

ON INTELLECTUAL PROPERTY IN FOOD AND AGRICULTURE

During its four sessions, the Panel has examined with great concern the impact of the TRIPS Agreement, the system of protection sought by UPOV, and farmers' rights.¹

Among the core ethical issues in food and agriculture arising from the TRIPS Agreement are:

- the increasing risk of a transfer of important knowledge from the common domain (public goods) to the private domain, often controlled by corporations;
- the likely negative impact of the TRIPS Agreement on the livelihood of poor farmers;
- the uncertain impact on sustainable access to affordable, safe, nutritious food for consumers with limited income;
- the environmental impact, including the effect on biodiversity.

Intellectual property rights in agriculture

Intellectual property protection has been extended in the last 25 years to a wide range of information, materials and products relevant to food and agriculture. The US Supreme Court decision in *Diamond v Chakrabarty* influenced national legislation and case law in many jurisdictions, opening the door for the patentability of living organisms, including microbes, plants and animals and their parts and components. In addition, the TRIPS Agreement and, more recently, a growing number of free trade agreements (FTAs) promoted by the United States of America, European Free Trade Association (EFTA) and the EU have propelled the expansion of intellectual property protection to biological materials, particularly plants. Since 1995, 40 countries have adhered to the UPOV Convention for the Protection of New Varieties of Plants, which until then had had a membership essentially limited to developed countries.

The extension of IPRs to agricultural inputs and products raises a number of ethical concerns.

The foundations of intellectual property rights

A number of arguments based on natural justice or morality have been articulated to promote an expansion of IPRs in agriculture and other areas. The granting of IPRs has been historically justified on three different types of grounds:

- *Natural-rights-based proprietorship*: Under different variants (including theological and non-theological), this approach gives property interests a moral primacy. Property rights, including on abstract objects, are deemed to pre-exist the state and

¹ The TRIPS Agreement is Annex 1C of the *Marrakesh Agreement Establishing the World Trade Organization*, signed in Marrakesh (Morocco) on 15 April 1994 (see www.wto.org/english/tratop_e/trips_e/t_agm0_e.htm).

The International Union for the Protection of New Varieties of Plants (UPOV) is an intergovernmental organization with headquarters in Geneva (Switzerland). It is based on the International Convention for the Protection of New Varieties of Plants, as revised since its signature in Paris on 2 December 1961. The objective of the Convention is the protection of new varieties of plants by an intellectual property right (see www.upov.int/export/sites/upov/en/publications/conventions/1991/pdf/act1991.pdf). The Thirty-first Session of the FAO Conference adopted the finalized text of the International Treaty on Plant Genetic Resources for Food and Agriculture (available at www.planttreaty.org). This treaty is the outcome of several years of negotiations to revise the International Undertaking on Plant Genetic Resources, in harmony with the Convention on Biological Diversity.

to be simply recognized as a matter of natural justice. In some of its formulations, this theory or creed is grounded on the idea that a person who is first connected to an object with economic value is entitled to appropriate it.

- *Distributive justice*: Intellectual property rights, namely patents, have been regarded by some as a reward that the society is morally obligated to give to whoever introduces a new creation or invention. Although this conception is not based on the pre-existence of rights, it considers the granting of such rights a moral imperative, regardless of the economic and social implications of such a grant. It shares with the natural rights theory a strong individualistic bias.
- *Instrumentalism*: This approach conceives IPRs as a tool that society creates to attain objectives of its own choice. In fact, IPRs emerged several centuries ago as rule-governed “privileges”. Although they interfered in the negative liberties of others, such privileges were justified as necessary to achieve the objectives of certain societies. Under an instrumentalist conception, knowledge is by its very nature a public good and IPRs withhold the use of information from the common pool for practical reasons, not as recognition of pre-existing rights or as a morally due reward.

A properly applied instrumentalist approach should allow countries to design their IPR policies in accordance with their own conditions and objectives, including in the area of agriculture. However, in the last 25 years, a proprietary approach, sometimes associated to moral reward arguments, has influenced national legislation and case law as well as international developments. Some of the best examples of the influence of proprietaryism may be found in the area of IPRs applied to plants, animals, microbiological organisms and their parts and components, such as cells and genes.

