THE CARITAS IN VERITATE FOUNDATION WORKING PAPERS "The City of God in the Palace of Nations"

Patents on Genetic Resources ?

A Catholic Perspective for the World Intellectual Property Organization



THE CARITAS IN VERITATE FOUNDATION WORKING PAPERS "The City of God in the Palace of Nations"

Patents on Genetic Resources ?

A Catholic Perspective on the World Intellectual Property Organization



With a selection of recent texts from the Church's engagement regarding intellectual property and genetic resources

www.fciv.org

Published by Mathias Nebel, FCIV, 16 chemin du Vengeron, CH-1292 Chambésy © 2013 The Caritas in Veritate Foundation

EDITORIAL

PART ONE: The search for a just solution

Historical Overview: Patentability of Genetic Resources at WIPO	0
Carlo Marenghi, IP and Trade Attaché, Holy See Mission in Geneva	9
Genetic Resources Patents and Catholic Social Teaching	
Roman Cholij, Research Associate, Von Hügel Institute, St. Edmund's	15
College, University of Cambridge	

PART TWO: Recent texts by the Magisterium on IP and genetic resources

	Introduction to Magisterial Documents and Holy See Interventions on Genetic Resources Joseph Grødahl Biever, JD/MBA, Research Intern, FCIV	67
Papal encyclical	Caritas in Veritate, Benedict XVI, 2009 (excerpt)	75
Papal message	Address to the Jubilee 2000 Debt Campaign, John Paul II, 1999	76
Papal message	Address to the Jubilee of the Agricultural World, John Paul II, 2000	78
Holy See intervention	At Third Ministerial Conference of the WTO, 1999	82
Holy See intervention	On IP and Genetic Resources, Traditional Knowledge and Folklore (At WIPO IGC), 2001	86
Holy See intervention	Intellectual Property and Access to Basic Medicines (At WTO Council on TRIPS), 2001	93
Holy See intervention	At WTO General Council, 2002	97
Holy See intervention	At WTO Fifth Ministerial Conference, 2003	99
Holy See intervention	At WTO Sixth Ministerial Conference, 2005	102
Holy See intervention	At WIPO General Assembly, 2008	107

PART THREE: Position of the Caritas in Veritate Foundation

The Emergence of IP Regimes and the Question of Genetic Resources	
at WIPO: Toward a New Legal Instrument	111
Mathias Nebel, Director, FCIV, Chaire Jean Rodhain, ICP Paris	111
Carlo Marenghi, IP and Trade Attaché, Holy See Mission in Geneva	

Editorial

t is easy to see why the codes to life-functions are both important to protect and attractive to patent for private companies. Scientific knowledge on genetic resources has developed extremely rapily in the last 20 years. Since the technology to read and analyse DNA has become accessible to more and more firms, the question of patents on inventions claimed over genetic material has also increased. In general terms, national intellectual property regimes are not well adapted to deal with genetic resources. The special significance of the codes to life-functions calls for not too eagerly allowing patents on them. The common good, prudence, and justice must be part of the discussion on patent rights on genetic resources.

But as is often the case, important issues are complex. We cannot reduce them to simple statements and unilateral decisions. In an increasingly globalised world, answers to patents on genetic resources, if any, are better met at the level of multilateral diplomacy, through negotiated agreement. Justice and the universal common good will too readily be set aside in bilateral agreements.

The World Intellectual Property Organization has been one of the most active fora for the debate of patents on genetic resources in the last decade. The whole process is now reaching maturity and in the next year a legal instrument will move through the WIPO General Assembly on the issue of patent on genetic resources and traditional knowledge. As is often the case with such negotiated legal texts, answers to complex issues are left to the fine print. The jungle of technical terms makes it difficult for non-specialists to see how the wider picture is addressed. Today, the question of patents on genetic resources has boiled down to the question of who can claim legal ownership of genetic resources and how to handle fair compensation between traditional people, countries of origin, and inventors.

However, since it is easy to overlook ends and goals in the heated debate and deadlock over vocabulary, the whole process must not be dismissed on simplistic assumptions over international bureaucracy and power plays. Those living in the real world know the necessity of hammering out an agreement on this issue. No agreement at all would be a detriment not only to the poor, but indeed to all of us. This is a matter of living up to the universal common good, beyond narrow-minded conceptions of the good of 'my' national companies, 'my' country, 'my' region, or 'my' allies. As much as anything else, the codes to life functions are of great significance to mankind.

2014 will be a year of intense activity at WIPO on genetic resources. The

PATENTS ON GENETIC RESOURCES?

