

## SEEDS AND AGRICULTURAL BIODIVERSITY: THE NEGLECTED BACKBONE OF THE RIGHT TO FOOD AND NUTRITION

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The human right to adequate food and nutrition has not paid enough attention to seeds and agricultural biodiversity, but the time has now come to turn this trend around. Peasant seed systems feed the world and are resilient in times of natural disasters. Yet they face severe threats due to the increasing corporate capture of seeds and nature on the one hand and the accelerated destruction of agricultural biodiversity on the other. Right to food and nutrition activists can strengthen the work of small-scale food producers to protect their agrarian, fishing, pastoral and agro-ecological systems by granting seeds and agricultural biodiversity their well-deserved place.

### WHAT ARE THE MAIN THREATS TO SEEDS AND AGRICULTURAL BIODIVERSITY TODAY?

Peasants are steadily losing their seeds: Their collective seeds systems are being made illegal and are destroyed and contaminated by genetically modified organisms (GMOs). The Green Revolution's agricultural policies, trade agreements, and more recently, the national and international legal frameworks protecting intellectual property rights (IPR) are behind this encroachment on peasants' seeds.<sup>2</sup>

IPR protection regimes such as the International Union for the Protection of New Varieties of Plants (UPOV) have been devised so as to protect the interests of the seed and breeder industry.<sup>3</sup> They severely impair access to seeds outside of UPOV by restricting peasant practices and seed management systems. In Tanzania and Colombia, among other countries, peasant practices have been declared illegal, and criminalized.

Furthermore, IPR protection regimes tend to create monopolies, which then place them in the position to reap profits and to enlarge their market power. It is estimated that Monsanto, DuPont, and Syngenta control 53% of the global commercial market for seeds.<sup>4</sup> The big six agro-chemical corporations (BASF, Bayer, Dow, DuPont, Monsanto, Syngenta) have recently announced that mergers are in the pipeline, leading to even more market concentration.<sup>5</sup> The economic, ecological, and socio-political risks of a monopolized seeds and breeds supply system are innumerable.

Other major threats relate to the destruction of agricultural biodiversity. This sad state of affairs is the result of land clearing, population pressure, overgrazing, environmental degradation, and industrialized farming, fishing and livestock keeping practices.<sup>6</sup> The industrial seed and breeding systems favor standardization and homogeneity. These have a negative impact on the very variables that underpin biodiversity.<sup>7</sup> The destruction of agrobiodiversity is particularly problematic given the challenges that climate change is posing on the realization of the right to food and nutrition.

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Special thanks to Stig Tanzmann (Bread for the World—Protestant Development Service) and Priscilla Claeys (University of Louvain and French Institute of Pondicherry) for their support in reviewing this article. This article was originally written in English.
- 2 La Via Campesina and GRAIN. *Seeds laws that criminalize farmers: Resistance and Fight-back*. LVC and GRAIN, 2015. Available at: [viacampesina.org/en/images/stories/pdf/2015-Seed%20laws%20booklet%20EN.pdf](http://viacampesina.org/en/images/stories/pdf/2015-Seed%20laws%20booklet%20EN.pdf).
- 3 For more information, please see insight box 1.1 "Farmers' Rights to Seed: Conflicts in International Legal Regimes" below.
- 4 ETC. "Who Will Control the Green Economy?" *ETC Group Communiqué* 107. (November, 2011): 22. Available at: [www.etcgroup.org/files/publication/pdf\\_file/ETC\\_wwwctge\\_4web\\_Dec2011.pdf](http://www.etcgroup.org/files/publication/pdf_file/ETC_wwwctge_4web_Dec2011.pdf).
- 5 ETC. "Breaking Bad: Big Ag Mega-Mergers in Play." *ETC Group Communiqué* 115. (December, 2015): 4. Available at: [www.etcgroup.org/sites/www.etcgroup.org/files/files/etc\\_breakbad\\_23dec15.pdf](http://www.etcgroup.org/sites/www.etcgroup.org/files/files/etc_breakbad_23dec15.pdf).  
For more information on concentration in the livestock sector, please see: Gura, Susanne. *Livestock Genetics Companies. Concentration and proprietary strategies of an emerging power in the global food economy*. Ober-Ramstadt: League for Pastoral Peoples and Endogenous Livestock Development, 2007. Available at: [www.pastoralpeoples.org/docs/livestock\\_genetics\\_en.pdf](http://www.pastoralpeoples.org/docs/livestock_genetics_en.pdf).

