Seeds of hunger: intellectual property rights on seeds and the human rights response

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Introduction: Yaowapa’s story

In rural areas all over the developing world, women like Yaowapa Promwong in Thailand have traditionally been seed savers and plant breeders. Until a decade ago, knowledge of seed selection and conservation enabled villagers in Yaowapa’s community to grow produce appropriate to their land. Heritage seeds have been passed down over generations, along with the family land.

In Yaowapa’s village, the main crop was rice. Each family usually grew several different varieties and therefore had different harvesting seasons. This allowed villagers to help each other harvest and keep production costs low. As well as their primary crops, families would often farm fish, prawns and other shellfish in the rice fields, grow vegetables and raise livestock around their homes. They produced enough food for their own consumption, often with a surplus to trade at local markets.

Around 10 years ago, many farmers were invited to government workshops on how to industrialize their farms and raise productivity for export. Several large agri-business companies attended these workshops and gave out gifts of seeds, fertilizers and pesticides, which farmers adopted with enthusiasm.

Produce for export must fit certain characteristics defined by distant buyers. Many farming families have now discontinued seed saving, turning instead to seeds from agri-businesses that supposedly know the market demand. Yaowapa describes the resulting changes in her village as socially and environmentally devastating. Her story is not unique.1

Behind the scenes, intellectual property rights (IPRs)2 on seeds are playing their part in her story. IPRs are accused of interfering with traditional farming and cultural practices, disempowering women and making farmers more vulnerable to market fluctuations. IPRs on seeds are said to contribute to loss of genetic and cultural diversity and to increased corporate concentration, which could result in environmental degradation and undermine long-term sustainability of food supplies.

This Backgrounder focuses on the human rights effects of IPRs on seeds and indicates how human rights advocates can help to ensure that intellectual property (IP) protection in agriculture is consistent with human rights and sustainable agriculture.

1 Asha Bee Abraham, Marginalising the Marginalised, 2007.

The context

Background

The importance of the agricultural sector in developing countries cannot be overstated. Agriculture provides food and jobs and is often the basis of community life. Around 70 percent of the world’s poorest people live in rural areas and are dependent on farming.3

A resilient agricultural sector requires a highly diverse range of plants and animals in order to keep breeding varieties that can cope with disease, changes in climate and other challenges that farmers, fishers and herders face.

IPRs jeopardize agricultural diversity essential to present and future food supplies (see Section V on page 10) – yet they are becoming increasingly prevalent in agricultural sectors for several reasons. IPRs are a useful way to maximize profits, essential to the private sector who increasingly dominates all aspects of agriculture. In parallel, the rapid development of biotechnology and genetic engineering has multiplied the potential value of genetic resources and thus the desire of companies to have legal means – via IPRs – to benefit from that potential. Furthermore, the World Trade Organization (WTO) Agreement on Trade-Related Intellectual Property Rights (TRIPS) has made minimum IP standards in agriculture a requirement for all its Members, thus serving, since the mid-1990s, as a vehicle for raising IP standards all over the world.

The increasing corporate presence in the agricultural sector

Since the beginning of the 20th century, food production has been increasingly monetized, making farmers throughout the world more dependent on suppliers of inputs (such as chemicals, credit and machinery), on intermediaries (for transport and processing) and on buyers of farm produce (retailers).
These processes are increasingly linked. What food is produced, how and at what price it is sold is, in many places, determined by a handful of private companies who provide agriculture-related goods and services.4

The corporate control of seeds

The seed is the basic unit of agricultural production and the basis of life itself. Its self-reproducing quality has long prevented it being sold on an industrial scale: why would a farmer purchase seeds when she can just replant those harvested from the previous crop? Indeed, for millennia, farmers have saved harvested seeds for re-sowing and exchange. Seeds are carefully selected on the basis that the plants producing them possess desirable traits – such as high yields, disease resistance or drought tolerance. This enables ongoing development of crops adapted to local conditions.

In most of the developing world, seed breeding continues to be carried out by farmers. However, scientific and technological advances in the early 20th century opened the way for private companies to become major players in industrialized country seed markets. A significant contributing factor to the gradual corporate dominance of seed breeding was the development of hybrids.5 Hybrids offer farmers uniform crops (well-suited to mechanized, industrial agriculture) and – often – higher yields. Crucially, as hybrids only produce true hybrid crops once, a farmer wanting to continue producing those crops has to buy new seeds each year – thus ensuring a relatively stable market for commercial hybrid producers.6

However, hybridization does not work for some economically important crops, such as wheat or soy. If a farmer purchases non-hybrid seed from a commercial breeder one year, there is no obligation for her to do so again the following year and she can re-sow, exchange, multiply or sell the harvested seed to other farmers. This limits the commercial seed industry’s means of retaining clients and increasing profitability.

The seed industry is now developing new technologies to limit plant reproduction, the most contentious being seeds genetically modified to produce sterile offspring or to propagate only if applied with a certain chemical.7 These technologies have not yet been mainstreamed and much of the industry’s efforts are focused on promoting legal means, via intellectual property rights, to control seeds.

II IPRs and who wants them

Pros and cons of IPRs

IPRs grant the right-holder (a person or a company) a period of near monopoly control over the production, sale and use of an invention. The high costs involved in obtaining an IPR means that it is only those with considerable resources who can afford them: most IPRs are held by large corporations.

