoples' rights to seeds (see Chapter II.D).

- Provide specific measures to protect and support peasant and Indigenous women's rights to save and use seeds that they have selected in their fields, family plots and/or collective/community fields.

PROTECTION FROM CONTAMINATION BY GMOS

A. What is at stake?

Despite broad public refusal of GMOs, including those resulting from so-called 'new genetic techniques', 'new breeding techniques', gene editing etc., several countries across the globe have introduced or are in the process of introducing them. Peasants and Indigenous Peoples as well as their organizations have been among the most outspoken critics of genetic engineering technologies because of the great risks they present for their seed and seed systems, health, biodiversity, ecosystems and the environment, as well as for their rights. GMOs are incompatible with peasants' and Indigenous Peoples' ways of using and managing their seeds for several reasons. Genetic manipulation or engineering to overcome the natural barriers of reproduction of living organisms is at odds with the laws of natural evolution and peasants' and Indigenous Peoples' relationship with nature, which is based on respect, natural co-evolution and knowledge of the deep interrelatedness between all living beings in a given ecosystem. GMOs are designed and artificially developed in laboratories to maintain their characteristics and to not adapt to the ecosystem in which they are cultivated. Their cultivation further requires an array of chemical, mechanical and genetic inputs that destroy ecosystems and biodiversity. They are further protected by a rigid IPR regime, which includes industrial patents. Using GMOs also entails a big financial burden for farmers who have to buy seed at high prices, pay licensing and technology fees and use specific agro-chemical inputs. Overall, GMOs are contrary to the sustainability of food systems and peasants' and Indigenous Peoples' way of life, which is built upon autonomy and resilience.

Even though they broadly reject GMOs, peasants and Indigenous Peoples in many parts of the world are being adversely affected by the use of GMOs, mainly by industrial farmers and agribusiness companies. Such use creates the risk of contamination of their crops, seeds and fields with GMOs as well as pesticides and other chemical inputs that are used for their cultivation, destroying peasant/native/local "varieties" and biodiversity. Contamination of seed occurs by gene transfer, accidental seed mixing or the use of soiled harvesting machinery. In regions with widespread use of GMOs, such as North America, it is virtually impossible to source non-contaminated seed.[38] Spray drift from herbicides used to grow genetically modified (GM) crops, for example glyphosate, affects the fields of non-GMO farmers and ecosystems such as forests, exposing them to adverse

38 Soil Association. 2002. Seeds of Doubt. North American Farmers' Experiences of GM Crops. Available at: orgprints.org/9041/1/Seeds_of_Doubt.pdf.

impacts, including the damaging of plants' and humans' DNA.[39] Contamination of peasants' and Indigenous Peoples' crops by GMOs can also result in them having to pay licensing fees and fines to the patent holder.

New biotechnologies, which use non-transgenic genetic techniques (such as cell fusion, and new techniques of mutagenesis, among others) and are sometimes referred to as 'new breeding techniques' or 'new genetic techniques', entail higher risks of adverse impacts on peasants and Indigenous Peoples inasmuch as genetic manipulations are more difficult to identify in comparison to first generation GMOs. In addition, biotechnology and agribusiness companies are pushing governments to exclude such techniques from existing GMO regulations, thus side-lining any measures that may exist to protect farmers and consumers from the risks of GMOs.

B. Elements to guide discussions at national and/or regional level

In order to ensure peasants' and Indigenous Peoples' rights to save and use their seeds against contamination by GMOs, legal frameworks should:

- Respect, protect and guarantee peasants' and Indigenous Peoples' rights to use seeds of their choice and to decide on the crops and varieties that they wish to grow, including the right to refuse the use of GMOs and other genetic engineering technology products.

- Rigorously apply the precautionary principle to GMOs, including organisms developed through new genetic technologies ('new breeding techniques', gene editing etc.), in order to avoid harm to health, the environment as well as impairments of human rights and the contamination of peasants' seeds systems. This should lead to a prohibition of GMOs, including their import. In countries where GMOs have been introduced, states should develop processes to phase them out.

- Clarify that organisms developed through new genetic technologies (sometimes referred to as 'new breeding techniques'), such as genome editing, among others, are to be considered as GMOs and are therefore regulated as such, rigorously applying the precautionary principle and the highest human rights, environmental and ethical standards.

- Put in place rigid and effective regulations to safeguard the environment and human rights, including peasants' and Indigenous Peoples' rights to seeds, in cases where states are not willing to prohibit or phase out the use of GMOs. Such regulations should include among others: strict prior impact and risk assessments and monitoring; a strict protection of traditional

39 Ferreira, María Florencia et al. 2017. Effects of the herbicide glyphosate on non-target plant native species from Chaco forest (Argentina). Ecotoxicology and Environmental Safety
Volume 144, October 2017, Pages 360-368; International Agency for Research on Cancer. 2015. IARC Monographs Volume 112: evaluation of five organophosphate insecticides and herbicides. Available at: www.iarc.who.int/news-events/iarc-monographs-volume-112-evaluation-of-five-organophosphate-insecticides-and-herbicides.

crops against contamination (particularly in centers of origin); prohibition of open field experiments; and strict rules regarding segregation, traceability and labeling.

- Recognize the right of authorities, including local authorities, to establish GMO-free zones, and put in place adequate measures to prevent contamination of such zones.

- Ensure oversight of GMO testing and use through responsible government agencies, taking effective measures to prevent all contamination and address conflicts of interest. Such agencies need to provide accurate information to the public and operate with full transparency.

- Put in place clear accountability rules for all actors involved in the development and use of GMOs in order to make them liable for any harm caused by their operations.

COMMUNITY SEED BANKS OR SEED HOUSES

A. What is at stake?

As stated before, seed management through peasant and Indigenous Peoples' seed systems is dynamic and collective. Seed saving may be done individually/at the household level or collectively. There are usually mechanisms through which farming communities can ensure that seeds are available, and that the genetic pool of their seeds is constantly renewed. Farming communities around the world have developed collective seed management systems, which are called in many different ways, depending on local realities. Community seed banks,[40] seed houses, granaries, etc. all designate places and practices of collective seed conservation and management. The exact way in which community seed banks work depends a lot on the local context and is based on the rules that a given farming community establishes for itself, but they are usually based on the collective storing of seeds, with community-led rules that allow community members – and possibly also other peasants and/or Indigenous Peoples – to obtain a certain quantity of seeds stored in the seed bank/house/hut, thus contributing to maintaining and further developing agricultural biodiversity. Seeds may be stored in a specific building in the community, but also in family granaries or simply on the kitchen shelf of community members. These practices also exist without there necessarily being a physical place of collective seed storage, instead constituting a network of peasants and/or Indigenous Peoples who know each other, who organize seed exchanges, and sometimes establish collectively managed plots for testing, selection and/or production of seed.

Generally, there is a form of knowledge and know-how transmission that enhances knowledge and capacity-development based on collective tools for description, circulation and experimentation. Another common feature is that community

40 Many peasants and Indigenous People prefer other terms to 'banks' because the main issue is the collective, dynamic management of seeds, rather than a physical space to store seeds. It is important to be mindful of the fact that peasants' and Indigenous Peoples' seed management practices predate the promotion of community seed banks (including this term/denomination) by some development agencies and NGOs.

seed banks/houses are usually built by a network of farmers who know each other and work jointly toward the same goal. Finally, they enable quality assurance systems based on local knowledge and the application of collectively defined rules.

Community seed banks or seed houses are very different from formal seed or gene/germplasm banks. The former are managed by farmers for farmers who take seeds from community seed banks or seed houses to use them in their fields, before they return them to the seed bank/house. In this way, farmers collectively contribute to the further development of seeds and their adaptation to local conditions. In fact, seed houses are mostly empty during the agricultural season, as seeds are multiplied in peasants' and/or Indigenous Peoples' fields. Collective seed management through community seed banks is also important for the transmission and exchange of seed-related knowledge and know-how, and is sometimes linked to mechanisms for collective seed quality assurance (see Chapter II.D). Community seed banks or seed houses can ensure that a given community or farmer network can manage its own seeds without any limitations by IPR or other laws. In addition, they allow peasants and Indigenous Peoples to be able to oversee and control who gets access to their seeds.

By making a wide range of seeds available to community members, community seed banks, seed houses, granaries etc. contribute to ensuring genetic diversity in peasants' and Indigenous Peoples' fields. By offering seeds at lower costs than acquiring them through seed vendors, they contribute to ensuring peasants' and Indigenous Peoples' seed sovereignty and improving availability and accessibility to a large diversity of locally adapted seeds. As such, they are also instruments for the conservation and selection of local varieties, restoring 'lost' varieties and sharing knowledge and expertise among peasants and Indigenous Peoples. The multiple benefits of community seed banks, seed houses, granaries etc. demonstrate that these are much more than repositories for storing seeds or grain, as some researchers and governments argue.

Over recent years, supporting the establishment of community seed banks has become a preoccupation among state authorities, donors of development cooperation as well as some non-governmental organizations (NGOs). While such initiatives can be very positive and support the realization of peasants' and Indigenous Peoples' rights to seeds and the preservation of agricultural biodiversity, there is a risk that they take away the agency of peasants and Indigenous Peoples, by externally imposing top-down (and sometimes bureaucratic) approaches of managing seeds through community seed banks, which do not respond to farmers' true needs. Despite the manifold benefits of community seed banks, seed houses, granaries etc., establishing formal community seed banks is not a sufficient, nor the most important, means for ensuring the realization of peasants' and Indigenous Peoples' rights to seeds. It is important to keep in mind that community seed banks are equally at risk of facilitating the appropriation of peasant/local/native seeds by researchers and/or commercial breeders, including transnational seed companies. Avoiding this requires community seed banks to be embedded in legal measures that effectively respect and protect peasants' and Indigenous Peoples' rights over their seeds, particularly the rules that define access to seeds that are managed collectively.

B. Elements to guide discussions at national and/or regional level

In order to ensure farmers' rights to save, use, exchange and sell their seeds in the context of community seed banks or houses, legal frameworks should not regulate community seed banks, but provide measures to protect farmers' seeds systems:

- Recognize that community seed banks, seed houses, granaries etc. can contribute to the conservation and sustainable use of seeds and biodiversity under the condition that they fully respect peasants' and Indigenous Peoples' autonomy. This requires, among other things, that laws do not prohibit seed exchange and to ensure that seeds are accessible to peasants and Indigenous Peoples as close to their fields as possible, so that they can choose what to grow.

- Contain clear and effective measures to prevent biopiracy, clarifying that peasants' and Indigenous Peoples' seeds that are stored in community seed banks or houses are to be considered as seeds under development, and therefore belong to the farmers or communities that develop them, in accordance with ITPGRFA Article 12.3(e). This entails recognizing that they alone are entitled to decide who can access these seeds and under what conditions.

- Put in place effective measures to guarantee that the use of seeds from community seed banks or houses by others than community members (including research institutions, commercial breeders or private persons) is subject to free, prior and informed consent (FPIC) of the communities to whom the seeds belong.