## 100 YEARS OF AGRICULTURAL CHANGE: SOME TRENDS AND FIGURES RELATED TO AGROBIODIVERSITY

- Throughout the 20<sup>th</sup> century, “some 75[%] of plant genetic diversity has been lost as farmers worldwide have left their multiple local varieties and landraces for genetically uniform, high-yielding varieties.
- 30[%] of livestock breeds are at risk of extinction; six breeds are lost each month.
- [By 1999,] 75[%] of the world’s food [was] generated from only 12 plants and five animal species.”<sup>8</sup>

## WHAT IS THE UNDERSTANDING OF SEEDS, AGRICULTURAL BIODIVERSITY AND THE RIGHT TO FOOD AND NUTRITION SO FAR?

General Comment 12 of the UN Committee on Economic, Social and Cultural Rights (CESCR) states that the core content of the right to food and nutrition covers, *inter alia*, the availability of food in a quantity and quality sufficient to satisfy the dietary needs of individuals, free from adverse substances, and acceptable within a given culture. ‘Availability’ refers to the possibilities either for feeding oneself directly from productive land or other natural resources, or to well-functioning distribution, processing and market systems (paragraph 12). This implies that seeds, plants, and animals are as indispensable as are land and water for feeding oneself.<sup>9</sup> Therefore, state parties (164 to date) to the International Covenant on Economic, Social and Cultural Rights (ICESCR) have the obligation to respect, protect, and fulfill access to—and use of—seeds, plants, and animals that people need in order to feed themselves.<sup>10</sup>

The relationship between the right to food and nutrition, seeds, and agricultural biodiversity was explicitly articulated for the first time in the FAO *Right to Food Guidelines*.<sup>11</sup> However, these guidelines did not mention farmers’ rights to save, use, exchange, and sell farm-saved seed, as per Article 9 of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA).<sup>12</sup> The guidelines also fail to provide guidance on how to respect, protect, and fulfill access to—and use of—seeds, plants and animals. Ultimately, these are elements that contribute to the realization of the right to food.

It is worth noting that the former UN Special Rapporteur on the Right to Food, Olivier De Schutter, highlighted that the state’s obligations are both to preserve and enhance informal and traditional farmers’ seed systems as well as to regulate commercial seed systems. This implies that farmers should have access to inputs with reasonable conditions.<sup>13</sup> Building on this interpretative development, important work has been done in terms of understanding the human rights impact of IPR protection regimes such as the 1991 Act of the UPOV Convention (UPOV 1991) on the right to food of peasants.

Against the backdrop of these threats, gaining a broader understanding of the fundamental relationship between seeds and agricultural biodiversity and the right to food and nutrition is crucial, especially in the context of food sovereignty.<sup>14</sup> Key opportunities can be found in the current debate on how to implement farmers’ rights within the framework of ITPGRFA and in the discussions at the UN Human Rights

6 Please see the *Wilderswil Declaration on Livestock Diversity* for the position of the organisations of livestock herders and other CSOs on industrial livestock production. Available at: [www.grain.org/article/entries/2227-wilderswil-declaration-on-livestock-diversity](http://www.grain.org/article/entries/2227-wilderswil-declaration-on-livestock-diversity).

7 Ensor, Jonathan. *Biodiverse agriculture for a changing climate*. Rugby (UK): Practical Action, The Schumacher Centre for Technology and Development, 2009. p. 26. Available at: [practicalaction.org/docs/advocacy/biodiverse-agriculture-for-a-changing-climate-full.pdf](http://practicalaction.org/docs/advocacy/biodiverse-agriculture-for-a-changing-climate-full.pdf); FAO Commission on Genetic Resources for Food and Agriculture. *The Second Report on The State of The World’s Plant Genetic Resources for Food and Agriculture*. Rome: FAO, 2010. p. 19 ff. Available at: [www.fao.org/docrep/013/i1500e/i1500e.pdf](http://www.fao.org/docrep/013/i1500e/i1500e.pdf).

8 Guendel, Sabine. “What is agrobiodiversity?” In FAO. *Building on Gender, Agrobiodiversity and Local Knowledge*. Rome: FAO, 2005. p. 3. Available at: [www.fao.org/3/a-y5956e.pdf](http://www.fao.org/3/a-y5956e.pdf).