Intellectual property rights and trade barriers

A large part of the population in developing countries depends on the production and sale of agricultural products. In accordance with the *World Development Report 2008*, agriculture is called to play a central role in achieving the Millennium Development Goal of halving extreme poverty and hunger by 2015. Gross domestic product originating in agriculture is deemed to be about four times more effective in reducing poverty than that originating outside the sector (World Bank, 2007).

The expansion of agricultural exports may contribute, if appropriate income distribution policies are in place, to reducing poverty and global income inequalities. During the Uruguay Round of the General Agreement on Tariffs and Trade, developed countries demanded acceptance of the TRIPS Agreement by developing countries as a quid pro quo to reduce their barriers to agricultural trade. In recent FTAs signed between the United States of America, EFTA, EU and several developing countries, the offer of preferential access to agricultural markets has also been the key card used to break such countries’ resistance to admit TRIPS-plus standards of IPR protection. TRIPS-plus standards are likely to have negative impacts, *inter alia*, on access to medicines, educational materials and technologies essential for development.

The Panel has also observed cases in which IPRs have been exercised by their title-holders in ways that generate inequitable outcomes. Overly broad claims interpretation and abusive measures at the border may result in developing countries losing income necessary to reduce poverty and implement development programmes.

Patents on living forms

Many national laws have recognized the possible conflict between the granting of patents and morality. Thus, the TRIPS Agreement expressly permits WTO members to “exclude from patentability inventions, the prevention within their territory of the commercial exploitation of which is necessary to protect *ordre public* or morality, including to protect human, animal or plant life or health or to avoid serious prejudice to the environment, provided that such exclusion is not made merely because the exploitation is prohibited by their law.” (Article 27.2). The TRIPS Agreement also allows countries to exclude plants and animals from patentability (Article 27.3(b)).

The idea of appropriation of living forms through patents may be morally unacceptable, particularly when IPRs involve living forms found in nature and a private monopoly would impede access to a public good. In these cases, the very granting of a patent may be immoral, even where the commercial exploitation were morally unobjectionable.

Appropriation of traditional knowledge

Several cases of inequitable appropriation through patents of traditional and indigenous knowledge have been reported. The legal fiction that considers “novel” (and, hence, susceptible of being patented) unpublished traditional/indigenous knowledge generated and used in a foreign country has ethically unacceptable consequences. As elaborated by the Committee on Economic, Social and Cultural Rights in its General Comment 17 on Article 15(c) of the *International Covenant on Economic, Social and Cultural Rights*, the moral and material interests of peoples, communities or other groups in their collective cultural heritage constitutes a fundamental right that needs to be protected by states (UN, 2006).

Test data protection

Undisclosed test data related to agrochemicals that contain new chemical entities should, under certain circumstances, be protected against unfair competition in accordance with international rules (Article 39.3 of the TRIPS Agreement). Although these rules do not require the granting of exclusive rights, in some countries and, notably, in the context of FTAs recently established with some developing countries, such test data cannot be used or relied on for at least ten years (from the date of marketing approval) even in cases where the relevant product is off-patent. This form of “data exclusivity” restrains competition and leads to higher prices for inputs that farmers in developing countries need, eventually making them uncompetitive and forcing them out of production. Such exclusivity may in practice amount to another impoverishing trade barrier, as morally objectionable as other barriers that restrict agricultural exports from poor countries.

Recommendations

FAO should promote awareness among policy-makers and the judiciary that, by its very nature, knowledge is a public good and that IPRs are tools that society uses to promote innovation and creation. The recognition of such rights is not a matter of natural justice or moral rewards. Any reform of IPR regimes should clearly identify its objectives and possible beneficiaries, and be undertaken after a careful assessment of the development impact of the new proposed rules.