Many inventors and investors claim that IPRs enable them to recuperate the costs of research and development (R&D) and are thus essential for stimulating innovation. As most IPRs are of limited duration, proponents say they provide a balance between the privileges granted to the right-holder and society’s interest in having access to novel development in the arts, science and technology.8

Critics argue that there is little evidence to suggest that IPRs promote innovation9 and some studies suggest that IPRs actually impede research.10 The particular conditions that IPRs may need to increase investment in innovation – like sufficient purchasing power or large enough markets – are absent in most of the world. This means that even where IPRs encourage innovation they only do so for the benefit of those who already have money. The temporary monopolies provided by IPRs almost always increase the price and limit access to the protected goods and services, making it very difficult for those without sufficient capital to access IPR-protected innovations.11

Another important consideration concerns IPRs on living organisms, such as plants, seeds or genetic material: can nature be owned? The very concept of ownership of life forms is antithetical to many peoples’ religious or moral views. Finally, although IPRs may act as an incentive for research in areas where new goods or technologies are needed, in the case of seeds, R&D has been underway for millennia and external incentives are unnecessary.

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5 Hybrids are the offspring of two genetically different pure-bred varieties.


7 Ibid.


III. How have IPRs expanded into agriculture?

The main vehicles: trade agreements, UPOV and technical assistance

An IPR on seed can only be enforced if national legislation exists to uphold it. Since the 1990s, almost all countries have started implementing legislation to allow IP laws in their agricultural sector.

It is the WTO’s Agreement on Trade Related Intellectual Property Rights (TRIPS) – which entered into force in 1995 – that has been crucial in promoting minimum standards of IP protection in agriculture. To join the WTO, a country must ratify TRIPS. Thus, countries have been enticed to accept IP through the lure of other trade benefits. TRIPS also introduced a powerful enforcement mechanism into IP in the form of the WTO’s binding dispute settlement mechanism.

TRIPS Article 27.3(b) requires all 153 WTO Members to provide some kind of IP protection on new plant varieties. Some Members opted for patents. Others joined the International Union for the Protection of New Varieties of Plants (UPOV), an intergovernmental organization whose Conventions define plant variety protection (PVP) (see Section IV on page 8).

Sui generis sidelined

The WTO allows sui generis systems, yet only a handful of States have developed their own sui generis laws for plant variety protection – and some of the few countries that have are in the process of dismantling theirs. Why?

One reason is that many States do not have the financial, technical and legal capacity to devise their own system. Another is the intense pressure brought to bear on governments by the UPOV Secretariat and the World Intellectual Property Organization (WIPO), which has an Agreement with the WTO to help developing countries implement their TRIPS commitments. WIPO, WTO and UPOV technical assistance programmes often only provide UPOV-consistent model laws, failing to inform countries about the options open to them and failing to assist them in developing systems that would suit their specific needs. This is perhaps unsurprising: over 90 percent of WIPO’s funding comes from IPR-holders. The technical assistance provided bilaterally to developing countries by their northern counterparts also generally promotes UPOV-consistent IP regimes.

Finally, bilateral trade agreements, which regulate trade between two countries or groups of countries, often include ‘TRIPS-plus’ provisions, which go beyond the IP standards defined by the WTO. A common example is the requirement that a country join UPOV’s 1991 Act, which removes the possibility of a national sui generis system. Such conditions are typical of US Free Trade Agreements and EU Economic Partnership Agreements, and have led countries such as Costa Rica to dismantle their sui generis systems.
The two most common types of IP protection for plants or plant parts are plant breeders’ rights (also known as plant variety protection or PVP) and patents. The concept of farmers’ rights – central to the nexus between IPRs on seeds and human rights – contrasts with the two main IP systems.

Plant breeders’ rights (PBRs) are set out in the UPOV Conventions. The first Act of the Convention entered into force in 1968 and has been revised three times, most recently in 1991, each time ratcheting up the standard of protection. The UPOV Act of 1991 grants breeders at least 20 years of near monopoly control over novel, distinct, uniform and stable plant varieties. All States which started the procedure to join UPOV after 1999 are obliged to become Parties to the 1991 Act. Other countries are allowed to remain Members of earlier Acts. As most UPOV Members joined recently, almost two-thirds are bound by UPOV 1991.

UPOV, and in particular its 1991 Act, has been criticized for several reasons:

► Since PBRs are only given for varieties that are genetically uniform and stable, the UPOV system promotes commercially-bred varieties geared for industrial agriculture, rather than recognizing incremental innovation or encouraging the diversity that exists in smaller-scale agriculture that prevails in developing countries.

► The UPOV system is gradually becoming less farmer-friendly, for instance:
  • Contrary to previous Acts, UPOV 1991 prohibits farmers from exchanging PBR-protected seeds they have harvested. Farmers may save and re-sow PBR-protected seeds on their own land, but only if their government has enacted an optional exception to the 1991 Act.
  • UPOV 1991 permits breeders to have both a plant breeders’ right and a patent on their varieties. (The genetic material covered by a patent cannot be used by others wanting to develop new varieties). Because agricultural biodiversity is essential for the maintenance of agro-ecosystems and as the major raw material for the development of new crop varieties, PBRs had previously been based on the premise that they could only be justified if they did not prevent other commercial breeders from accessing the IP-protected genetic material.