9 OHCHR and FAO. “The Right to Adequate Food.” *Fact Sheet 34*. Geneva: UN, 2010. Available at: [www.ohchr.org/Documents/Publications/FactSheet34en.pdf](http://www.ohchr.org/Documents/Publications/FactSheet34en.pdf).

10 In its concluding observations, the CESCR recommended to India in 2008 to provide “state subsidies to enable farmers to purchase generic seeds which they are able to reuse, with a view to eliminating their dependency on multinational corporations,” and to review the seed bill of 2004 in light of obligations with the right to food and nutrition. Committee on Economic, Social and Cultural Rights. Consideration of Reports Submitted by the States Parties under Articles 16 and 17 of the Covenant. E/C.12/IND/CO/5. May 2008. Paragraph 69.

11 For more information on genetic resources for food and agriculture, please see Guideline 8D in FAO. *Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security*. Rome: FAO, 2004. Available at: [ftp.fao.org/docrep/fao/009/y7937e/y7937e00.pdf](http://ftp.fao.org/docrep/fao/009/y7937e/y7937e00.pdf).

12 FAO. *International Treaty on Plant Genetic Resources for Food and Agriculture*. Rome: FAO, 2009. Available at: [ftp.fao.org/docrep/fao/011/i0510e/i0510e.pdf](http://ftp.fao.org/docrep/fao/011/i0510e/i0510e.pdf).

13 De Schutter, Olivier. *The Right to Food. Seeds policies and the right to food: enhancing agrobiodiversity and encouraging innovation*. 2009. Paragraph 7. Available at: [www.srfood.org/images/stories/pdf/officialreports/20091021-report-ga64\\_seed-policies-and-the-right-to-food\\_en.pdf](http://www.srfood.org/images/stories/pdf/officialreports/20091021-report-ga64_seed-policies-and-the-right-to-food_en.pdf).

14 For a more detailed discussion, please see: Bellows, Anne C. et al., eds. *Gender, Nutrition, and the Human Right to Adequate Food: Toward an Inclusive Framework*. Routledge: New York, 2016.

Council on the recognition of the rights to seeds and biological diversity within the draft Declaration on the Rights of Peasants and Other People Working in Rural Areas.<sup>15</sup> The links between the right to food and nutrition and farmers' and peasants' rights to seeds and agricultural biodiversity need to be consolidated.

## TOWARDS A BETTER UNDERSTANDING OF HOW SMALL-SCALE FOOD PRODUCERS RELATE TO SEEDS AND AGRICULTURAL BIODIVERSITY<sup>16</sup>

The right to food and nutrition encompasses 'adequacy' in nutritional, cultural, socio-economic, climatic and ecological terms.<sup>17</sup> In order to perceive this dimension, it is essential to develop an in-depth understanding of how small-scale food producers access, use, and relate to seeds, plants, and animals for food provision.

In South Asia and Sub-Saharan Africa, among other areas, the large majority of peasants, particularly women, still rely on peasant seed systems.<sup>18</sup> Access to seeds is additionally provided via formal, commercial, and state supported seed systems.

Small-scale food producers do not talk about 'genetic resources' or 'biodiversity' when referring to seeds, plants, animals, insects or microorganisms. Those who are still connected to traditional systems use terms that are rooted in their worldviews and the belief that all of nature is living, and that human beings are an intrinsic part of the family of living creatures. For instance, indigenous peoples in Peru refer to their livestock as 'brothers' and 'sisters'.

Human beings and other living beings shape each other's existence through a timeless relationship of mutual interaction; it is a process of co-evolution. Biodiversity embodies a dynamic, constantly changing, and fluid patchwork of relations between people, plants, animals, other organisms, and the environment. Thus, biodiversity is the manifestation of the creativity and knowledge of peasants as they engage with the natural environment to satisfy their needs, while striving for autonomy.<sup>19</sup> Indeed, for those living in poverty in rural areas across the planet, the only chance of survival has always been to rely on nature.