- Clarify that community seed banks or houses are different from germplasm/gene banks and that there is no obligation to transfer seeds contained in community seed banks or houses to germplasm banks. In case a farming community or network wishes to establish a relationship between their seed bank and germplasm banks, an agreement needs to be signed by both parties to ensure the respect of peasants' and Indigenous Peoples' rights over their seeds in the context of such a collaboration.

- Foresee the support of community seed banks or houses, as well as other measures to promote the use of peasant/native/local seed by farmers as long as their rights are effectively protected and guaranteed.

PEASANTS' ACCESS TO PUBLIC GERMPLASM/GENE BANKS

A. What is at stake?

As stated earlier, peasants and Indigenous Peoples mainly keep and develop seeds that have been either passed down for generations or received through exchanges from other peasants, Indigenous Peoples or communities. However, sometimes they introduce commercial varieties that they have bought on the market into their production and seed systems. In the face of rapid loss of agricultural biodiversity – in particular the disappearance of many locally adapted varieties following various 'green revolutions' premised on the exclusive use of so-called 'improved' industrial seeds, and/or shocks and emergencies that can lead to the loss of seeds used by farming communities – peasants and Indigenous Peoples may also need or want to access seeds that are conserved in public germplasm/gene banks. This chiefly concerns seeds that have been collected in farmers' fields in order to be conserved in such seed or gene banks.

Legal frameworks should therefore put in place provisions that facilitate the access of peasants and Indigenous Peoples to seeds and related information that are conserved in public germplasm/gene banks.

B. Elements to guide discussions at national and/or regional level

In order to realize peasants' and Indigenous Peoples' rights to seeds, legal frameworks should:

- Establish facilitated access to seeds and associated information that is stored in public germplasm/gene banks for peasants and Indigenous People who contribute to the preservation, sustainable use and further development of biodiversity. Conditions and terms for accessing, as well as pertinent rights and responsibilities, need to be defined in accordance with the rights, needs and practices of peasants and Indigenous Peoples, which are different from those of the seed industry and research institutions. Information on saved seed should be published in a language that peasants and Indigenous Peoples can understand, and germplasm banks should be decentralized in order to be as close as possible to their fields.

- Clarify that there is no obligation for peasants and Indigenous Peoples to restitute the material or associated information from germplasm banks after its further development by them on their fields. Peasants and Indigenous Peoples are free to choose whether to restitute such material or not.

- Establish clear and effective measures to ensure traceability of all transfers of seeds and associated information between peasants and Indigenous Peoples on the one hand, and germplasm/gene banks on the other, as well as subsequent access by researchers or the seed industry, based on written documents that keep track of the movements of the genetic material and associated information. Each farmer or community that provides seed to a germplasm/gene bank must receive a written and dated document in his or her name attesting the handover.

- Clarify the modalities for using public germplasm/gene banks as 'security backup' for peasant/native/local seed. This requires germplasm/gene

banks to put in place seed quality standards, which take into account the needs and practices of peasants and Indigenous Peoples, which are different from industrial standards (see Chapter II. D and Box 7). Wherever individual farmers or farming communities decide to store samples of their seeds under development and associated information in germplasm banks, it needs to be clarified that any seed and associated information provided continues to belong to them, in accordance with ITPGRFA Article 12.3(e). The role of germplasm/gene banks is to support peasants and Indigenous Peoples in the conservation of their seeds and associated knowledge; any access or use by the germplasm bank or other parties require the individual farmer's or community's FPIC.

SHOCKS, SEVERE DISRUPTIONS AND EMERGENCIES

A. What is at stake?

Peasant and Indigenous Peoples' seed systems are usually very resilient. They allow farming communities to constantly adapt their seeds to changing environmental and agro-ecological conditions. However, shocks such as extreme weather events, epidemics, severe pest infestations, conflict and war as well as other crisis situations can lead to loss of harvests and seed stocks. In such situations, communities may not be able to rely solely on their own seeds, but may require assistance in order to have access to adequate seeds to produce and realize their rights to seeds. In the face of the effects of global warming (droughts, irregular rainfall patterns, increased frequency of extreme weather events etc.) and disasters caused by massive destruction of ecosystems (pests, epidemics etc.), shocks and emergency situations are likely to substantially increase in frequency and intensity in the next years.

Emergency and relief programs led by state authorities, international institutions or NGOs often rely on industrial or commercial seed. While making available such seed in response to a crisis or emergency may ensure peasants' and Indigenous Peoples' capacity to produce and feed themselves, it can lead to locking them into the industrial seed sector with its IPR regimes and marketing rules (see Chapter II. D), thus undermining their autonomy and the realization of their rights to seed in the long run. In some cases, seed companies and other actors seek to benefit from emergency situations in order to impose the use of commercial varieties and dislocate markets. They do so by promoting the use of industrial F1 hybrid seeds that prevent peasants and Indigenous Peoples from selecting the seed from their fields for the next season, and/or spreading GMO grains hidden in food aid, which can then be used as seed, creating dependency by expanding commercial seed markets.

Therefore, legal frameworks need to ensure peasants' and Indigenous Peoples' access to seed of sufficient quality and quantity in crisis and emergency situations, in ways that support the realization of their rights over seeds and their seed systems.

B. Elements to guide discussions at national and/or regional level

In order to respect, protect and guarantee farmers' rights in situations of emergencies and crises, legal frameworks should:

- Clarify states' obligations to provide timely, swift and targeted support to peasants and Indigenous Peoples in situations of emergencies, severe disruptions and crises, in order to ensure access to seeds of sufficient quality and quantity, which are adapted to local growing conditions. States should put in place and/or support preventive mechanisms, which are controlled by peasants and Indigenous Peoples, to ensure availability of adequate seeds in crisis situations. In the event of severe disruptions, the state should primarily source seed from those mechanisms and distribute it to affected peasants and Indigenous Peoples.

- Establish that emergency or crisis support measures need to be designed and implemented in ways that ensure – to the extent possible – peasants' and Indigenous Peoples' rights to use seeds of their choice and to decide on the species and varieties that they wish to grow. Such measures should aim to maintain and support peasant seed systems. Food aid must arrive before the consumption of local seed stocks as food, to ensure that these can be used for agricultural production.

- In cases where emergency or crisis support measures entail the distribution of seed that is protected by IPR, provisions should ensure that the use of such seed by peasants and Indigenous Peoples shall not limit their rights over seeds, including the right to select, re-sow and save seeds from their harvest, as well as the right to exchange and sell farm-saved seeds from such varieties.

- Introduce measures that states should take to support farming communities to recover their seeds and rebuild their peasant seed systems after an emergency. Such measures should include facilitated access to seeds and associated information that are stored in public germplasm banks. In order to promote the use of peasant and Indigenous seeds and agricultural biodiversity, support for the exchange of seed among affected farmers with other communities in non-affected areas who practice peasant agroecology should always be prioritized over the distribution (or even the disposal of unsold or downgraded) commercial seed, which is adapted to industrial monocultures.

- Include measures aimed at ensuring peasants and Indigenous Peoples' access to adequate seed in policies and legislation related to disaster management, including budgets for such situations.

/4./ RIGHTS TO EXCHANGE AND SELL SEEDS

A. What is at stake?

Exchanging and selling seeds are part of peasants' and Indigenous Peoples' seed management practices and seed systems, and are core elements of their right to seeds. However, it is in the context of these practices that they face some of the most severe restrictions to exercise their rights. Indeed, the policy and legal frameworks in many countries and regions explicitly or de facto curtail the exchange and sale of seeds that peasants and Indigenous Peoples select in their fields. Seed-related frameworks typically focus on the industrial/commercial seed sector and impose criteria and rules that have been developed for its homogeneous and stable varieties. The economic interests of the seed industry are protected through different types of laws and regulations, especially IPR and seed marketing rules, such as requirements for registration, certification and quality control, and sanitary regulations. In the case of IPR laws, the 1991 Act of the

UPOV Convention (see Box 6) along with national and regional laws on marketing of seeds that are based on this model are particularly restrictive.

Existing frameworks thus marginalize peasant and Indigenous Peoples, whose seeds are per definition neither homogeneous nor stable and do therefore not correspond to the criteria that have been developed for the industrial/commercial seed sector. In several instances, their practices are even outright criminalized. They face particular restrictions in the context of the exchange and sale of seeds that they have selected in their fields from varieties that are protected by IPR.

Peasants and Indigenous Peoples around the world have developed their own criteria to describe their seeds and populations/"varieties" as well as rules to ensure seed quality, which are based on their customary practices and collective rights. These need to be recognized, protected and supported. The exchange and sale of seeds that they have selected in their fields ("farm-saved seed") is critical for peasants' and Indigenous Peoples' contribution to the conservation, sustainable use and further development of agricultural biodiversity.

B. Elements to guide discussions at national and/or regional level

In order to ensure peasants' and Indigenous Peoples' rights to exchange and sell seeds, states should:

- Recognize and effectively protect peasants' and Indigenous Peoples' right to exchange and sell seeds that they have selected in their fields ("farm-saved seed") as core components of their seed systems and seed management practices.

- Ensure that seed policies and laws, IPR laws, certification schemes, and seed marketing rules do not restrict peasants' and Indigenous Peoples' right to seeds, and take into account their realities and needs, in accordance with UNDROP Article 19.8.

- Proactively address the discrimination of peasant and Indigenous Peoples' seeds and seed systems resulting from agricultural and seed policies and IPR laws that are biased towards the commercial/industrial seed sector, including by redirecting public financial support to agroecological peasant farming.

The following paragraphs will provide more specific guidance on critical elements in the context of peasants' and Indigenous Peoples' right to exchange and sell seed.

SEED EXCHANGE

A. What is at stake?

Seed exchange is very common among peasants and Indigenous Peoples around the world, and is part of their seed management practices and systems. Such exchanges happen within a given community or group but also between peasant or Indigenous farmers from different communities. They are organized according to rules established by the community or group, or based on an agreement between the farmers or Indigenous Peoples involved in an exchange. In some countries and regions, exchange networks have been created in order to facilitate the exchange of seeds between farmers. Peasant/indigenous seed fairs are other spaces where such exchanges take place. Seed exchanges are important in order to ensure the renewal of genetic diversity of the seeds and "varieties"/populations that are used by farmers or communities. They are also crucial to stop genetic erosion, increase agricultural biodiversity and to ensure adaptability of crops and varieties to changing conditions, in particular in the context of climate change.

While the exchange of seed between farmers is usually less contentious than the sale of seed, laws may introduce proscriptions or restrictions, such as establishing excessive limitations on the quantity of seed that may be exchanged or imposing phytosanitary rules that have been developed for the industrial seed sector and are not adapted to peasant and Indigenous Peoples' seeds. In some countries' legal frameworks, non-monetary exchanges are considered a commercial transaction, thus prohibiting or restricting them according to the laws that apply to seed sale and marketing.