► PBRs can be awarded to plant varieties that are only minimally distinct from existing varieties, thus rewarding those (usually commercial breeders) who have taken only the most recent step in the long history of the development of a plant variety.

Patents provide the right-holder with a 20-year monopoly over all uses of an invention, provided it is new, involves an inventive step and is capable of industrial application. In plants, patents may apply to a number of biological materials and processes (including seeds, plant cells or isolated DNA sequences), but ultimately give the right-holder control over the seed.

► Farmers cultivating patented seeds do not have any rights over the seeds they plant; they are merely licensees of a patented product. When buying patented seeds, farmers are often obliged to sign contracts agreeing not to save, re-sow or exchange the seeds.

► Patents are only granted to plants or plant parts that involve an ‘inventive step’, raising again the question of exclusive rights to those who took only the most recent step in developing the variety.

Farmers’ rights are customary rights of farmers to save, use, exchange and sell farm-saved seed; to be recognized, rewarded and supported for their contribution to the global pool of genetic resources as well as to the development of commercial varieties of plants; and to participate in decision making on issues related to crop genetic resources. Farmers’ rights are conceived as largely collective or communal in nature and tend to be non-exclusive, since they promote sharing and exchange of materials and knowledge.

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The concept of farmers’ rights was coined to counterbalance the expansion of PBRs and patents, which threaten to restrict the ability of farmers to maintain and develop agricultural biodiversity and fail to recognize farmers’ contributions to the breeding of plant varieties – including varieties now protected by IPRs. In most countries farmers’ rights are not enshrined in law (see Text Box 5 on page 13).

V. How do IPRs on seeds affect human rights?

Text Box 2
Profiting from IPRs: GM examples

There is a dearth of scientific studies on the human and environmental consequences of genetic modification. Nevertheless, the profits which go hand-in-hand with the patents granted to genetically modified organisms (GMOs) have accelerated research into, and promotion of, GM crops.

Like their conventional counterparts, GM seeds can end up in places where they were not originally sown: blown by the wind or planted inadvertently by a farmer. Biotechnology companies have been accused of engaging in a 'strategy of contamination,' sometimes illegally planting or facilitating the spread of GM seeds. Because most GM crops are covered by patents, GM companies can force a farmer to pay infringement charges if GM seeds are found in his field, even if the farmer did not plant them himself. Dozens of farmers in the US have faced legal battles with Monsanto, the world's leading biotechnology company, for alleged infringements.

Nevertheless, each day more farmers become dependent on commercially produced seed, 82 percent of which is protected by an IPR. In parallel, most countries are implementing laws requiring IPRs on seeds and developing mechanisms to enforce these rights. Thus, the likelihood of a farmer sowing an IP-protected seed is growing, as is the likelihood that she will be taken to court or penalized if she re-sows or exchanges that seed.

The ability of farmers to re-use seeds has many advantages. It allows them a measure of independence from the market and a potential source of additional income. Unfettered exchange ensures flows of genetic materials, contributes to locally appropriate seeds and to the diversity of crops, as well as constituting an important element of cultural life and community in many regions.

Patents and PBRs promote industrial-scale agriculture, facilitate increased concentration of seeds and other agricultural inputs in the hands of a few transnational corporations, foster inappropriate R&D, threaten sustainability of food production, accelerate the depletion of agricultural biodiversity and permit biopiracy. All of these have adverse implications for the enjoyment of human rights.

Encouraging corporate concentration

There is no obligation for farmers to buy commercially produced, IP-protected seeds. However, many farmers have been seduced by commercial seed advertisements' promises of greater yields. In India, for example, Monsanto and its local partner Mahyco asserted that farmers who bought their Bt cotton seeds would have higher yields and reduced production costs because the variety would require less pesticide. Thousands of farmers began cultivating the patented crop, but studies in Andhra Pradesh show that Bt-cotton farmers earned lower net returns than non-Bt farmers, in part because they had to increase their pesticide use to deal with the previously uncommon diseases that are plaguing the Bt cotton plant.

Another reason why farmers buy IP-protected seeds is because in some areas there is little else available. Two thirds of IP-protected seeds available today are owned by the ten largest seed companies. This gives them control of the market and the ability to buy up any competition. In India, Monsanto bought up most of the other cotton seed companies in the cotton belt and has been accused of destroying non-Bt seeds – dramatically reducing the availability of non-IP protected seeds in local markets.

Ultimately, millions of farmers could lose their livelihood because they will no longer be able to afford seeds. This is especially true given the vertical integration of seed companies. In many parts of the world, the same company will provide credit, seeds and pesticides, as well as buying farmers' produce, thus trapping farmers in a cycle of dependence on one company.

12 Carmela Busto-Maroto, The Biotechnology Protocol and the Future of Biotechnology, American Policy Program Special Report, 2005. See Table 1 at the end of this Backgrunder for a summary of how IPRs can affect human rights.
14 Testing Point Project, Genetically engineered rice: How safe? 2006;
15 US Department of Agriculture, The USDAÃ¢â‚¬â„¢s Proposed Rule to Ban the Sale and Distribution of Genetically Engineered Rice, 2008;
16 ETC Group, Who Owns Nature? Corporate Power and the Final Frontier in the Commodification of Life, 2008;
18 Bt cotton is genetically engineered to produce Bacillus thuringiensis toxins, which kill pests such as cotton bollworms.
21 These include the TTP; Indian Farmers, Farmers and Bt Cotton; BT Group, gmo2003
V. How do IPRs on seeds affect human rights?