It is clear then that peasant seed 'varieties' and livestock keepers' breeds are inextricably linked to culture, specific production systems and land, pastures, forests, rivers, and lakes. No peasant variety from any given territory and ecosystem can survive without the community being responsible for its selection and conservation.<sup>20</sup> Indeed, peasant seeds are so well adapted to their local environment and culture, that they can also be used to rebuild agricultural areas following a natural disaster. The earthquake in Nepal is a case in point.<sup>21</sup>

Women and men harbor knowledge about different areas related to plants and animals, which equally contribute to human welfare. In Africa and Latin America, for instance, women are often wild plant gatherers, home gardeners, plant domesticators and herbalists.<sup>22</sup> But they may also be the custodians of seeds and of related knowledge. Women's criteria for choosing certain food crop seeds may include: cooking time, the quality of a meal and its nutritional value, taste, resistance to bird damage, ease of collection, processing, preservation, and storage. Men are more likely to consider yield, suitability for a range of soil types, and ease of storage.

- 15 For more information on the work of the open-ended intergovernmental working group on this declaration, please visit: [www.ohchr.org/EN/HRBodies/HRC/RuralAreas/Pages/3rdSession.aspx](http://www.ohchr.org/EN/HRBodies/HRC/RuralAreas/Pages/3rdSession.aspx).
- 16 For more information, please see: International Planning Committee for Food Sovereignty (IPC). Agricultural Biodiversity Working Group. "Biodiversity for Food and Agriculture: the perspectives of small-scale food providers." in FAO. *State of the World's Biodiversity for Food and Agriculture. Thematic Study*. Rome: FAO, 2015.
- 17 United Nations Committee on Economic, Social and Cultural Rights. *General Comment 12*. Paragraphs 7–11. Available at: [www.refworld.org/pdf/doc/4538838c11.pdf](http://www.refworld.org/pdf/doc/4538838c11.pdf).
- 18 Thomas Braunschweig et al., *Owning Seeds, Accessing Food, A Human Rights Impact Assessment of Upov 1991 based on Case Studies in Kenya, Peru and the Philippines*. Zurich: Berne Declaration, 2014. pp. 19, 24–36. Available at: [www.evb.ch/fileadmin/files/documents/Saatgut/2014\\_07\\_10\\_OwningSeed\\_-\\_Accessing\\_Food\\_report\\_def.pdf](http://www.evb.ch/fileadmin/files/documents/Saatgut/2014_07_10_OwningSeed_-_Accessing_Food_report_def.pdf).
- 19 Kastler, Guy, Antonio Onorati and Bob Brac. "Seeds and Peasant Autonomy." *Right to Food and Nutrition Watch* (2013): 47–50. Available at: [www.rfn-watch.org/fileadmin/media/rfn-watch.org/ENGLISH/pdf/Watch\\_2013/Watch\\_2013\\_PDFs/Watch\\_2013\\_eng\\_WEB\\_final.pdf#page=47](http://www.rfn-watch.org/fileadmin/media/rfn-watch.org/ENGLISH/pdf/Watch_2013/Watch_2013_PDFs/Watch_2013_eng_WEB_final.pdf#page=47).
- 20 Brac de la Perrière, Robert Ali and Guy Kastler. *Seeds and Farmers' Rights: How international regulations affect farmer seeds*. Peasants Seeds Network and BEDE, 2011. p. 53. Available at: [www.farmersrights.org/pdf/semences\\_reglementations\\_EN.pdf](http://www.farmersrights.org/pdf/semences_reglementations_EN.pdf).
- 21 For more information, please visit: [www.libird.org/app/news/view.aspx?record\\_id=35](http://www.libird.org/app/news/view.aspx?record_id=35).
- 22 For more information on women and seeds in Africa, please see the article "African Food Sovereignty: Valuing Women and the Seed They Keep" in this issue of the *Right to Food and Nutrition Watch*. For more information on seeds in Latin America, please see the article "The Struggle for Peoples' Free Seeds in Latin America: Experiences from Brazil, Ecuador, Colombia, Honduras and Guatemala" in this issue of the *Right to Food and Nutrition Watch*.

## DEEPENING THE UNDERSTANDING OF THE CONNECTION BETWEEN THE RIGHT TO FOOD AND NUTRITION AND SEEDS AND AGRICULTURAL BIODIVERSITY

We now turn to the question on what states should do to respect, protect, and fulfill access to—and use of—seeds, plants, and animals that people need in order to feed themselves.

Seeds and breeds are not a commodity that peasants buy and sell. Nor are they a scientific invention. In this sense, rural people's access to seeds and breeds should not be framed as access to commodities (or 'genetic material') produced by industry and science. In a human rights-based approach, access to seeds, plants, and animals is framed as an evolving and collective relationship to nature in any given territory. This means that peasant systems, which underpin agricultural biodiversity, should be recognized, protected, and promoted by states.