B. Elements to guide discussions at national and/or regional level

In order to implement peasants' and Indigenous Peoples' rights to exchange their seeds, legal frameworks should establish that:

- the exchange between peasants and Indigenous Peoples of seeds that they have selected in their fields ("farm-saved seed") does not constitute a commercial transaction within the scope of seed and PVP laws.

- there are no restrictions or limitations regarding the exchange of seeds that peasants and Indigenous Peoples have selected in their fields ("farm-saved seed") between peasants and Indigenous Peoples, individually or as a community, other than those that they have defined themselves;

- the right of peasants, Indigenous Peoples and their communities to define the modalities and rules for the exchange of their own seed is recognized and guaranteed.

REGISTRATION OF PEASANT/INDIGENOUS SEEDS OR "VARIETIES"

A. What is at stake?

The registration of peasant/indigenous/native "varieties" is proposed by several governments, international organizations and NGOs as a means to protect these from illegitimate appropriation. In some cases, proponents argue that registration could be the main way to realizing farmers' rights as recognized by ITPGRFA. Consequently, a large number of donor-funded projects supporting peasants and Indigenous Peoples to register their seeds are being implemented in all parts of the world.[41] However, such approaches entail risks that may lead to the opposite outcome, namely the further limitation of peasants' and Indigenous Peoples' rights over their seeds and their seed management practices.

In many national frameworks, the registration of "varieties" in a national catalogue or registry is a precondition for production, sale and marketing of seeds. In addition, many countries have laws that require seed producers to register in order to produce and sell their seeds. These seed laws also put into effect seed certification requirements that need to be met before seed is produced/multiplied and sold, marketed and exported (see the section on seed marketing rules below for more details).

Given that national and regional seed catalogues and registries (as well as certification systems, which will be discussed in more detail below) have been developed for the commercial/industrial seed system, the criteria for description and registration are those developed for this sector. Concretely, for purposes of registration, a variety must meet the criteria of distinctiveness, uniformity and stability (DUS criteria) and, depending on the country, sometimes also Value for Cultivation and Use (VCU) criteria (see Box 7 for more information on the different criteria). As explained above, peasant and Indigenous Peoples' seeds do not comply with these criteria because they are dynamically managed and conserved, and are in permanent development. They can therefore only be identified by their phenotypic and cultural characteristics, which have already been noted by the peasants, Indigenous Peoples or communities to which they belong. These characteristics remain stable only in their original growing conditions. Consequently, often such seed cannot be sold legally because it is prohibited by the seed law.

In order to respond to this situation, some countries and regions have introduced specific provisions, registries or annexes to their catalogues for farmer/peasant/indigenous, local, traditional or native "varieties"/populations, which have less strict criteria for registration and multiplication, in order to take into account the description used by peasants and Indigenous Peoples. While these measures may, in some cases, lower the obstacles by peasants and Indigenous Peoples to sell their seeds, they can entail a number of risks and problems. Among others, such approaches:

- Are often imposed on peasants and Indigenous Peoples, instead of responding to their real needs and aspirations;
- Take the seed out of the peasant/Indigenous Peoples' management sys-

41 See, for instance: African Centre for Biodiversity/PELUM Zimbabwe. 2020. Registration of farmers' varieties in SADC. Available at: www.acbio.org.za/sites/default/files/documents/202008/registration-farmers-varierties-sadc_0.pdf.

tems, in which it is embedded;

- May constitute the first step towards privatization of peasant seeds, which entails the risk of illegitimate appropriation by other actors (biopiracy);

- Can lead to limitation in possible uses of the respective variety for farming communities or individual peasants;

- May put peasants and Indigenous Peoples in competition with other, more competitive actors regarding the promotion of and the benefits from these "varieties".

B. Elements to guide discussions at national and/or regional level

In order to implement peasants' and Indigenous Peoples' rights to sell and exchange their seeds, states need to ensure that these are not limited or restricted by any mandatory description or registration and certification systems. In order to do so, national and/or regional frameworks should:

- Clarify that there is no registration requirement for seed that peasants and Indigenous Peoples have selected in their fields and that their rights to exchange and sell such seeds also applies when these are not registered. In addition, it should be explicitly stated that peasants and Indigenous Peoples are not required to register as seed producers in order to sell their seeds. If necessary, states need to adapt their existing seed and intellectual property rights laws accordingly.

- Guarantee peasants' or Indigenous Peoples' freedom to describe and identify their seeds according to the criteria of their choice whenever they choose to register them. Registration should be done in the name of the individual peasant/farmer or the community, not in the name of a "variety".

- Clarify that whenever peasants or Indigenous Peoples choose to register their own seeds, this does not prevent other peasants, Indigenous Peoples or communities from using them and selling their own seeds.

- Establish that the registration of peasant/indigenous seeds or populations/"varieties" in formal registers cannot be done without the free, prior and informed consent (FPIC) of all peasants, Indigenous Peoples or communities who have selected and conserved them, in accordance with international human rights standards.

- Guarantee that no person or corporation can appropriate a variety denomination used by peasants or Indigenous Peoples by registering a variety type that prohibits the use of that denomination for the cultivation and marketing of other variety types already cultivated and marketed under that same denomination.

- In case states deem it necessary to register all marketed varieties, including peasant/indigenous populations/"varieties", in order to protect the seed buyer, they should not impose criteria, which are unsuitable for peasant/indigenous/native seeds. Instead, they should require only strictly necessary information, namely:
  - the species to which the seeds belong;
  - the name(s) of the peasant(s)/Indigenous Peoples/communities that have selected, conserved and produced them;
  - their region of origin; and
  - the year of production.

- Recognize and guarantee the rights of peasants, Indigenous Peoples and communities to establish their own (community) seed inventories, as part of their right to self-determination.

- Offer the legal possibility of lodging these inventories, without making them public, with a public authority that can guarantee the pre-existence of the registered peasant populations/"varieties" in the event of a subsequent biopiracy attempt.

Box 5

Seeds, intellectual property and the primacy of human rights

Intellectual property rights (IPR) are an important means to privatizing seeds and genetic resources. They grant exclusive rights over seed production and marketing to individuals or companies who have 'created' a new variety (breeders). Intellectual property – through the exclusive, individual rights it promotes – is diametrically opposed to the way in which peasants and Indigenous Peoples conceive of seeds and their associated knowledge, innovations and practices. In many instances, IPR enter into direct conflict with peasants' and Indigenous Peoples' rights to seeds by restricting these and/or criminalizing farming communities' seed management practices. This happens despite the fact that international law clearly establishes the primacy of human rights over other legal norms.

Under the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS), World Trade Organization (WTO) member countries are required to provide some form of intellectual property protection on plant varieties. Article 27.3 b) establishes that governments have to provide protection through the following means: 1) patents; 2) an effective sui generis system (a system of its own kind); or 3) any combination of these two means. TRIPS thus allows states to develop

a variety protection system that is adapted to their needs (sui generis system).[42] However, the seed industry and several governments have used the TRIPS agreement and/or bilateral trade agreements as a catalyst to promote the UPOV system, which sets significant limitations to peasants' and Indigenous Peoples' rights to seeds (see Box 6).

Whereas IPR are based on the international commercial law regime, peasants' and Indigenous Peoples' rights to seeds are enshrined in the international human rights framework. As explained in Chapter I, these rights have been recognized on the basis of the past, present and future contributions of peasants and Indigenous Peoples – through their collective practices and systems – to the conservation, sustainable use and further development of agricultural biodiversity. For rural people, seeds and agricultural biodiversity have an inalienable character, i.e. the identity of peasants and Indigenous Peoples as well as the social fabric of their communities are deeply intertwined with the seeds, plants and animals that they live with. The recognition of seeds and biological diversity as human rights in international human rights law is grounded in their inalienable nature. Furthermore, seeds and biodiversity are essential for the enjoyment of many human rights, including the rights to food and nutrition, work, health, self-determination and culture.

In international law, human rights instruments take precedence over other international instruments, such as those protecting IPR. According to the UN Charter, the promotion and protection of human rights is one of the UN's main purposes (Article 1(3)), and UN Member States pledged to take joint and separate action to promote universal respect for human rights (Articles 55(c) and 56). The UN Charter also provides that "[i]n the event of a conflict between the obligations of the Members of the United Nations under the present Charter and their obligations under any other international agreement, their obligations under the present Charter shall prevail" (Article 103).[43] UNDRIP and UNDROP in particular clarify that peasants' and Indigenous Peoples' rights to seeds are human rights. Moreover, article 19.8 of UNDROP clarifies that states "shall ensure that seed policies, plant variety protection and other intellectual property laws, certification schemes and seed marketing laws respect and take into account the rights, needs and realities of peasants and other people working in rural areas."

The fact that, in practice, IPR often prevail over peasants' and Indigenous Peoples' rights to seeds is therefore a breach of states' obligations under international human rights law.

42 In 2010, the Plurinational State of Bolivia expressed strong concerns about Article 27.3 b), stating that the patent system has become an instrument of privatisation and commoditisation of life itself on a worrying scale and magnitude and stressing that for the Indigenous Peoples of Bolivia and of many other peoples of the world, life is something sacred that under no circumstances should be subject to private appropriation or considered as a commodity. Bolivia also pointed out that a revision of this article is necessary to prohibit the patenting of all forms of life, guarantee the protection of innovations of indigenous and local agricultural communities and prevent anti-competitive practices that threaten food sovereignty in developing countries. See Third World Network. 2010. TWN Info Service on WTO and Trade Issues, 21 June 2010. Available at: twn.my/title2/wto.info/2010/twninfo100605.htm.

43 It is worth noting that all UN Member States reaffirmed, in the Vienna Declaration and Programme of Action, that the promotion and protection of human rights is the first responsibility of governments. See Geneva Academy. 2020. The Right to Seeds and Intellectual Property Rights. Research Brief. Available at: www.geneva-academy.ch/joomlatools-files/docman-files/The%20Right%20To%20Seeds%20And%20Intellectual%20Property%20Rights.pdf.

SALE AND MARKETING OF SEEDS, INCLUDING "FARM-SAVED SEED" FROM VARIETIES PROTECTED BY IPR

A. What is at stake?

The use, sale and marketing of seeds that have been selected in their fields ("farm-saved seeds") is a very common practice among peasants and Indigenous Peoples, and can be an important additional source of income for some. Buying seeds from other peasants or Indigenous Peoples, local seed traders, and commercial seed producers is a way of ensuring genetic renewal of the crops and "varieties" used by farmers, which is crucial for the further development of agricultural biodiversity and adaptation to climate change. Depending on the context, peasants and Indigenous Peoples may also use seeds of varieties developed by public research institutions as well as commercial varieties, and then use and sell seeds that they have selected in their fields.