The right to food and sustainability of food production

The Committee on Economic, Social and Cultural Rights has provided the most detailed definition of what the right to food entails, in its General Comment on the right to food. The right to food also implies accessibility of such food in ways that are sustainable and that do not interfere with the enjoyment of other human rights. The General Comment specifies that “the notion of sustainability is intrinsically linked to the notion of adequate food or food security, implying food being accessible for both present and future generations.”

The world’s poorest inhabitants – small-scale farmers – would benefit most from research into local plant varieties and on-farm technologies, such as irrigation systems, that could dramatically increase agricultural productivity on marginal lands. The structural problems that caused the global food crisis of 2007-8 resulted in large part from decades of insufficient investment in these small-scale agricultural producers. IPRs in agriculture will only exacerbate this situation.

Threatening the sustainability of food production

The threat to farmers’ livelihoods is made worse by the increased privatization of research and development (R&D). Until recently, most agricultural R&D was carried out by publicly funded institutions, which encouraged sharing biological resources and related knowledge between people and across countries. Today, as almost half of agricultural research is funded by the private sector, research priorities are increasingly oriented towards profitable crops and farming methods, rather than towards public needs.

IPRs affect the sustainability of food production in three critical ways:

- **Through restricting flows of genetic material**
  
  As more plant varieties are subject to IP protection, fewer farmers will be able to exchange or re-sow their seeds, ultimately reducing the number of people involved in crop breeding. Fewer farmer-breeders means a much more limited knowledge base of, and less physical access to, the variety of plant genetic resources available worldwide.

  As noted above, IPRs restrict the genetic materials available to commercial breeders and researchers working for public institutions. Optimal development of new varieties of food crops depends on having access to as wide a range of genetic material as possible. Patents and increasingly patent-like PBRs restrict access to the genetic material and will limit laboratory-based research and innovation.

- **Through encouraging monocultures**

  IPRs are only granted to genetically uniform seeds and so promote the cultivation of monocultures. By rewarding standardization and homogeneity, the IP system erodes biodiversity.

  If the agricultural sector of a given country is increasingly dominated by large monoculture farms, smaller farmers may no longer be able to earn enough to survive because of their inability to compete. This in turn fuels the downward cycle of biodiversity loss as the conservation and development of locally adapted seeds and plants, as well as the knowledge required to maintain them, is not renewed.

  Planting monocultures is the leading cause of the depletion of local plant varieties and renders production

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Text Box 3

IPRs: threatening the human rights of people living in rural areas

Already, the right to food is unrealized in many rural areas. This is usually because of lack of access to land, water or credit. If seeds are added to this list of inaccessible assets, hunger in rural areas will become more prevalent. This affects not only the right to food but also related rights, as indicated in Table 1 on pages 22-23, such as the right to life, to work and to health, as well as rural women’s rights as set out in the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW).

Text Box 4

The right to food and sustainability of food production

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Text Box 5

Fostering inappropriate research and development

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more vulnerable: thousands of acres planted with identical seed can be lost to a single disease or pest. Catastrophes which illustrate the dangers of genetic uniformity have already occurred, including the US corn leaf blight of the 1970s, which decimated about 15 percent of the US maize crop and caused an estimated US$2 billion in losses.30

- **Through accelerating contamination of the environment**

  Most monocultures are dependent on chemical herbicides and pesticides because they lack the genetic variety that protects crops. Planting monocultures often results in massive increases of agro-chemical use. This is especially true of GM monocultures, over 80 percent of which have been modified to withstand specific types of herbicide that kill most other plants in the field.31 The herbicides are developed by the same companies that produce GM-seed and are sold as a package. Arguably, it is precisely to augment herbicide use (and thus their profit margins), that biotechnology companies promote the use of their herbicide-resistant seeds.

  The toxins contained in these chemicals have harmful effects for the farmers that use them and can contaminate the air, rivers and other water sources far beyond the farm.32 In addition, intensive, pesticide-based agricultural methods tend to deplete the long-term productive capacity of land and thus endanger the right to food of future generations. As noted in Text Box 4 on page 12, the realization of the right to food also requires food to be free from adverse substances.

**Eroding traditions and knowledge**

Seed exchange practices have long constituted a fundamental aspect of farmers’ cultural life. By limiting such exchange, thus also hindering rituals around planting and harvests, IP protection directly interferes with the enjoyment of the right to take part in cultural life, as well as with minority and indigenous rights.

Another dimension of the right to take part in cultural life is the relationship of many rural and indigenous groups with their land. If farmers leave their land because they are no longer able to derive a livelihood from farming, they will no longer be able to partake in key cultural practices linked to their ancestral land. A number of human rights bodies, including the Inter-American Court of Human Rights, have recognized land as a fundamental basis of culture.33

UPOV and TRIPS, as well as the national IP systems that they favour, also fail to acknowledge traditional beliefs about knowledge or nature. Many indigenous groups do not have a concept of ‘ownership’ of knowledge. To the extent that such ‘ownership’ exists, it is often collective and for the benefit of the community.