The full respect and enjoyment of women's rights are central to the protection of agricultural biodiversity. Women can only make their own choices for the selection and conservation of crops and animals if they control land and water and are able to participate on equal terms in policy making and in defining research priorities.

In order to ensure the existence and further development of peasant seeds and breed systems, states have the obligation to regulate commercial and state-driven systems in such a way as to support peasant systems, rather than to threaten them.

### CONCLUSION

New ways to respect, protect and fulfill peoples' access to and use of seeds, plants, and animals that they need in order to feed themselves must take center stage in the ongoing development of the right to food and nutrition, within the framework of food sovereignty. The evolving collective relationship that rural people have to seeds, plants, animals, territories, and nature should play a key role. This relationship is so deeply intertwined with rural people's human dignity, that its protection justifies a stand-alone human right to seeds and biological diversity. This long-overdue contribution to the right to food and nutrition will soon become a reality in the forthcoming UN Declaration on the Rights of Peasants and Other People Working in Rural Areas.<sup>25</sup>

#### **INSIGHT 1.1 Farmers' Rights to Seed: Conflicts in International Legal Regimes**

*Karine Eliane Peschard*<sup>24</sup>

The principle of the *farmers' exception*—farmers' right to save, use, grow, exchange, and sell seeds of protected varieties—is one of the most contentious issues in the international negotiations on the rights to plant genetic resources for food and agriculture. The proliferation of global intellectual property, trade and environmental regimes in the last 25 years has led to conflicting norms. With regard to farmers' right to seed, the main conflict is between trade agreements and the International Union for the Protection of New Varieties of Plants (UPOV) on the one hand,<sup>25</sup> and the FAO International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA),<sup>26</sup> also known as the Seed Treaty, on the other.

<sup>23</sup> Please see insight box 1.2 "Peasants' Rights to their Seeds are at the Forefront of Human Rights" below.

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<sup>25</sup> For more information on the UPOV Convention, please visit: [www.upov.int](http://www.upov.int).

<sup>26</sup> For more information on the *International Treaty on Plant Genetic Resources for Food and Agriculture*, please visit: [www.planttreaty.org](http://www.planttreaty.org).

In the preamble of the Seed Treaty, it is stated that farmers' right to save, use, exchange, and sell farm-saved seed and other propagating material is fundamental to the realization of farmers' rights. However, other international trade and intellectual property (IP) agreements severely restrict these same rights.

The application of the UPOV Convention, as revised in 1991, effectively undermines the implementation of farmers' rights. The 1978 Act of the UPOV Convention allowed farmers to save, use, and exchange seeds. With the 1991 revision, farmers' right to seed have become an optional exception left to the discretion of national governments; it is restricted to farmers' own use and must "safeguard the legitimate interests of the breeder" (Article 15.2).

Article 27(3)(b) of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) provides some flexibility in terms of plant variety protection. However, many countries are signing away this flexibility by entering into bilateral or regional trade agreements that include provisions for intellectual property in plant varieties that go beyond the TRIPS minimum requirements. Hence, for example, member countries of the recently concluded Trans-Pacific Partnership (TPP)<sup>27</sup> are required to join the 1991 Act of the UPOV Convention (UPOV 1991).

These restrictions on farmers' abilities to save, exchange, and sell seeds clash with the farmers' rights that are guaranteed in the Seed Treaty. Article 9.3 of the Seed Treaty states:

*Nothing in this Article shall be interpreted to limit any rights that farmers have to save, use, exchange and sell farm-saved seed/propagating material, subject to national law and as appropriate.*

While these contradictions remain largely unaddressed and unresolved, the corporate sector is actively pursuing its efforts to exploit agrobiodiversity for private ends. For example, the DivSeek initiative, launched in 2012, aims to "uncover crops' hidden genetic data" by sequencing plant genetic material held in national and international gene banks.<sup>29</sup> This material was collected from farmers' communities under the assumption that it would remain in the public domain.<sup>30</sup> By bringing together 69 institutional and corporate members (including leading agbiotech companies Bayer Crop Science, DuPont Pioneer, Monsanto and Syngenta), DivSeek opens the door to the corporatization of these resources. Farmers are conspicuously absent from the initiative, and the latter makes no mention of access and benefit sharing. If such an initiative is allowed to proceed, it will make a farce of the Seed Treaty efforts to enforce farmers' rights.

