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 proprietarianism*: 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 proprietarian 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 proprietarianism 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.