**Opening the way to biopiracy**

Permitting IPRs on genetic resources encourages biopiracy. Indigenous knowledge of the potential uses of a particular plant or genetic resource is invaluable to bioprospectors seeking to develop, for example, new medicines or drought-resistant crops. However, neither patents nor PBRs oblige the right-holder to recognize or remunerate the source of the knowledge or resources.

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31 ETC Group, op.cit.
33 The Mayagna / Sumo Awas Tingni Community v Nicaragua, Judgment of the Inter-American Court of Human Rights, 31 August 2001, paras 149. <http://www.corteidh.or.cr/docs/casos/articulos/seriec_79_ing.pdf> In the same case, the Inter-American Court defined property as including both tangible and intangible assets. Intangible assets could clearly include the traditions and knowledge of the community.
VI. Some simple steps to ensure that IP on seeds does not undermine human rights

Human rights advocates can play an important role in ensuring that IP policy is human rights-consistent. This section indicates some of the avenues for advocacy in this area. It also provides contact details of some of the many groups already active on IP and seed issues, which human rights advocates are encouraged to join forces with.

If discussions are underway in your country regarding patentability of living organisms

- Lobby your government to enshrine the non-patentability of living organisms in your country’s constitution, national laws or regulations.
- Ensure that your government is aware that it is not obliged to require patents for living organisms or for new plant varieties.
- Carry out or commission analysis of possible human rights impacts of allowing patenting or other IP protection for seeds in your country.
- Lobby your government to prohibit the cultivation of GM crops and recommend stricter regulations on GMOs that may be entering your country.
- Submit this analysis to the relevant people and institutions in your country (parliamentarians, government officials, the agriculture ministry, the patent office, the national human rights commission, the media).
- Submit this analysis to relevant international human rights mechanisms (see Table 2 at the end of this Backgrounder).

If farmers’ rights are at risk in your country

- Lobby your government to enshrine farmers’ rights to save, re-sow and exchange harvested seeds – as well as other provisions laid out in Article 9 of the ITPGRFA – in national legislation or in the constitution.

Text Box 6
A weak attempt to prevent biopiracy: the Convention on Biological Diversity

The Convention on Biological Diversity (CBD) of 1993 contains provisions intended to prevent biopiracy. The CBD bases access to biological or genetic resources on the principle of ‘prior informed consent’ (PIC) and specifies that benefits arising from the use of these resources will be shared according to mutually agreed terms (known as access and benefit sharing or ABS). This is supposed to prevent IPRs being granted to resources obtained through biopiracy.

Currently, many developing countries and civil society organizations are seeking an amendment to TRIPS that would oblige all applicants to fulfill ABS and PIC requirements to be eligible for a patent. These discussions, designed to bring TRIPS into line with the CBD (and thus known as the TRIPS-CBD debate) are taking place in the WTO TRIPS Council.

The CBD has several limitations. One is that indigenous peoples may face considerable pressure – both from the bioprospector and the State – to allow their knowledge and resources to be used and commodified in ways that they find unacceptable. Another is the lack of an effective enforcement mechanism to ensure that ABS agreements between a State and a bioprospector are upheld. Also, by granting sovereignty over genetic resources to States, the CBD fails to acknowledge the historically discriminatory approach of many ruling elites towards indigenous and minority groups.

Text Box 7
Groups working to oppose IPRs on living organisms include:

- Berne Declaration www.evb.ch/en
- ETC Group www.etcgroup.org
- GRAIN www.grain.org
- Greenpeace www.greenpeace.org/international
- Pesticide Action Network (PAN) www.pan-international.org
- South Centre www.southcentre.org
- SWISSAID www.swissaid.ch/index_en.php
- The Centre for International Environmental Law (CIEL) www.ciel.org
- The South East Asian Council for Food Security and Fair Trade www.seacouncil.org
- Third World Network www.twnside.org.sg
- Via Campesina www.viacampesina.org

Text Box 8
The International Treaty on Plant Genetic Resources for Food and Agriculture

If an indigenous group did want to use IPRs to protect its knowledge from biopiracy, it might not succeed. To obtain a patent, the claimant must show that there is an identifiable inventor. This almost immediately dismisses the knowledge systems and innovations of indigenous peoples as well as those of farmers because they innovate communally, over long periods of time. PBRs require that plant varieties be distinct, “clearly distinguishable from any other variety whose existence is a matter of common knowledge.” Again, this disqualifies communally developed varieties.


36 The International Treaty on Plant Genetic Resources for Food and Agriculture, Art 9, 3 November 2001 (date of adoption), 29 June 2004 (entry into force), <http://www.planttreaty.org/texts_en.htm>
Ensure that farmers’ groups are involved in defining farmers’ rights and that legal protections for farmers’ rights are consistent with human rights.

- Lobby your government not to join UPOV – particularly not UPOV 1991 – and not to adopt UPOV 1991-style legislation.
- Work to develop a national sui generis system for the protection of plant varieties, which specifically allows farmers to continue exchanging and re-sowing harvested seeds.
- If you are from a developing country member of WIPO, ensure that your government is aware of its right to demand technical assistance from the WIPO to develop sui generis plant variety protection.
- Bear in mind that WIPO technical assistance may promote UPOV or WIPO models only. Your government might be better advised to contact other agencies, such as the Office of the High Commissioner for Human Rights (OHCHR) or NGOs working on farmers’ rights issues (see Text Box 8 below), which can recommend more human rights-friendly or farmer-friendly options.