There is an urgent need to address incoherencies in the international legal system. Increasing restrictions on age-old seed-saving practices have been accompanied by a subtle but disturbing shift in language: farmers' rights to seeds are increasingly couched as 'privileges' and 'exceptions', subordinated to the dominant 'rights' of breeders. Current efforts to have the rights to seed and biological resources recognized in the draft of the UN Declaration on the Rights of Peasants and Other People Working in Rural Areas are aiming to establish the primacy of these rights as human rights that should not be subordinated to trade and intellectual property.

27 For more on the TPP, please see: Khan, Tessa. "The Trans-Pacific Partnership: A Threat to Human Rights." *Right to Food and Nutrition Watch* (2015): 51. Available at: [www.rfn-watch.org/fileadmin/media/rfn-watch.org/ENGLISH/pdf/Watch\\_2015/RtFNWatch\\_EN\\_web.pdf#page=51](http://www.rfn-watch.org/fileadmin/media/rfn-watch.org/ENGLISH/pdf/Watch_2015/RtFNWatch_EN_web.pdf#page=51).

28 Five countries (out of twelve) will have to join the UPOV 1991 as a result of the TPP: Brunei, Chile, Malaysia, Mexico, and New Zealand. Due to their membership in UPOV 1991, six TPP members are in potential violation of their commitments to farmers' rights under the Seed Treaty.

29 For more information on DivSeek, please visit: [www.divseek.org](http://www.divseek.org).

30 For more information, please see: Kastler, Guy, Antonio Onorati and Bob Brac. *Supra* note 19.

## INSIGHT 1.2 Peasants' Rights to their Seeds are at the Forefront of Human Rights

Guy Kastler<sup>31</sup>

Subsistence agriculture destined for local markets provides three quarters of global food consumption. The peasant farmers who produce this food do not have the financial means to buy commercial seeds and the necessary inputs. By depriving them of their right to reproduce and exchange their own seeds, small-scale food producers are being forced into debt, bankruptcy, and migration towards the slums of large cities—and even to suicide. This constitutes an intolerable violation of the right to work and the human right to adequate food and nutrition.

Commercial seeds are almost exclusively bound for monocultures that are exported to rich nations to feed their animals, dress their people, and fill their car tanks. They also feed speculation on the agrifood industry in the global hunger market. Forcing peasants to buy commercial seeds every year undermines the food security of most of the world's population, who are dependent on food crops. Commercial seeds are selected in seed stations or laboratories, far removed from the fields. They are adapted to the standardized crop conditions of experimental stations and are based on chemical fertilizers and pesticides, which can then be used everywhere to erase the diversity of local environments. These industrial selections have provoked the disappearance of almost 75% of crop diversity in the world.<sup>32</sup> Moreover, laboratories now add resistance genes to pathogens and herbicides. These transgenic varieties are rapidly spreading all over the planet, and thus pathogens are adapting and bypassing the resistance genes, which in turn leads to an increase in the use of pesticides. The same is true for herbicides, which adventitious seeds are also becoming resistant to.

Local peasant seeds are the only selections which permit the adaptation of crops to the complexities of each ecosystem without having to resort to astronomical quantities of inputs. Additionally, these seeds allow for constant renewal of biodiversity, firstly through massal selection from local crops and then regularly complemented by slight contributions from exogenous seeds. Local adaptation and the constantly renewing diversity are key factors in the sustainable resilience of food crops in the current context of climate, environmental, health, and economic crises. The opposite can be said for the specific and therefore short-lived resistance of industrial selections.

Peasant seed systems build on peasant rights to preserve, use, exchange, and sell their own seeds. Peasants have handed over the entirety of plant genetic resources from their plant selections to research, and to the industry—free of cost. They do not completely reject the improvements being made, but they do reject the imposed legal and technological barriers (for instance, hybrid F1 seeds, 'terminator' seeds) used by the industry to ensure its absolute monopoly by banning peasants from using and exchanging their own seeds. Peasants reject, too, the contamination of their crops and of the wild biodiversity, which slowly but surely weakens plants and poisons animals and human beings. Peasant seeds cannot live side by side with terminator seeds, the 1991 Act of UPOV Convention (UPOV 1991), patents on seed and seed genes, nor with GMOs, as they all destroy biodiversity as well as the rights and health of peasants.