However, these practices are among the most contentious aspects of farmers' rights. In this sense, many countries significantly restrict the rights of peasants and Indigenous Peoples through legal frameworks. The goal of such measures is to protect breeders' and seed companies' IPR (in the form of plant variety protection and/or patents), based on international agreements such as WTO's TRIPS agreement and UPOV conventions (see Boxes 5 and 6). The implementation of IPR is usually justified with the need to stimulate plant breeders' creation of new varieties by increasing the economic value of their 'innovations'. They are thus granted as exclusive rights, which restrict the use of seeds from protected varieties by other persons and entities. Usage is typically subject to the payment of royalties, including in cases where peasants and Indigenous Peoples use seeds that they have selected in their fields ("farm-saved seed") from protected varieties. The seed industry is significantly pressurizing governments to impose and expand corporate-friendly IPR regimes, resulting in the adoption of increasingly stricter legal measures that limit peasants' and Indigenous Peoples' ability to use and sell their seeds in many countries. Some countries go further and restrict the sale of products derived from these propagating materials.[44] Due to the dematerialization of seeds and genetic resources and the use of digital sequence information (DSI, see Chapter II.E), seed corporations can now patent gene sequences and genetic information, consequently limiting the use of any seeds that contain these sequences and subjecting it to the payment of royalties. It should be noted that the core argument in favor of IPR, i.e. to encourage plant breeders to 'innovate', is questionable. IPR are a central part of the industrial agricultural system, which has dramatically reduced agricultural biodiversity over the last century (see Introduction). IPR contribute directly to this erosion inasmuch as they reward and encourage standardization and homogeneity. This has particularly grave consequences for resilience of agricultural systems to climate change-related uncertainty.

Oftentimes, the sale and marketing of seeds by peasants and Indigenous Peoples is restricted further by quality control and certification requirements, which have been developed for the seed industry but subsequently applied to all seeds, al-

44 This is the case, for instance, in the IPR system championed by the African Regional Intellectual Property Organization (ARIPO). See African Centre for Biodiversity. 2018. The Arusha Protocol and Regulations: Institutionalising UPOV 1991 in African seed systems and laws. Discussion Document. Available at: www.acbio.org.za/sites/default/files/documents/The%20Arusha%20Protocol%20and%20Regulations_Institutionalising%20UPOV%201991%20in%20African%20seed%20systems%20and%20laws.pdf.

though the criteria in question do not correspond to the realities of peasants and Indigenous Peoples. By restricting or disallowing peasant and indigenous seed to be sold and marketed freely, seed, certification and IPR laws ensure that the seed industry can dominate the seed sector, thus actively marginalizing peasant and Indigenous Peoples and their seed systems.

It should be noted that farmers' rights as recognized by ITPGRFA are limited to those peasants and Indigenous Peoples who contribute to the conservation and further development of agricultural biodiversity (see Chapter II.A on Definitions). They typically sell their seeds directly to other farmers, and these transactions, therefore, do not habitually happen in the realm of the anonymous, commercial (global) seed market. As such, peasants' and Indigenous Peoples' seeds do not directly compete with commercial/industrial seeds, but are exchanged and sold on a different kind of 'market', which is specific to them and is based on a direct peer-to-peer (farmer-to-farmer or community-to-community) relationship.

Article 9 of ITPGRFA entrusts states to implement farmers' rights in their policies and laws. This includes peasants' and Indigenous Peoples' right to sell seeds and propagating material selected by them in their fields ("farm-saved seeds"). In practice, however, most countries' policy and legal frameworks create an environment where IPR trump farmers' rights and commercial seed trumps peasant and indigenous seed. This not only breaches fundamental principles of international law (see Box 5), but also constitutes a discrimination vis-à-vis peasants and Indigenous Peoples and their seed systems. It is therefore urgent that states revise their legal frameworks in accordance with their human rights obligations. This requires them to take action at two levels, namely:

1. Legal recognition and protection of peasant and Indigenous Peoples' seed systems: States need to put in place specific legislation to protect and promote peasants' and Indigenous Peoples' seed management practices, through which they realize their right to seeds.

2. Seed, IPR and seed marketing laws as well as seed certification schemes: States must ensure that these laws and schemes do not restrict peasants' and Indigenous Peoples' rights to seeds, nor lead to the criminalization of their seed systems and customary practices. Regarding IPR, adequate *sui generis* IPR laws can contribute to this objective.

B. Elements to guide discussions at national and/or regional level

In order to implement peasants' and Indigenous Peoples' rights to use, exchange and sell the seeds that they have selected in their fields ("farm-saved seeds"), legal frameworks should clarify that:

- there are no restrictions to the use, exchange and sale of seeds between peasants and Indigenous Peoples;

- peasants' and Indigenous Peoples' right to seeds ("farmers' rights"), including the right to sell farm-saved seeds and propagating material, apply to all types of seeds that are selected and multiplied by them in their fields. This includes seed selected from varieties that are protected by IPR.

- the right of peasants and Indigenous Peoples to sell their own seeds directly to other peasants and Indigenous Peoples does not require them to

register as seed producers, nor to register their seeds/"varieties"/populations (see section on Description and registration of peasant/farmer/native seeds).

- IPR do not limit peasants' and Indigenous Peoples' rights over their seeds in any way. Rather, states need to revise their laws (in particular PVP, patent, seed laws etc.) so that they do not restrict farmers' rights, in accordance with ITPGRFA Article 9 as well as UNDROP article 19.8.

In some cases, countries may have passed seed, PVP or other laws that establish restrictions – explicitly or *de facto* – to peasants' and Indigenous Peoples' rights to sell seed that they have selected in their fields, especially from protected varieties, and it may not be possible to revise them immediately. In these cases, international human rights law requires states to revise their policy and legal frameworks, and in the meantime to introduce the necessary measures to ensure farmers' rights. Accordingly, the following measures could be adopted:

- A possible condition for the sale of farm-saved seed from protected varieties by peasants and Indigenous Peoples is to refrain from using the protected variety's name, trademark or trade name of the right holder in seed labeling.

- Another possibility is the establishment of thresholds below which producing, marketing and selling seeds by peasants and Indigenous Peoples is allowed without restrictions. Such thresholds can be defined according to the volume of seeds or to the market value. Either way, such thresholds need to be carefully defined in a way that they do not restrict peasants' and Indigenous Peoples' rights to exchange and sell seeds that they have selected in their fields. They must correspond, for the supplier, to what an average farm in the region can produce beyond food market crops and, for the recipient, to the needs of an average farm in the region.[45]

Box 6

UPOV vs. the right to seeds

The International Union for the Protection of New Varieties of Plants (UPOV) has set up an IPR/plant breeders' rights system that substantially restricts peasants' and Indigenous Peoples' right to seeds. This has been demonstrated by a number of case studies and

45 The production capacity or needs of 'hobby' or 'leisure' gardeners are certainly not appropriate criteria for the definition of thresholds.

acknowledged by human rights institutions.[46] Nevertheless, the seed industry and some countries (of the Global North) assert that UPOV respects the provisions of ITPGRFA Article 9, and have gone so far as suggesting that launching UPOV-based PVP systems can be considered a way of supporting the implementation of farmers' rights.[47] Such claims are false and dangerous for two main reasons.

Firstly, peasants' and Indigenous Peoples' seeds cannot be described by the criteria that underpin the UPOV system. This is not because their seeds are of a lesser quality, but because UPOV criteria have been developed for the industrial seed sector. In order to be registered as a variety under the UPOV system, it needs to be novel, distinct, uniform and stable, i.e. meet the so-called NDUS criteria. Because peasants' and Indigenous Peoples' seeds and populations are in constant evolution and managed in a dynamic way within their agricultural and seed systems, they do not meet these criteria. This is a reflection of the vast difference between the peasants' and Indigenous Peoples' conception and management of seeds and that of the industrial seed sector, marginalizing and criminalizing the former's seeds and management practices in countries that have joined UPOV or have developed UPOV-based legal frameworks.

Secondly, the exceptions foreseen in the UPOV system do not allow for the realization of peasants' and Indigenous Peoples' right to seeds. UPOV grants the breeder of a new plant variety a monopoly over its commercial seed production and marketing through a plant variety certificate (PVC). The PVC differs from a patent in two important exceptions, which have been devised so as to facilitate the development of new varieties and guarantee food security. First, the so-called "breeders' exemption" allows for the use of protected varieties for the purpose of breeding new ones. Second, the so-called "farmers' exemption" or "farmers' privilege" should ensure that no restrictions are placed on peasants' and Indigenous Peoples' right to select and use their own seeds, namely by selecting seeds from the harvest of a protected variety. However, whereas this exemption was comprehensive in the first Act of the UPOV Convention of 1961, it has been strongly curtailed in its successive versions, in particular the 1991 version.

Article 15(2) of UPOV 1991 provides an optional (i.e. not mandatory[48]) exception, which may be incorporated into national laws to allow farmers to use a protected variety "for propagating purposes, on their own holdings, the product of the harvest which they have obtained by planting, on their own holdings". This exception, however, is subject to a number of conditions, namely ensuring that it stays "within reasonable limits" and safeguards "the legitimate interests of the breeder." In addition, this exception only applies to "private and non-commercial use"

46 See, for instance: Braunschweig, Thomas; Meienberg, François; Pionetti, Carine; Shashikant, Sangeeta. 2014. Owning Seeds, Accessing Food. A Human Rights Impact Assessment of UPOV 1991 based on case studies in Kenya, Peru and the Philippines. Available at: www.publiceye.ch/fileadmin/doc/Saatgut/2014_Public_Eye_Owning_Seed_-_Accessing_Food_Report.pdf; Christinck, Anja and Walløe Tvedt, Morten. 2015. The UPOV Convention, Farmers' Rights and Human Rights. An integrated assessment of potentially conflicting legal frameworks. Published by GIZ. Available at: wocatpedia.net/images/c/cd/Giz2015-en-upov-convention.pdf; De Schutter, Olivier. 2009. Seeds policies and the right to food: enhancing agrobiodiversity and encouraging innovation. Report of the Special Rapporteur on the right to food to the UN General Assembly. A/64/170. Paragraph 7. Available at: undocs.org/A/64/170.

47 See, for instance, the submissions made by the International Seed Federation (ISF) and some governments to the Inventory of the AHTEG on farmers' rights. Representatives of the seed industry, UPOV and UPOV member countries regularly state that UPOV and ITPGRFA need to be implemented in a mutually supportive manner, implying that the implementation of farmers' rights needs to be done within the limits of UPOV. It needs to be noted, however, that only a fraction of the state Parties to ITPGRFA are members of UPOV, and even fewer have ratified the 1991 Act of the UPOV Convention.

48 This means that states that join UPOV can choose whether to apply this exception or not.

of seeds selected from protected varieties. While the 1991 Act of the UPOV Convention is not entirely clear about what is to be considered as private and non-commercial use, UPOV has clarified that this exception generally does not extend to non-commercial uses. It states that while "the propagation of a variety by an amateur gardener for exclusive use in his own garden" may fall within the scope of the exception, it needs to be ensured that no material of the variety is being provided to others. This means that the exchange and sale of seeds that have been selected by amateur gardeners is not allowed. UPOV further clarified that the scope of the exception for subsistence farmers is limited to the "propagation of a variety by a farmer exclusively for the production of a food crop to be consumed entirely by that farmer and the dependents of the farmer living on that holding [...]."[49] Thus, the "farmers' privilege" in UPOV 1991 is extremely narrow and excludes any exchange and sale of surplus of the harvest as well as any exchange or sale of seeds selected by peasants and Indigenous Peoples in their fields. As such, it restricts their right to seeds, confining them into a small niche if not outright criminalizing their seed management practices.