Submit the findings of the assessment to the relevant government ministries.

Stimulate public debate about the issues at stake by making the findings known through the media.

Submit the findings to relevant national and international human rights mechanisms.

If you are from an industrialized country whose government is negotiating with developing countries, remind the government of its obligations not to require other countries to enter into agreements that would make it harder for them to uphold human rights.

If your country has indigenous populations or minority groups

- Urge the government to create a sui generis system to protect the traditional knowledge and genetic resources of indigenous and minority groups within the State.
- Ensure that indigenous groups are involved in defining the indigenous- or minority-related provisions of the sui generis system.

If your country is in the process of negotiating trade or other international agreements which contain provisions on IP

- Ask the relevant government ministry for information on the status of the negotiations and the contents of the proposed trade agreement(s).
- If the government does not share this information, apply your country’s freedom of information laws when possible, or turn to international mechanisms to uphold the right to information and participation in trade agreements.
- Ensure that the government has commissioned or carried out an assessment of the impacts of the proposed IP provisions in the trade agreement on the human rights of vulnerable groups.
- If the government indicates that it is unwilling to carry out such an assessment, commission or carry out an assessment yourself.

See also:


Text Box 8
Groups working to promote farmers’ rights include:

ETC Group www.etcgroup.org
Farmers’ Rights Project www.farmersrights.org
IFOAM (International Federation of Organic Agricultural Movements) www.ifoam.org
Réseau Semences Paysannes www.semencespaysannes.org
Via Campesina www.viacampesina.org
Vredeseilanden http://veco.vredeseilanden.org/en

If your country is in the process of negotiating trade or other international agreements which contain provisions on IP

- Ask the relevant government ministry for information on the status of the negotiations and the contents of the proposed trade agreement(s).
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- Ensure that the government has commissioned or carried out an assessment of the impacts of the proposed IP provisions in the trade agreement on the human rights of vulnerable groups.
- If the government indicates that it is unwilling to carry out such an assessment, commission or carry out an assessment yourself.

Text Box 9
Groups working for human rights-consistent IP provisions in trade agreements include:

3D → Trade - Human Rights - Equitable Economy www.3dthree.org
BIOTHAI (Biodiversity Action Thailand) www.biothai.org
GRAIN www.grain.org
International Centre for Trade and Sustainable Development (ICTSD) http://ictsd.net
The South East Asian Council for Food Security and Fair Trade www.seacouncil.org
Third World Network (TWN) www.twinside.org.sg

Text Box 10
Groups working to promote indigenous rights over genetic and biological resources and traditional knowledge include:

Indigenous Peoples’ Council on Biocolonialism www.ipcb.org
International Indian Treaty Council www.treatycouncil.org/home.htm
Tebtebba www.tebtebba.org
The Christensen Fund www.christensenfund.org
Third World Network (TWN) www.twinside.org.sg
VI. Some simple steps to ensure that IP on seeds does not undermine human rights

If your country has ratified the CBD

- Recommend that your government implement domestic legislation, as urged by the CBD, to regulate access to genetic resources and knowledge in an equitable manner, according to the principle of PIC (the Bonn Guidelines\(^\text{37}\) may be of use here).
- Encourage your government to support the development of legally binding international mechanisms to support such national legislation.
  - You can make these recommendations directly by participating in the CBD’s bi-annual Conference of Parties or through asking an NGO who participates in these meetings to make them on your behalf.
  - You can also submit these recommendations to your government’s IP office or to your country’s representatives to WIPO in Geneva.

If your country is a member of the WTO

- Urge your government to support the Article 29bis amendment of TRIPS (aiming to enhance compatibility between TRIPS and the CBD).
- If your country is still implementing its TRIPS commitments, make sure your government knows that they are not obliged to allow patents on living organisms and that they can develop a nationally-specific *sui generis* system to protect plant varieties.
  - You can submit these recommendations to your government’s trade ministry and/or IP office or to your representatives to the WTO in Geneva.

If your country is a member of WIPO

- Recommend that WIPO promote human rights impact assessments of the implications of new or proposed IP standards in agricultural sectors.
- Recommend that WIPO technical assistance programs to governments be required to present the IP flexibilities available to governments.
  - You can make these recommendations directly by participating in WIPO meetings, such as the Committee on Development and Intellectual Property (CDIP) or the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), or through asking an NGO who participates in the CDIP or the IGC to make them on your behalf.
  - You can also submit these recommendations to your government’s IP office or to your country’s representatives to WIPO in Geneva.