31 [Guy Kastler](#) is facilitator at the Réseau Semences Paysannes, Aiguillon in France. For more information, please visit: [www.semencespaysannes.org](http://www.semencespaysannes.org). Special thanks to Karine Eliane Peschard (Graduate Institute of International and Development Studies) and Stig Tanzmann (Bread for the World—Protestant Development Service) for their support in reviewing this insight box. This insight box was originally written in French.

32 Guendel, Sabine. "What is agrobiodiversity?" In *FAO. Building on Gender, Agrobiodiversity and Local Knowledge*. Rome: FAO, 2005. pp. 1–6. Available at: [www.fao.org/3/a-y5956e.pdf](http://www.fao.org/3/a-y5956e.pdf).

Peasants have placed their hopes in the proposition of strengthened rights to seeds and biodiversity in the draft Declaration on the Rights of Peasants and Other People Working in Rural Areas, currently being discussed at the UN Human Rights Council.<sup>33</sup> The draft declaration<sup>34</sup> asserts the rights of peasants to “conserve, use, maintain, and develop their own seeds, crops and genetic resources, or those of their choice.” It also affirms their rights to “save, store, transport, exchange, donate, sell, use and re-use farm-saved seeds, crops, and propagating material.” In addition, the text stipulates that peasants have “the right to conserve, maintain and develop agricultural biodiversity,” and confirms their right to traditional knowledge. It also addresses the right to protect peasant seeds and agricultural systems from genetic contamination, biopiracy and theft, and all actions that endanger biodiversity and traditional knowledge; peasants’ collective rights “to maintain their traditional agrarian, pastoral and agroecological systems upon which their subsistence and their renewal of agricultural biodiversity depend”; the right to exclude their genetic resources, agricultural biological diversity and their own knowledge and technologies from intellectual property rights; and “the right to participate in decision-making on matters related to the conservation and sustainable use of agricultural biodiversity.”

### *INSIGHT 1.3* The 15<sup>th</sup> Garden: The Food Sovereignty Network of the People of Syria *Julia Bartal*<sup>35</sup>

When diplomatic solutions lead from one closed border to another and reports tell of one disaster after the next, the real solutions are often found within civil society. Yet Syrian civil society faces insurmountable obstacles. Since the start of the revolution in 2011, the international community has failed to protect the human right to adequate food and nutrition of the people of Syria. Over the past years, communities across Syria have come under siege—mostly by the Syrian regime and its allies.<sup>36</sup> However, starvation is also a consequence of the international community’s failure to perform up-to-date evaluations on aid and development and to demand access into besieged communities.

As a farmer in the food sovereignty network that supports Syrian activists, I have recently returned from the closed Syrian-Turkish border. In spring 2016, I witnessed how tens of thousands of people were stranded in Greece. In Europe, human rights violations of refugees can be easily documented, but at the Syrian border increased militarization means that civilian contact and camera documentation is practically impossible. Following the closing of borders, civil society work has been ground to a halt.

Behind the silenced, closed borders, hundreds of thousands of people are trapped—whether they try to flee or stay. Nevertheless, many communities across Syria are sustaining a civil society presence, while struggling to produce food and realize the right to food and nutrition. One truly grassroots network is The 15<sup>th</sup> Garden.<sup>38</sup> A network of urban and family gardens and rural agricultural projects, it was formed in 2013 to create small local farmer unions and find pragmatic solutions to food production in besieged areas. The network is supported by farmers and gardeners from various countries in Europe, and reaches out to refugee communities inside and outside Syria’s borders. The network exchanges vegetable seeds and rejects the use of hybrids and GMOs, as well as agricultural support that leads to dependency. The 15<sup>th</sup> Garden also shares knowledge on how to grow, harvest, and reproduce local