It should be noted that UPOV has already applied this narrow interpretation in its assessments of the seed and PVP laws of countries that requested membership. Concretely, it has conditioned the accession of countries like Malaysia and the Philippines to the revision of legal provisions that allowed the exchange and sale of seeds among farmers.[50] In the light of this, it is highly problematic that the seed industry and several governments of the Global North are enticing countries of the Global South to become members of UPOV, even though their agricultural sectors rely on peasants and on indigenous food production and seed systems. Indeed, UPOV is presented to governments from the Global South as a handy way of complying with their obligation to formulate IPR laws on plants under the TRIPS agreement. What is more, adhesion by developing countries to UPOV is often imposed through clauses in trade agreements.

49 UPOV. 2009. Explanatory Notes on Exceptions to the Breeder's Right Under the 1991 Act of the UPOV Convention. Available at: www.upov.int/explanatory_notes/en.

50 See: Braunschweig, Thomas; Meienberg, François; Pionetti, Carine; Shashikant, Sangeeta. 2014. Owning Seeds, Accessing Food. A Human Rights Impact Assessment of UPOV 1991 based on case studies in Kenya, Peru and the Philippines. Available at: www.publiceye.ch/fileadmin/doc/Saatgut/2014_Public_Eye_Owning_Seed_-_Accessing_Food_Report.pdf.

Box 7

Standards for the industrial seed sector

A number of standards and criteria have been developed in the context of IPR and seed marketing rules. All of these have in common that they have been developed for the industrial/commercial seed sector. Consequently, they are inappropriate for the description and characterization of peasant and Indigenous Peoples ' seeds and differ substantially from their own criteria to determine and ensure good seed quality.

UPOV and other IPR regimes require varieties to meet the criteria of novelty, distinctiveness, uniformity and stability (NDUS), in order to protect them as new varieties. Novelty means that a new variety needs to be different from other varieties that are already protected.[51] Distinct means that a variety needs to be different from other existing varieties in at least one key characteristic. Uniform means that plants in each generation are the same as one another in key defined characteristics. Stable means that key defined characteristics are reproduced with limited or no variation from generation to generation.

Additionally, distinctiveness, uniformity and stability (DUS) are criteria that need to be met for variety releases, and are also a requirement for seed certification under the Organization for Economic Cooperation and Development (OECD).[52] Some countries also require varieties to meet Value for Cultivation and Use (VCU) criteria for purposes of registration. VCU tests are based on the notion that new varieties must have some additional benefit over existing varieties before they can be released.

Peasants' and Indigenous Peoples' seeds are heterogeneous and adaptable to changes in their social and natural environment, hence the above-mentioned criteria are unfitting. Moreover, these criteria and related comprehensive testing procedures entrench structural marginalization and discrimination of these seeds in different countries' seed sectors. Firstly, the high costs and administrative burden of registration processes deter marginalized people from engaging in them. Secondly, testing for variety release is mostly financed with public funds. This public support to the industrial/commercial seed sector is not mirrored by equal support to peasant and Indigenous Peoples' seed systems.

51 "Novelty" does thus not mean that a variety needs to be completely new or non-existing before a certain moment in time. The wording of article 6 of the UPOV 91 Convention states that the terms means that "propagated or harvested material of the variety has not been sold or otherwise disposed of to others." This means that a variety is considered "new" if it has not been commercially sold before the application. This opens the door for the illegitimate appropriation of peasant and indigenous peoples' seeds (see Chapter II.5).

52 OECD has developed Schemes for the Varietal Certification of Seed. These contain a list of species and varieties that are eligible for certification and establish distinction, uniformity and stability (DUS) as requirements for certification. Membership is open to OECD, UN and WTO countries and currently 61 countries participate. See: www.oecd.org/agriculture/seeds.

As described throughout this paper, peasants' and Indigenous Peoples' seeds and seed systems are distinct from the industrial/commercial sector. This includes the ways in which they describe their seeds and "varieties"/populations as well as the criteria and mechanisms with which they define and ensure seed quality. The recognition and legal protection of their seed systems is a key component of the realization of peasants' and Indigenous Peoples' right to seeds.

SEED MARKETING RULES, QUALITY CONTROL AND CERTIFICATION

A. What is at stake?

Seed marketing rules such as variety release and certification requirements as well as phytosanitary measures *de facto* limit peasants' and Indigenous Peoples' right to seeds in many countries, especially their right to sell their seeds. Such rules and requirements have been developed for industrial seeds and seed production and are therefore not adapted to their seeds and seed management practices (see Box 7). Consequently, their seeds usually cannot comply with industrial standards that are the basis of most seed laws. Given that certification is a condition for the marketing of seeds in many countries, such requirements often preclude peasants' and Indigenous Peoples' ability to sell – and sometimes also to exchange – the seeds that they have selected in their fields, and may even result in the criminalization of their practices. In addition, the considerable – mostly public – resources that are used for testing and monitoring are symptomatic of the structural bias towards the industrial seed system, which consequently increases its dominance. This involves the side-lining and denigration of peasants' and Indigenous Peoples' seed and production systems, as well as a lack of public support and funding.

Peasants and Indigenous Peoples all over the world have developed their own control systems in order to guarantee seed quality. These can be informal, based on trust, reputation and social rejection of those who do not respect the rules of a given community or network, or formalized, as in the case of codes of conduct or participatory guarantee systems (PGS). Such quality assurance systems are an important part of peasant and Indigenous Peoples' seed systems. They apply criteria that have been previously defined collectively by farmers and their communities, based on their own needs and practices. Given that exchanging and selling peasant seed usually happens between farmers and is typically based on a personal, peer-to-peer relationship, peasants' and Indigenous Peoples' own quality assur-

ance systems are not only sufficient, but much better adapted to their requirements than the regulations put in place for the seed industry.

Legal frameworks should therefore acknowledge the existence of peasants' and Indigenous Peoples' own seed quality standards, and recognize them as appropriate for the exchange and sale of their farm-saved seed.

B. Elements to guide discussions at national and/or regional level

In order to implement peasants' and Indigenous Peoples' rights to exchange and sell their farm-saved seeds, legal frameworks should:

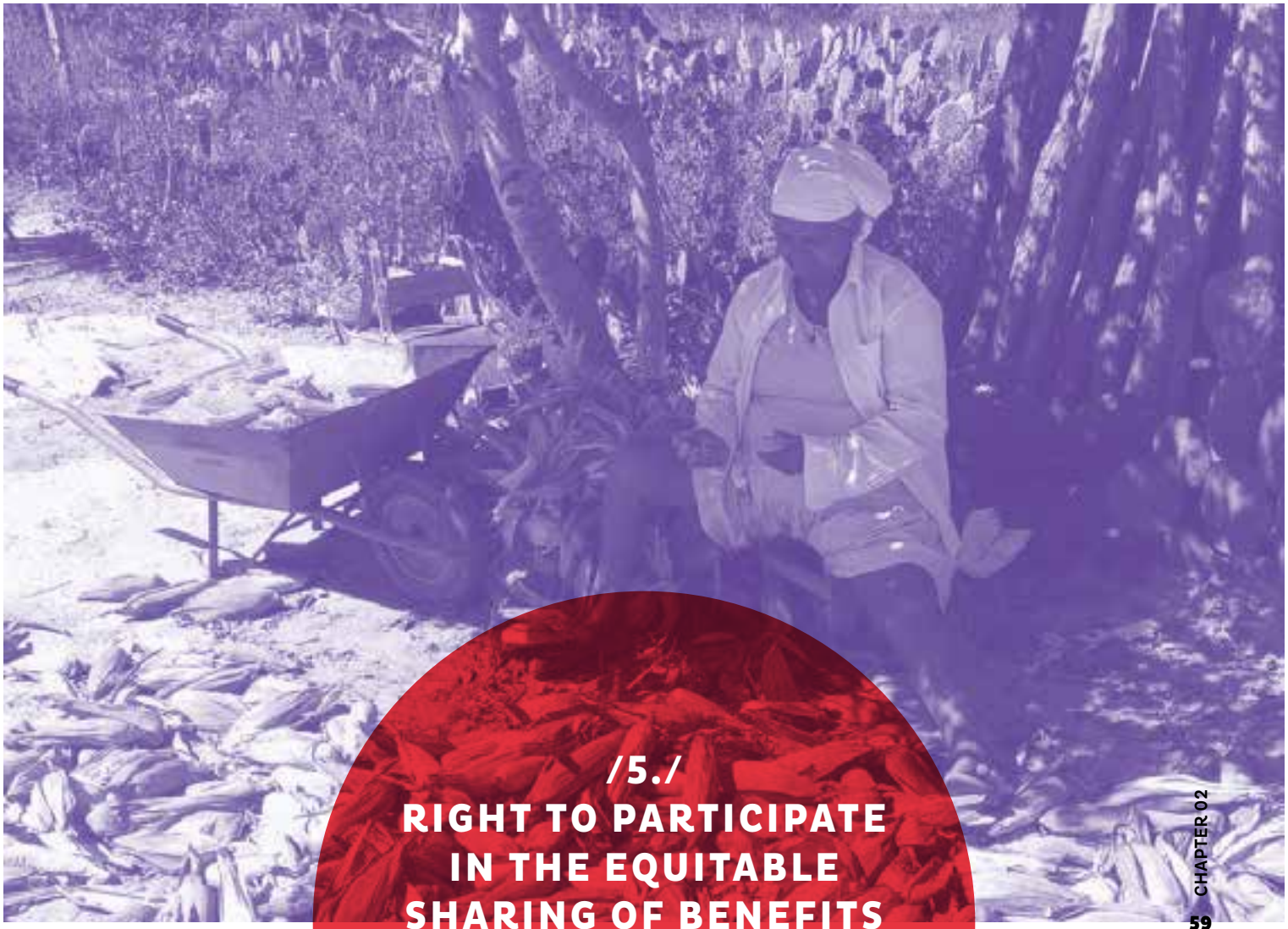
- Clarify that seed marketing rules, including certification requirements and phytosanitary standards, which apply for the commercial/industrial seed sector, do not apply to the exchange or sale of seeds selected by peasants and Indigenous Peoples in their fields ("farm-saved seeds").

- Recognize peasants' and Indigenous Peoples' own mechanisms and criteria for seed quality control and assurance (including phytosanitary and nutrition quality) as part of their seed systems and the realization of their rights to seeds. Such mechanisms and systems should, however, remain voluntary.

- Put in place clear, accessible and participatory procedures for the legal recognition of peasants' and Indigenous Peoples' quality assurance and control systems, including but not limited to PGS.