Table 1: Human rights affected by IPRs on seeds

<table>
<thead>
<tr>
<th>Human right</th>
<th>How IPRs on seeds can affect the right</th>
<th>How IPRs on seeds can affect the right</th>
</tr>
</thead>
<tbody>
<tr>
<td>In no case may a people be deprived of its own means of subsistence, ICCPR, Art 1 and ICESCR, Art 1</td>
<td>By reducing farmers’ and indigenous groups’ rights to save, exchange and re-sow seeds, IPRs could result in depriving these groups of their own means of subsistence.</td>
<td>Few States consider the impact on nutrition of new IP laws and measures. By allowing the cultivation and/or consumption of GM crops despite insufficient proof that these do not have adverse health effects, States are acting contrary to the right to health. States neglect their health obligations by implementing development-related activities that lead to the displacement of indigenous peoples against their will from their traditional territories and environment, thus denying them their sources of nutrition and breaking their symbiotic relationship with their lands.</td>
</tr>
<tr>
<td>For the full texts, please refer to the treaties themselves.</td>
<td></td>
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<tr>
<td>Convention on the Elimination of All Forms of Discrimination Against Women, 18 December 1979 (date of adoption), 3 September 1981 (entry into force), <a href="http://www2.ohchr.org/english/law/crc.htm">http://www2.ohchr.org/english/law/crc.htm</a></td>
<td>Marketing facilities, appropriate technology and levels, implementation of development planning at all levels,</td>
<td>Allowing ‘ownership’ of knowledge relating to plants offends the religious and cultural beliefs of many communities, including rural communities and indigenous peoples. Land is often central to cultural or religious practices, but many small-scale farmers have to leave their land, unable to compete with large farms and the concentration of agricultural purchasers, which IPRs facilitate. Biopiracy may deprive peoples’ right to use plants or genetic resources they have used traditionally, if these plants are patented by someone else.</td>
</tr>
<tr>
<td>Right to freedom of religion, ICCPR, Art 18</td>
<td>Right of persons belonging to ethnic, religious or linguistic minorities to not be denied the right to enjoy their own culture and to profess and practice their own religion, ICCPR, Art 27 and CRC, Art 30</td>
<td>Right to take part in cultural life, to enjoy the benefits of scientific progress and its applications, ICESCR, Art 15</td>
</tr>
<tr>
<td>Equal rights of men and women, ICCPR, Art 3 and ICESCR, Art 3 and CEDAW, Art 2</td>
<td>The commercialization of agriculture tends to make women more vulnerable, it often deprives them of their traditional role as food producers and it does not recognize their role in the household or the informal economy. IPRs do not recognize the particular role women play as plant breeders and thus discriminate against those whose religious or cultural beliefs consider these in a special way. Higher prices of seeds that come with increased IPRs will be particularly detrimental for those people that are already vulnerable – small-scale farmers, minorities, indigenous groups – thus having discriminatory effects.</td>
<td>Right and opportunity to take part in the conduct of public affairs, ICCPR, Art 25</td>
</tr>
<tr>
<td>States must pay particular attention to the particular problems faced by rural women, CEDAW, Art 14</td>
<td>States must eliminate discrimination against women in rural areas and promote the right of women: ✧ to participate in the elaboration and implementation of development planning at all levels, ✧ to have access to agricultural credit and loans, marketing facilities, appropriate technology and equal treatment in land and agrarian reform, CEDAW, Art 14</td>
<td>There are almost no cases of prior assessment of the likely impacts of IP protection for seeds on children’s rights.</td>
</tr>
<tr>
<td>States must eliminate discrimination against women in rural areas and promote the right of women: ✧ to participate in the elaboration and implementation of development planning at all levels, ✧ to have access to agricultural credit and loans, marketing facilities, appropriate technology and equal treatment in land and agrarian reform, CEDAW, Art 14</td>
<td>States must improve methods of production, conservation and distribution of food… by developing or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources, ICESCR, Art 11 and CRC, Art 27</td>
<td>Technical assistance provided through multilateral institutions or bilateral development agencies usually recommend strict IP standards for plant varieties, with adverse effects for the enjoyment of a number of human rights.</td>
</tr>
<tr>
<td>Rights to life, ICCPR, Art 6 &amp; Right to an adequate standard of living, including adequate food and housing… States must improve methods of production, conservation and distribution of food… by developing or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources, ICESCR, Art 11 and CRC, Art 27</td>
<td>By contributing to depriving many rural communities of affordable seeds and depriving them of their traditional means of obtaining seeds, IPRs can affect the right to life, as well as the right to an adequate standard of living. By reducing genetic diversity and promoting monocultures, IPRs jeopardize sustainability of food production, an essential element of the right to food. By putting in place systems that favour crops that are not necessarily adapted to their social, cultural, economic, climatic or ecological conditions, States act contrary to the ‘adequacy’ requirement of the right to food. By not taking adequate measures to ensure that the activities of private business are in conformity with the right to food, States neglect their obligation to protect the right to food.</td>
<td>Right to work, ICESCR, Art 6</td>
</tr>
<tr>
<td>Right to an adequate standard of living, including adequate food and housing… States must improve methods of production, conservation and distribution of food… by developing or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources, ICESCR, Art 11 and CRC, Art 27</td>
<td>Right to just and favourable conditions of work which ensure… a decent living, ICESCR, Art 7</td>
<td>Right to work, ICESCR, Art 6</td>
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<tr>
<td>Right to just and favourable conditions of work which ensure… a decent living, ICESCR, Art 7</td>
<td>Right to the protection of the moral and material interests resulting from any scientific or artistic production of which he is the author, ICESCR, Art 15</td>
<td>When biopiracy occurs, it deprives the traditional custodians of the knowledge or resources of their moral and/or material interests. If the conditions for obtaining an IPR exclude traditional and indigenous knowledge or resources, it also violates this right.</td>
</tr>
</tbody>
</table>