- 33 For a more detailed discussion, please see: Monsalve Suárez, Sofia. “The right to seeds and biological diversity in the UN Declaration on the Rights of Peasants and Other People Working in Rural Areas.” *FIAN International Briefing* (March, 2016). Available at: [www.fian.org/fileadmin/media/publications/2016/droits\\_semences\\_UK\\_web.pdf](http://www.fian.org/fileadmin/media/publications/2016/droits_semences_UK_web.pdf).
- 34 For more information on the draft declaration and the text cited in this article, please see: [documents-dds-ny.un.org/doc/UNDOC/GEN/G16/046/42/PDF/G1604642.pdf](http://documents-dds-ny.un.org/doc/UNDOC/GEN/G16/046/42/PDF/G1604642.pdf).
- 35 Julia Bartal is an active farmer from East Germany. She works at a collective farm of 45 hectares, which produces vegetables and honey, and raises cattle, milk goats and workhorses. She has worked in solidarity networks in Palestine and Syria, as part of the support network of The 15<sup>th</sup> Garden Syria, and is member of the *Arbeitsgemeinschaft bäuerliche Landwirtschaft* (AbL), which is La Via Campesina’s (LVC) German member organization. LVC is an international movement that coordinates peasant organizations of small and middle-scale producers, agricultural workers, rural women, and indigenous communities from Asia, Africa, America, and Europe. For more information, please visit: [www.viacampesina.org](http://www.viacampesina.org). Special thanks to Paula Gioia (European Coordination Via Campesina—ECVC) and Ansar Jasim (supporter of The 15<sup>th</sup> Garden) for their support in drafting and reviewing this insight box. This insight box was originally written in English.
- 36 Break the Sieges and Siege Watch are two initiatives that regularly map hunger sieges in Syria. There are currently 52 cities and communities under siege: 49 by the Syrian regime and 3 supposedly by Islamist forces, such as ISIS. An estimated one million people are affected. For more information, please visit: [www.breakthesieges.org](http://www.breakthesieges.org) and [www.siegewatch.org](http://www.siegewatch.org).
- 37 Food baskets are regularly delivered into areas where farmers are still operating, thus destroying their local survival possibilities even further. Development projects are being implemented, but UN seed deliveries into Syria, including connected data, are controlled and approved by the Syrian government. Although international organizations, such as the FAO, have offices in Syria and Turkey, the approval process goes through the Damascus office (personal conversation with FAO). Packages contain hybrid seeds, pesticides and fertilizers. GIZ (the German aid agency) delivered pesticides but failed to include protective clothing (personal conversation with local farmers and activists). For more information, please see: [www.carnegieendowment.org/2015/06/04/food-insecurity-in-war-torn-syria-from-decades-of-self-sufficiency-to-food-dependence/19hg](http://www.carnegieendowment.org/2015/06/04/food-insecurity-in-war-torn-syria-from-decades-of-self-sufficiency-to-food-dependence/19hg).
- 38 For more information, please see: Montgomery, Katarina. “Greening the Rubble: Syrians Embrace Urban Farming to Stave off Starvation.” *News Deeply*, October 28, 2014. Available at: [www.newsdeeply.com/syria/articles/2014/10/28/greening-the-rubble-syrians-embrace-urban-farming-to-stave-off-starvation](http://www.newsdeeply.com/syria/articles/2014/10/28/greening-the-rubble-syrians-embrace-urban-farming-to-stave-off-starvation). Please also see: La Via Campesina. “The struggle for freedom and food sovereignty: a letter of solidarity to the farmers of Syria.” July 7, 2014. Available at: [www.viacampesina.org/en/index.php/main-issues-mainmenu-27/human-rights-mainmenu-40/1653-the-struggle-for-freedom-and-food-sovereignty-a-letter-of-solidarity-to-the-farmers-of-syria](http://www.viacampesina.org/en/index.php/main-issues-mainmenu-27/human-rights-mainmenu-40/1653-the-struggle-for-freedom-and-food-sovereignty-a-letter-of-solidarity-to-the-farmers-of-syria).

seeds. They conduct workshops inside and outside of Syria, bringing together Syrian and international food producers and activists. The network develops creative ways for sharing skills, including manuals on seed reproduction, natural fertilization methods, and growing vegetables, which can get through the blockades. In besieged areas, there is proof that some gardens can cover up to 20% of community needs and, during harvest, black market prices have dropped to pre-siege levels.

The international community has neglected Syrian civil society for five years now. Recent closed-border policies are taking their toll on civil society actors. The public narrative is shaped by questions on how to 'manage' the flow of refugees and confront extremism. Yet the solutions provided by those in power contradict the reality on the ground, neglecting both the needs and capabilities of the people of Syria. It is high time that the world acknowledges the role played by grassroots organizations, food sovereignty networks, farmers and city gardeners in breaking down the barriers and staving off starvation in Syria.