- Ensure that certification through peasants' and Indigenous Peoples' quality assurance and control systems, such as codes of conduct or PGS, does not limit the rights of other communities using the same "variety"/population.

- Ensure that specific, scale-appropriate food safety policies, biosecurity policies and other relevant regulations are put in place for small-scale producers to allow them to exchange and sell their seeds and products.



/5./ RIGHT TO PARTICIPATE IN THE EQUITABLE SHARING OF BENEFITS ARISING FROM THE USE OF PLANT GENETIC RESOURCES

A. What is at stake?

Peasants' and Indigenous Peoples' right to equitably participate in the sharing of benefits arising from the utilization of plant genetic resources is recognized in ITPGRFA Article 9. As stated above, they have largely developed our existing agricultural biodiversity over centuries of seed selection and management practices that continue to this day. Meanwhile, commercial breeders and seed companies have reaped colossal economic benefits from the work carried out by generations of farming communities around the world. These benefits are derived from unrestricted use of seeds collected from peasants' and Indigenous Peoples' fields, rigid IPR regimes, and other economic protection mechanisms that restrict the use of commercial/industrial seed by actors other than the owner of intellectual property rights covering a given variety, a gene or genetic information. The immense profit made by an increasingly concentrated industrial seed sector thus

goes hand in hand with the plundering of peasants' and Indigenous Peoples' seeds, and with the restriction of their rights over seeds.

At the global level, ITPGRFA has created a Multilateral System (MLS) for facilitated access and benefit sharing. Under this system, breeders, including seed companies and research institutions can access seeds and associated information that have been put in the MLS – in practice this refers mainly to public gene/germplasm banks – under facilitated terms (i.e. without demanding and proving permission by the owner of the material or associated information), in order to develop new varieties. In principle, such access requires a sharing of the benefits, i.e. a payment into ITPGRFA's global Benefit Sharing Fund (BSF). However, in reality, despite enormous profit made by the seed industry since ITPGRFA came into force, they have made practically no payment to date. Consequently, states – especially from the Global South – have received almost no disbursements, which they are supposed to distribute to the benefit of those peasants and Indigenous Peoples who contribute to the conservation, sustainable use and further development of agricultural biodiversity.[53] The growing practice of sequencing the genetic information contained in seeds and saving it in digital format – often referred to as "Digital Sequence Information (DSI)" – has further undermined the functioning of the MLS and benefit-sharing. This is because the seed industry and several governments – especially from the Global North – claim that digital sequences are not covered by ITPGRFA, and therefore have no benefit-sharing obligations when they use them to develop new commercial seeds.[54]

At its 8th meeting in November 2019, the ITPGRFA Governing Body did not reach an agreement on the MLS reform, and left it on standby. The persistent violation of peasants' and Indigenous Peoples' rights to equitably participate in the benefits arising from the use of plant genetic resources is therefore set to continue, unless states put in place effective measures at national and/or regional levels in order to guarantee these rights.

B. Elements to guide discussions at national and/or regional level

In order to respect peasants' and Indigenous Peoples' rights to equitably participate in the sharing of benefits arising from the utilization of plant genetic resources, legal frameworks should:

- Clarify that equitable benefit-sharing implies the full respect, protection and guarantee of peasants' and Indigenous Peoples' rights to save, use, exchange and sell seeds and other propagating material that they select in their fields ("farm-saved seeds") as well as their traditional knowledge and their effective participation in decision-making related to seeds. This applies also to seeds from varieties that are covered by IPR, given that the seed industry has produced and is still producing all its new seeds through

53 See: African Centre for Biodiversity/Third World Network. 2019. Crunch Time for the Seed Treaty. A review of some outstanding issues in the negotiation - Will the effort to fix ITPGRFA's broken benefit sharing system measure up to expectations? Available at: www.acbio.org.za/sites/default/files/documents/Crunch_Time_for_the_Seed_Treaty_A_review_of_some_outstanding_issues_in_the_negotiation_Will_the_effort_to_fix_ITPGRFAs_broken_benefit_sharing_system_measure_up_to_expectations.pdf.

54 See: African Centre for Biodiversity/Third World Network. 2019. Prudence versus Pressure at the Seed Treaty. Will the critical need to address digital sequence information break the Seed Treaty's effort to fix its benefit-sharing system? It probably should. Available at: www.acbio.org.za/sites/default/files/documents/Prudence_versus_Pressure_at_the_Seed_Treaty.pdf.

the unrestricted use of seeds that have been selected and conserved by hundreds of generations of peasants and Indigenous Peoples and/or the digital information they contain. It is a matter of equity that peasants and Indigenous Peoples can do the same with the industry's commercial seeds.

- Put in place effective measures that ensure the payment of contributions to ITPGRFA Benefit Sharing Fund as well as national and/or regional funds. One effective measure that states should consider is the introduction of a tax on the sale of non-freely reproducible seeds by seed companies.

- Clarify that the beneficiaries of contributions to the ITPGRFA Benefit Sharing Fund as well as national and/or regional funds should be the peasants and Indigenous Peoples who contribute to the conservation, sustainable use and further development of agricultural biodiversity. This requires the establishment of mechanisms, which ensure that available funds are distributed to peasants' and Indigenous Peoples' organizations under transparent and accessible terms.

PROTECTION FROM BIOPIRACY/ THE ILLEGITIMATE APPROPRIATION OF PEASANT AND INDIGENOUS PEOPLES' SEEDS

A. What is at stake?

The seed industry and research institutions appropriate peasant/native/local seeds/"varieties" through different tools. The IPR regime is central to this and has been considerably strengthened over the last two decades, both at global level as well as in national and regional laws and frameworks. UPOV, in particular in its 1991 version, remains one of the main instruments used by the seed industry to appropriate seeds, protect 'new' varieties and restrict their use through PVP, in particular by peasants and Indigenous Peoples (see Box 6). Moreover, IPR are usually complemented by laws that only allow the marketing of PVP-compliant varieties, thereby prohibiting the exchange and sale of peasants' and Indigenous Peoples' seeds, which do not comply with these criteria (see Chapter II.D). The UPOV regime has considerably expanded through the adherence of states to UPOV and/or the inclusion of UPOV-based rules in (multi or bilateral) trade agreements. In some countries and regions, commercial/industrial seed can also be protected through patents, which are even more restrictive.

Over the last years, the growing use of digitalized genetic sequences – often referred to as Digital Sequence Information (DSI) – and the issuing of patents on genetic sequences, have created new ways for powerful actors, in particular transnational seed companies, to appropriate seeds. Large amounts of genetic information from plants, cultivars, wild species etc. have been recently sequenced, digitalized and saved in numerous databases. Corporations have filed patents for specific genetic sequences, which contain characteristics that promise business opportunities (such as drought resistance, resistance to certain pests etc.). According to the industry, new genetic engineering techniques allow for the introduction of genetic sequences of specific traits into plants, thus creating 'new' varieties that express those traits.

DSI facilitates the appropriation of peasant/native/local seeds in two ways:

1. As an increasing amount of plants, cultivars and seeds are sequenced and the genetic information is available in data banks, the seed industry no longer needs to access physical material or seeds, e.g. by collecting it from peasants' and Indigenous Peoples' fields or by accessing gene/germplasm banks, which are subject to ITPGRFA benefit-sharing rules. Accessing and analyzing genetic sequences requires huge computing and data storing capacities that only big companies can afford, which will further concentrate the industrial seed sector.

2. The scope of the patents on genetic sequences, whether physical or digital, extends to all varieties/plants that contain those sequences. This includes 'new' varieties created in the seed industry's laboratories, but also commercial varieties or peasants' and Indigenous Peoples' populations/"varieties" and seeds that have always contained a patented sequence. Another mechanism of biopiracy is the contamination of crops and fields with patented gene sequences, be they GMOs or not. These two mechanisms mean that peasant/native/local seeds/"varieties" can fall under the protection of such patents overnight, prohibiting their use by peasants and Indigenous Peoples, who have selected and conserved them. They are obliged to pay licensing fees in order to be allowed to grow them or to pay fines wherever their seed contains patented genetic sequences. Such patents therefore drastically restrict peasants' and Indigenous Peoples' ability to use and develop their seeds, thus drying up the main channel for renewing and adapting biodiversity, including to climate change.

Such biopiracy is a gross violation of peasants' and Indigenous Peoples' rights to seeds as recognized by ITPGRFA as well as other legal instruments. However, the seed industry and some governments – in particular governments from the Global North, in which the big transnational seed corporations are based – claim that digitalized genetic sequences or DSI do not fall under the scope of ITPGRFA because they are not (material) plant genetic resources. If such an interpretation prevails, the Treaty will be obsolete and peasants' and Indigenous Peoples' rights to seeds will be completely undermined. It would also make obsolete the existing mechanisms, which are supposed to ensure facilitated access and benefit-sharing. At the ITPGRFA's Governing Body Meeting in November 2019, no agreement could be reached on the issue of DSI, creating a dangerous limbo that allows corporations to continue to file patents on genetic information.

B. Elements to guide discussions at national and/or regional level

In order to prevent biopiracy, including in the context of DSI, legal frameworks should:

- Prohibit patents on seeds/PGRFA and clarify that genetic information is to be considered part of PGRFA.