1 For the full texts, please refer to the treaties themselves.
2 <http://www2.ohchr.org/english/law/crc.htm>
3 <http://www2.ohchr.org/english/law/iccecr.htm>
4 <http://www2.ohchr.org/english/law/crc.htm>
6 Right to benefit from the protection of the moral and material interests resulting from any scientific or artistic production of which he is the author, ICESCR, Art 15
7 The Human Rights Committee – charged with overseeing implementation of the ICCPR – has stated that the right to life is to be interpreted in a broad sense requiring inter alia measures to reduce malnutrition.
8 The Committee on Economic, Social and Cultural Rights – charged with overseeing implementation of the ICESCR – has stated that the right to food requires ‘adequacy, ’ ‘availability’ and ‘accessibility’ of food. ‘Adequacy’ is determined by social, economic, cultural, climatic and other conditions; ‘availability’ includes the requirement that food be available, free from adverse substances and acceptable within a given culture; and ‘accessibility’ implies ways that are sustainable and that do not interfere with the enjoyment of other human rights.
<table>
<thead>
<tr>
<th>Human rights issue</th>
<th>Source of the right (non-exhaustive list)</th>
<th>Accountability mechanisms (non-exhaustive list)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right to food</td>
<td>• Universal Declaration of HR, Art 25</td>
<td>• UN Special Rapporteur on the right to food*</td>
</tr>
<tr>
<td></td>
<td>• International Covenant on Economic, Social and Cultural Rights (ESCR), Arts 1 and 11</td>
<td>• Committee on ESCR**</td>
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<td></td>
<td>• Additional Protocol to the American Convention on HR in the Area of ESCR (Protocol of San Salvador)</td>
<td>• Inter-American Commission on Human Rights</td>
</tr>
<tr>
<td>Right to a healthy environment</td>
<td>• Protocol of San Salvador, Art 11</td>
<td>• Inter-American Commission on Human Rights</td>
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<td></td>
<td>• African Charter on Human and Peoples’ Rights (Banjul Charter), Art 24</td>
<td>• African Commission on Human and Peoples’ Rights (ACHPR), African Court of Justice</td>
</tr>
<tr>
<td>Right to participate in cultural life / Cultural rights</td>
<td>• Universal Declaration of HR, Art 27</td>
<td>• Committee on ESCR**</td>
</tr>
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<td></td>
<td>• International Covenant on ESCR, Art 15</td>
<td>• African Commission on Human and Peoples’ Rights</td>
</tr>
<tr>
<td></td>
<td>• African Charter on Human and Peoples’ Rights, Art 20</td>
<td>• ACHPR, African Court of Justice</td>
</tr>
<tr>
<td>Indigenous rights / Minority rights</td>
<td>• International Covenant on Civil and Political Rights, Arts 1 and 27</td>
<td>• Human Rights Committee**</td>
</tr>
<tr>
<td></td>
<td>• Convention on the Rights of the Child, Art 30</td>
<td>• UN Special Rapporteur on the rights of indigenous people*</td>
</tr>
<tr>
<td></td>
<td>• UN Declaration on the Rights of Indigenous Peoples</td>
<td>• HR Council Independent Expert on minority issues*</td>
</tr>
<tr>
<td>Poverty and human rights</td>
<td>• Convention on the Rights of the Child, Arts 24 and 27</td>
<td>• Committee on the Rights of the Child**</td>
</tr>
<tr>
<td></td>
<td>• Convention on the Elimination of Discrimination Against Women, Arts 11, 12, 13 and 14</td>
<td>• Committee on the Elimination of Discrimination Against Women**</td>
</tr>
<tr>
<td>Right to information, to consultation and to participation</td>
<td>• International Covenant on Civil and Political Rights, Art 25</td>
<td>• Human Rights Committee</td>
</tr>
<tr>
<td></td>
<td>• ILO Convention No 169, on the Rights of Indigenous and Tribal Peoples</td>
<td>• UN Special Rapporteur on the right to food and on the rights of indigenous peoples*</td>
</tr>
<tr>
<td></td>
<td>• UN Declaration on the Right to Development</td>
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</tr>
</tbody>
</table>

* Detailed information on how to submit information to these Rapporteurs and Experts can be found by clicking on the link of the relevant mandate from <http://www2.ohchr.org/english/bodies/chr/special/themes.htm> or in the OHCHR’s Handbook for NGOs, <http://www.ohchr.org/Documents/Publications/NgoHandbook/ngohandbook5.pdf>

** Information on the UN treaty monitoring bodies, as well as the lists of countries they are due to examine in the coming years can be found at <http://www.ohchr.org/EN/HRBodies/Pages/HumanRightsBodies.aspx>


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The THREAD [Trade, Human Rights and the Economy: Action upDates] series is a topical information and action-alert series on trade, designed for people concerned with human rights. THREAD publications provide human rights advocates with the information tools to enable them to ensure that trade and trade-related rules promote and protect human rights.

This Backgrounder explains the rise of intellectual property rights (IPRs) on seeds and the implications of this for rural livelihoods, cultural practices and the global food supply. It illustrates several human rights concerns related to IPRs on seeds and suggests some possible actions human rights advocates can undertake.

3D → Trade - Human Rights - Equitable Economy promotes collaboration amongst trade, development and human right professionals to ensure that trade and trade-related rules are developed and applied in ways that promote an equitable economy.