Noting that the relentless march towards increased levels of IPR protection puts at risk agricultural production and exports necessary for social and economic development, FAO should object to coercion of developing countries aimed at adopting TRIPS-plus standards that are inconsistent with these countries' development needs, such as the obligation to grant patents on plants or data exclusivity. Similarly, IPR holders should be called on to exercise their rights in accordance with ethically acceptable norms, and not to impose undue barriers to trade in agricultural products originating from developing countries.

In determining patenting policies, FAO should call on governments to assess cautiously the ethical implications of the appropriation of living forms, and be aware of the room available under the TRIPS Agreement to prevent the patenting of morally unacceptable subject matter as well as, more generally, of animal and plants. Some of the situations that would require an ethical review include:

- unpredictable or undesirable dissemination of organisms or genes claimed in patent applications that may affect agricultural development and sustainability;
- the acquisition of patent rights that may stimulate the development of technologies that generate suffering of animals or risks to the sustainability of farming practices and agriculture;
- the patentability of materials discovered in nature, not "invented" by the applicant;
- patents on genes that cover all possible functions thereof, including those not discovered by the patent applicant;
- overly broad patent claims such as those drafted in functional terms (covering all ways of addressing a problem), which extend protection to entire species or reach back to parent breeding lines or unimproved germplasm contained in relatives of a patented cultivar;
- patents covering plant varieties that prevent their use as a source of further varietal improvement;
- patents over plant materials that restrict farmers' rights to save and re-use seeds in accordance with their traditional practices;
- the use of border measures in a way that unduly restrains legitimate trade in agricultural products, particularly from developing countries.

FAO should request governments to review patent policies that allow the appropriation of indigenous/traditional knowledge. They should, in particular, adopt measures to ensure the effective protection of the interests of indigenous peoples relating to the expressions of their cultural heritage and traditional knowledge.

More generally, the system under the TRIPS Agreement should be improved through

measures to ensure that there is no misappropriation of genetic resources in the public domain by enterprises and plant breeders. Patents should be given only for a genuine invention that has created a biological product significantly different from any that existed before, and the patent should cover only the inventive step itself, nothing beyond it.

Intellectual property rights, including on test data for agrochemicals, should be implemented in a way that contributes to agricultural production and poverty reduction through access to required inputs at affordable costs. Governments should avoid implementing legal regimes that create exclusivity over the use of such data.

FOOD SECURITY TO MEET DIETARY NEEDS FOR ACTIVE AND HEALTHY LIVES; ETHICAL CONSIDERATIONS IN CONNECTING ELEMENTS OF FAO'S MANDATE

FAO is required under its Constitution of 1945 to collect, analyse, interpret and disseminate information relating to nutrition, food and agriculture. For many years, initiatives focusing on these various elements followed their own, specialized and mostly unrelated paths. In the FAO Secretariat, nutrition was left more or less isolated in a division conducting its work rather independently of what happened in the other parts of the organization. In the light of the implications for people's diet and nutrition of globalization processes as discussed below, the recent institutional reform within FAO, which has placed nutrition together with consumer protection in the Agricultural and Consumer Protection Department, should encourage stronger linkages with production issues besides emphasis on consumer protection for good nutritional health in the age of globalization.

In 1996, the Heads of State and Government at the WFS agreed on a definition of food security in a way that points to an explicit connection between the various mandates of FAO according to its Constitution.

... Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. ...

World Food Summit Plan of Action, Para. 1 (FAO, 1998)

The food security concept thus defined can serve to connect the fundamental tasks of the Organization related to food production, distribution and access, encompassing the interests of both producers and consumers, and the concern with sustainable environment. The Panel recommends that FAO use the food security definition systematically and encourage Member States to do so in the formulation of their agricultural as well as their food and nutritional policies.

In particular, the recognition that agricultural production should aim at providing "nutritious foods" to meet the "dietary needs" underlines the fact that a primary purpose of agriculture and food handling is to facilitate matters so that all people can eat satisfactorily in the pursuance of health and absence of disease and thereby lead an active (implying also productive) life. This should guide the production/processing/distribution chain and serve as a point of departure for checking whether developments in agricultural and food supply policies really serve the meaning and purpose expressed in the 1996