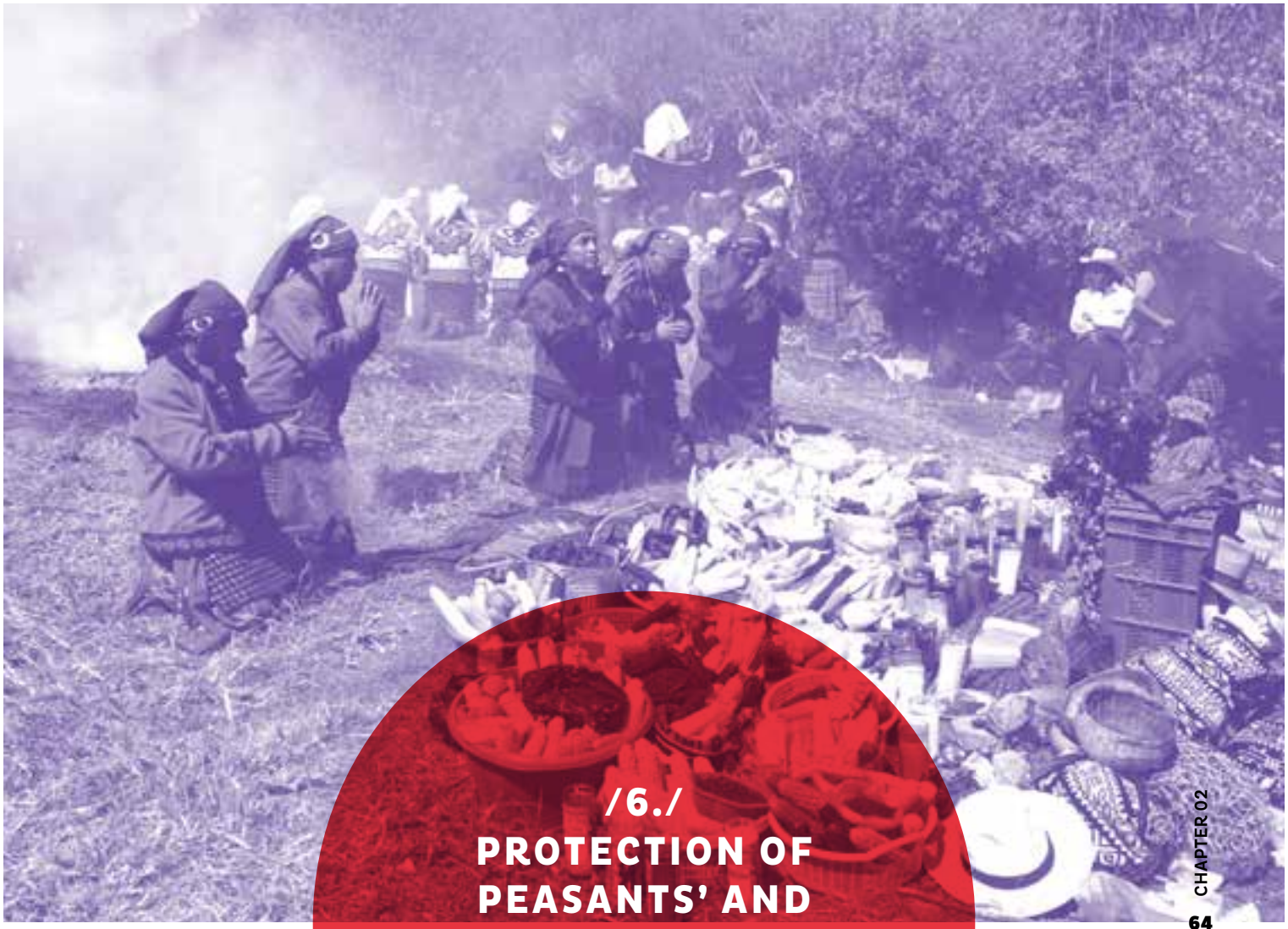
- Prohibit patents on genetic information/sequences.

- Clarify that IPR do not limit in any way peasants' and Indigenous Peoples' rights over the seeds that they select in their fields ("farm-saved seeds"). Rather, states need to revise their laws (in particular PVP, patent, seed laws

etc.) so that they do not restrict farmers' rights, in accordance with ITPGRFA Article 9 as well as UNDROP Article 19.8.

- Put in place measures and mechanisms that guarantee and effectively implement FPIC of peasants and Indigenous Peoples for all access and use of their seeds, the genetic information they contain as well as related knowledge, including the respect of their right to say no.

States should further support the amendments of the ITPGRFA's Standard Material Transfer Agreement (SMTA), in order to ensure that beneficiaries of facilitated access to a PGRFA contained in the Treaty's Multilateral System cannot claim IPR. Such claim would limit the facilitated access to the PGRFA in question or hinder peasants' and Indigenous Peoples' rights to save, use, exchange and sell seeds or other propagating material from that PGRFA.



/6./ PROTECTION OF PEASANTS' AND INDIGENOUS PEOPLES' TRADITIONAL KNOWLEDGE

A. What is at stake?

Peasants' and Indigenous Peoples' traditional knowledge, innovations and practices are critical for the realization of their right to seeds and the conservation, sustainable use and further development of biodiversity. Consequently, ITPGRFA, CBD, UNDRIP and UNDROP explicitly enshrine their protection as an obligation of states, as well as communities' right to FPIC[55] on matters regarding their biological resources. Peasants' and Indigenous Peoples' traditional knowledge, innovations and practices are fundamental for their specific seed systems. It is important to stress that such knowledge is not restricted to specific crops, varieties, or plant characteristics. Rather, it encompasses the knowledge of the re-

55 The exact formulation varies between these instruments. However, FPIC has become a broadly applied standard of international human rights law, especially in the context of Indigenous Peoples' rights. It is increasingly applied to other groups as well.

lationships of these plants with their environment and all the other organisms and living beings that constitute the local ecosystem as well as the ways in which they interact with other plants, animals and microorganisms, whether cultivated or wild, and the care to be taken in the event of problems related to the plant's health, their nutritional and cultural use by human communities, etc. Traditional knowledge thus goes beyond information, and is embedded in a social and cultural system. For many communities, their traditional knowledge equally has a strong spiritual value, which is linked to their collective identity and their relationship with nature. Moreover, it is not knowledge that belongs to one person, but has been built collectively within a community, and is continuously shared and transmitted from generation to generation. As part of its dynamic nature, it is not applied only once, but it is learnt and further enriched through constant observation, practice, innovations and exchange.

In practice, traditional knowledge, innovations and practices are, however, rarely effectively protected. The right to FPIC is frequently violated. Illegitimate appropriation of peasants' and Indigenous Peoples' seeds and associated knowledge happens in many different ways, including outright theft, but also more subtle ways such as research that is labeled 'participatory' (see below for more details). Several powerful actors suggest applying IPR as a way of protecting traditional knowledge, instead of providing effective protection of traditional knowledge that respects its specificities, its social and cultural dimensions as well as peasants' and Indigenous Peoples' distinct ways of organizing. Some proposals suggest creating registries of such knowledge, supposedly as a way of protecting it. However, these approaches are based on a market logic that is contrary to the nature of traditional knowledge and opposed to its main characteristics, i.e. its oral, dynamic and collective nature, as well as its embeddedness in knowledge systems. In addition, they risk paving the way toward facilitating, rather than preventing, free access to and further appropriation of traditional knowledge by seed companies and other actors.

States' and non-state actors' benefit-sharing duties as contained in international instruments such as ITPGRFA, CBD and the Nagoya Protocol are pertinent to the protection of traditional knowledge. However, benefit-sharing must not narrow the scope of states' measures to protect peasants' and Indigenous Peoples' traditional knowledge, practices and innovations, based on CBD Article 8 (j). Benefit sharing agreements mostly concern the use of specific genetic resources or knowledge by other actors (seed companies, researchers etc.), but do not provide protection to traditional knowledge and the knowledge systems that they are part of. The protection of traditional knowledge therefore requires laws that specifically recognize and protect peasant and indigenous knowledge systems as a central part of peasant seed systems.

B. Elements to guide discussions at national and/or regional level

In order to effectively protect peasants' and Indigenous Peoples' traditional knowledge, legal frameworks should:

- Recognize that such knowledge is embedded in knowledge systems that are closely linked to peasant and Indigenous Peoples' seed systems as well as the natural environments in which it has developed, and that it must therefore be protected in its integrity.

- Clarify that the specific nature of traditional knowledge – namely that it is collective and dynamic, and transmitted orally – requires appropriate forms of protection, respecting peasants' and Indigenous Peoples' values and forms of organizing as well as their right to self-determination. Effective and meaningful participation of peasants and Indigenous Peoples is critical to develop appropriate forms of protection of traditional knowledge.

- Recognize and support the crucial role of peasant and indigenous women in the context of biodiversity-related traditional knowledge, practices and innovations within peasant and Indigenous Peoples' seed and knowledge systems.

- Clarify that IPR and registries or databases of traditional knowledge are not appropriate ways of protecting traditional knowledge and realizing farmers' rights.

- Clarify that no IPR, marketing or certification rules/laws can prohibit peasants and Indigenous Peoples from continuing to use and develop their traditional knowledge, practices and innovations.

- Put in place measures and mechanisms that guarantee and effectively implement the free, prior and informed consent (FPIC) of peasants and Indigenous Peoples' over their seeds and related knowledge, practices and innovations, including the respect of their right to say no.

- Clarify that peasants' and Indigenous Peoples' seed-related traditional knowledge, practices and innovations must be subject to the same access and benefit-sharing rules as physical genetic resources, whether they are oral, written or digitized.

COLLABORATIVE RESEARCH

A. What is at stake?

Participatory research projects involving research institutions (public or private) as well as peasants and/or Indigenous Peoples can be a way of supporting seed selection and conservation by farmers, thus contributing to further develop agricultural biodiversity and ensuring the genetic renewal of the seeds and populations/"varieties" used by farmers. It can be an additional way of recognizing peasants and Indigenous Peoples as actors that are key to develop biodiversity as well as orienting training and research related to agriculture and food towards their rights, needs and interests.

However, without adequate regulation and safeguards, participatory research can entail the risk of facilitating biopiracy, making peasant and indigenous "varieties" or populations more easily accessible to breeders and seed corporations. This risk is increased when the seeds identified as research objects are sequenced, digitalized and made available in online databases (see Chapter II.E). If varieties resulting from participatory research projects are registered in the name of the

research institution, this may also amount to biopiracy, especially in cases that constrain peasants' and Indigenous Peoples' rights to use seeds of such varieties.

In addition, while participatory research projects involve peasants and Indigenous Peoples, they are often conceived, designed and implemented by researchers and/or their institution, thus establishing an inequitable relationship between researchers on the one hand and peasants and Indigenous Peoples on the other. Legal frameworks should ensure that research projects involving peasants and Indigenous Peoples are truly collaborative in nature, involving peasants and Indigenous Peoples on the same footing as researchers at all stages of the process.

B. Elements to guide discussions at national and/or regional level

In order to ensure the respect and realization of peasants' and Indigenous Peoples' right to seeds in the context of participatory research projects, legal frameworks should establish key principles fur such projects:

- Collaborative research projects need to primarily benefit peasants and Indigenous Peoples who contribute to conserving and sustainably using biodiversity, and to take into account their rights, needs and interests.

- Collaborative research projects need to involve peasants and Indigenous Peoples on the same footing as researchers, aiming at the co-construction of knowledge. It is imperative that peasants and Indigenous Peoples are involved in all phases of such projects, from design to implementation and evaluation.

- Researchers and research institutions are required to respect the rights enshrined in ITPGRFA and CBD, including its Protocols. In order to ensure this, researchers and institutions carrying out participatory research should be required to sign a contract, which explains the scope and methodology of the research, declaring that no results or reproductive material will be published or made available without the explicit authorization of the concerned community, People or farmer. Peasants' and Indigenous Peoples' right to FPIC includes their right to refuse to participate in proposed research projects as well as to withhold consent to the publication and dissemination of research results whenever this could jeopardize their rights, or contradict their values or interests. Signed contracts between researchers and farmers should also spell out the benefits that peasants and Indigenous Peoples may derive from collaborative research.

- Researchers and research institutions must not be allowed to produce genetic sequences of seeds or reproductive material that has been made available by farmers without their explicit consent. The contract signed by researchers or research institutions shall contain provisions that subject the publication of DSI obtained from such seeds or reproductive material to the FPIC of the concerned peasants and Indigenous Peoples.

- In case of publication of traditional knowledge by researchers who have collected it, this knowledge remains the collective property of the concerned peasants and Indigenous Peoples. Such knowledge does not become the property of the researchers and its use therefore remains subject to the FPIC of the concerned peasants and Indigenous Peoples.

- Researchers and research institutions are required to respect the autonomous organization of peasant seed systems, which do not separate seed saving, selection, multiplication and conservation from agricultural production. This includes not using participatory research projects to encourage peasants or Indigenous Peoples to enter the framework and logic of industrial seeds that separates these steps, reducing farmers to mere users of seeds that are produced outside their agricultural systems.

- Varieties or populations that are identified or developed in the context of collaborative research projects must not be formally registered without the explicit consent of the concerned peasants and Indigenous Peoples and/or their communities. Whenever peasants or Indigenous Peoples give their consent or decide to register such varieties or populations, this shall not prevent other peasants, Indigenous Peoples or communities from using them and exchanging and selling their own seeds as long as they respect the rules of use established by the farmers or communities that provided them, such as the use of a denomination of origin linked to the growing of a "variety"/population in a given region.

- States need to monitor the respect of the principles for collaborative research involving public and/or private institutions. Monitoring should involve representatives of peasants and Indigenous Peoples. It should further include the creation of mechanisms that allow peasants and Indigenous Peoples to submit complaints, and ensure their independent assessment, including conflict resolution mechanisms.

/7./ RIGHT TO PARTICIPATE IN DECISION-MAKING

GOVERNANCE

A. What is at stake?

In order for peasants and Indigenous Peoples to effectively participate in decision-making that could affect their rights over seeds and biodiversity, states are required to put in place appropriate governance mechanisms. In most countries, frameworks and institutions governing seed and related issues primarily – if not exclusively – address the formal and/or the commercial/industrial seed sector as well as research institutions. Organizations representing the industrial seed sector and commercial breeders are mostly represented in these institutions, whereas organizations of those peasants and Indigenous Peoples – who critically contribute to the conservation, sustainable use and further development of agricultural biodiversity through their seed systems – are not.

As mentioned above, peasant/farmer/native seeds are managed by specific, collective systems, which are fundamentally different from the formal or industrial seed sector and its way of operating. Policy and legal frameworks that recognize and protect peasant seed systems therefore need to be complemented by adequate governance mechanisms, which ensure effective participation of peasants and Indigenous Peoples. Such mechanisms should be distinct from bodies that govern the formal or industrial seed sector and address all issues that may affect farmers' rights.

B. Elements to guide discussions at national and/or regional level

In order to ensure peasants' and Indigenous Peoples' right to effective participation in decision -making, legal frameworks should:

- Contain provisions ensuring that peasants and Indigenous Peoples and their organizations are informed in due time and in a format and language that is adapted to their needs and realities about all policy initiatives that could affect their rights to seeds. Information should be made available regarding the envisaged procedure, including its commencement, opportunities to participate, and the relevant public authority or any other official body from which pertinent information can be obtained and to which comments or questions can be submitted.

- Establish specific institutions and/or consultative bodies that are mandated to support the implementation of peasants' and Indigenous Peoples' rights to seeds, including the design and implementation of relevant policies and their monitoring. Terms of Reference should be drafted through a participatory process in order to clearly define the mandate, scope and working procedures of such bodies, including their cooperation with other relevant decision-making or consultative bodies (such as those dealing with agricultural policies, rural development, biodiversity and environmental issues, parliamentary processes, agricultural research institutions, among others). States should ensure that sufficient financial resources are made available to ensure that such bodies can operate.

- Ensure the effective participation of organizations of peasants and Indigenous Peoples who contribute to the conservation, sustainable use and further development of agricultural biodiversity in such institutions or bodies, recognizing their participation as rights holders and clearly defining the modalities of their participation through a participatory process. Participation of farmers and Indigenous Peoples needs to be based on their contribution to the conservation and further development of biodiversity,[56] and respect the principles of peasants' and Indigenous Peoples' autonomy and self-organization, whilst ensuring gender balance. In order to ensure that the institutions/bodies' work is geared towards outcomes that benefit peasants and Indigenous Peoples, these groups need to participate in the definition of priorities and activities. Special attention needs to be given to provide all relevant information in due time and in a format

56 Organizations of farmers that exclusively use seeds from the formal/industrial seed sector and therefore do not participate in the conservation or dynamic management of PGRFA must not replace the organizations of those peasants and Indigenous Peoples who do contribute.

and language that is adapted to the needs and realities of peasants and Indigenous Peoples. Depending on the local context, translation should be ensured in order to guarantee meaningful participation of peasants and Indigenous Peoples in all written and oral exchanges.

- Ensure the effective and adequate participation of peasants' and Indigenous Peoples' organizations in institutions or bodies that govern the formal/industrial seed sector, in order to guarantee their participation in all issues that may have a bearing on the realization of their rights to seeds.

MECHANISMS FOR MONITORING AND EVALUATION

A. What is at stake?

The effective implementation of peasants' and Indigenous Peoples' rights to seeds requires adequate monitoring and accountability mechanisms. Such mechanisms allow states to assess progress made and to evaluate the results of policies and legal frameworks as a means to identify gaps and good practices. It is critical to ensure participation of peasants' and Indigenous Peoples' organizations, and to guarantee the wider public's right to information regarding results. Monitoring is also a precondition for accountability in cases of violations and abuses of peasants' and Indigenous Peoples' rights over seeds.

As underlined above, implementation of peasants' and Indigenous Peoples' rights to seeds remains a huge challenge in almost all countries around the world. Wherever monitoring mechanisms exist, they tend not to assess progress or shortcomings regarding the realization of these specific rights. Lack of oversight and information contributes to the further marginalization of peasants' and Indigenous Peoples' seed systems and their contribution to food sovereignty, biodiversity, climate change adaptation and mitigation, sustainable development, women's rights etc. It further enables misinterpretation of "farmers' rights" by powerful actors with vested interests, biopiracy as well as other violations of peasants' and Indigenous Peoples' rights to seeds.

B. Elements to guide discussions at national and/or regional level

In order to ensure adequate monitoring of the realization of peasants' and Indigenous Peoples' rights to seeds, legal frameworks should:

- Guarantee the public's right to information on all documents and data, as well as on the monitoring procedures.

- Establish effective mechanisms for the participatory monitoring of all measures that affect peasants' and Indigenous Peoples' rights to seeds ("farmers' rights") as well as their impacts on biodiversity, food and nutrition security, and rural livelihoods, among others. Such monitoring mechanisms should assess challenges/shortcomings as well as good practices and be geared towards ensuring accountability. Monitoring of the realization of peasants' and Indigenous Peoples' rights to seeds should be done

by specific mechanisms, which may be linked to dedicated bodies and/or institutions (see previous section). In addition, this monitoring should also be linked to other existing monitoring processes, such as periodic reporting on biodiversity, human rights monitoring etc.

- Clarify the modalities of monitoring activities, in particular the effective participation of the organizations of those peasants and Indigenous Peoples who contribute to the conservation, sustainable use and further development of agricultural biodiversity. Farmers' organizations should be given the possibility to provide inputs into monitoring reports developed by independent bodies, and be allowed to submit their own monitoring reports.

- Ensure that outcomes of monitoring activities are made public and considered by all relevant institutions, such as those responsible for agricultural policies, rural development policies, biodiversity and environmental policies, trade and investment policies, as well as national human rights institutions.

- Determine that outcomes of monitoring activities need to be taken into account in the development or revision of policies and laws.

- Provide mechanisms through which peasants and Indigenous Peoples' and their organizations can submit complaints and seek remedy for abuses and violations of their rights over seeds. Such mechanisms must be accessible to rural people and communities, taking into account their needs and realities. Additionally, complaints need to be investigated independently, in a transparent way, and geared towards effective remedy. The contribution that such mechanisms may provide to addressing violation of peasants' and Indigenous Peoples' right to seeds ("farmers' rights") should, however, not replace judicial remedies.

- Encourage capacity development for state authorities on peasants' and Indigenous Peoples' right to seeds ("farmers' rights"), including staff from relevant ministries, local authorities, judicial authorities (judges, attorneys) etc.

CONCLUSION

This guide was mostly written during the year 2020, which was marked by the COVID-19 pandemic. The pandemic exposed the unsustainability and profound structural inequalities of societies around the world. Peasants, Indigenous Peoples and other rural people were severely affected by the pandemic and governments' measures to stop the spread of the virus. Local markets closed for weeks or months in many places, and peasants, Indigenous Peoples, livestock keepers, animal breeders, shepherds and fisher people were not able to get their products to consumers. In several countries, small-scale food producers, migrant and agricultural workers were exposed to violence, as police and/or the military brutally imposed lockdowns.[57]

And yet the pandemic has shed light on the fragility of global value chains, and underlined the importance of resilient, localized food systems to provide nutritious food to rural and urban communities. The High-Level Panel of Experts of Food Security and Nutrition of the UN Committee on World Food Security (CFS HLPE) emphasized the need for all governments to support more resilient food production systems based on agroecology in response to the pandemic, and to support more diverse and resilient distribution systems, including shorter supply chains and territorial markets.[58]

The CFS HLPE recommended that governments "support more resilient food production systems based on agroecology" as well as more "diverse and resilient distribution systems, including shorter supply chains and territorial markets." Around the world, local distribution systems set up by small-scale food producers and rural and urban communities provided food to those in need, while ensuring an income to farming communities.

Peasants' and Indigenous Peoples' agroecological production and management systems are the backbone of sustainable, localized food systems. Their rights to seeds as well as knowledge, practices and innovations are crucial to respond to shocks such as the COVID-19 pandemic and climate change, and to all efforts aiming at halting and reversing the rapid loss of biodiversity. As we have emphasized throughout this guide, peasants and Indigenous Peoples realize their rights to seeds, which have been recognized by international human rights law, through their collective seed systems. Therefore, efforts to implement provisions from ITPGRFA Article 9 need to focus on recognizing, legally protecting and supporting these systems. Some relief from existing marginalization and criminalization may come from approaches that segment the bundle of peasants' and Indigenous Peoples' rights and/or are limited to some aspects of their seed management practices, but ultimately these will not enable them to conserve, sustainably use and further develop agricultural biodiversity.

57 International Planning Committee for Food Sovereignty (IPC). 2020. COVID-19 – Small-scale food producers stand in solidarity and will fight to bring healthy food to all. Available at: www.foodsovereignty.org/covid-19.

58 High Level Panel of Experts (HLPE). 2020. Impacts of COVID-19 on Food Security and Nutrition: Developing Effective Policy Responses to Address the Hunger and Malnutrition Pandemic. Available at: www.fao.org/3/cb1000en/cb1000en.pdf.

The proposals in this guide lay out what the realization of peasants' and Indigenous Peoples' right to seeds could look like in practice, within their distinct seed systems. The authors acknowledge that the elements provided may not be exhaustive and may have to be adapted depending on each context. As outlined above, this guide is the outcome of an ongoing collective process, which builds on the struggles of rural working people in all parts of the world. This process continues and the experiences of all organizations and countries are important to inspire struggles in other places and collectively pave the way for people's and food sovereignty. We therefore invite all organizations to provide feedback on this guide and to share any experience and information that could further enrich this guide.