Caritas in Veritate Foundation seeks to contribute to the debate on the legal instrument. Too often the Catholic perspective is seen as overly broad and disconnected from reality. This report proves that this is not the case. A Christian perspective on international affairs does not remain solely at the level of principles and wishful thinking. It trickles down even to the fine print of a negotiated text. We hope that this working paper, created with the active collaboration of the Mission of the Holy See at the United Nations in Geneva, may contribute to reaching a just and fair agreement on this important issue.

This working paper thoroughly addresses the issue of patents on genetic resources. First through a report by Roman Cholij of the Von Hügel Institute on the legal and ethical questions forming the basis of the present negotiation process; then, by publishing here the narrow corpus of recent texts by the magisterium of the Church on intellectual property and genetic resources; and finally, by presenting a position paper for the coming negotiation.

PART ONE

The search for a just solution

HISTORICAL OVERVIEW: THE PATENTABILITY OF GENETIC RESOURCES AT THE WORLD INTELLECTUAL PROPERTY ORGANIZATION

CARLO MARENGHI

The relationship of genetic resources and traditional knowledge to intellectual property protection has been one of the most complex, controversial yet dynamic issues on the agenda of multilateral deliberations in the areas of biodiversity, trade and intellectual property during the past decade.

One of the important challenges it raises comes precisely from the fact that discussions have taken place simultaneously in a number of international forums such as the Convention on Biological Diversity (CBD), the World Trade Organization (WTO) and the World Intellectual Property Organization (WIPO), creating significant obstacles to ensuring 'coherence' and 'mutual supportiveness' between processes responding to different mandates. While the WTO stalemate in the Doha round of negotiations has yielded little progress on these and other matters, the 2010 CBD adoption of the Nagoya Protocol on Access and Benefit Sharing (ABS) is an important milestone in the debate that has a bearing on deliberations in other forums.

At WIPO, the Intergovernmental Committee on Intellectual Property, Genetic Resources, Traditional Knowledge and Folklore (IGC) has been, since its creation in 2000, the main focus of deliberations with the active participation of a variety of stakeholders, in particular indigenous groups. Throughout its existence, it has witnessed a rich policy dialogue and contributed to a better understanding of the issues at hand. The origin of the IGC goes back to the negotiations and diplomatic conference that led to the adoption of the Patent Law Treaty in 2000.

As part of the negotiation process, Colombia presented a submission, later supported by various members of the Group of Latin American and Caribbean Countries (GRULAC), at the WIPO Standing Committee on Patents (SCP) in September 1999. Its aims were to seek to ensure that industrial property protection guaranteed the protection of the country's biological and genetic heritage. Colombia's proposals called for the following:

"All industrial property protection shall guarantee the protection of the country's biological and genetic heritage. Consequently, the grant of

patents or registrations that relate to elements of that heritage shall be subject to their having been acquired legally. . . . Every document shall the registration number of the contract affording access to genetic resources and a copy thereof where the goods or services for which protection is sought have been manufactured or developed from genetic resources, or products thereof, of which one of the member countries is the country of origin."¹

The proposal highlighted for the first time in WIPO that the granting and registration of relevant patents should be subject to the legal acquisition of genetic resources (GRs) and that patent applications should mention the registration number of the contract affording access to GRs by the country of origin.

The SCP did not reach a consensus on this proposal,² and WIPO Member States subsequently revisited the issue no less than five times. In November 1999, the WIPO Working Group on Biotechnology held informal discussions on Colombia's proposal and issued a questionnaire aimed at identifying the intention of WIPO Member States as to the eventual adoption of the Requirement at the national or regional level.³ The WIPO Meeting on Intellectual Property and Genetic Resources, held in Geneva on 17 and 18 April 2000, discussed the responses to that questionnaire, as well as other issues concerning traditional knowledge, in preparation for the Diplomatic Conference for the adoption of the Patent Law Treaty. In that venue, Colombia softened its proposal—it no longer suggested that the provision have a mandatory nature, but rather a permissive nature, in the sense that it merely permitted Parties to the future Patent Law Treaty to adopt the Requirement at the national level.

The main arguments against it were that the SCP was not the right forum for such discussions and that they did not fully understand the intent and purpose of the mission. In order to avoid a political impasse, and after various bilateral and regional grouping negotiations, a deal was struck by which Colombia would withdraw its proposal in exchange for the creation of a governmental body that would broadly address intellectual property (IP) issues that arise in the context of access to GRs and benefit-sharing.

Later on, in the context of the twenty-sixth session of the WIPO General Assembly in 2000, and as a consequence of a GRULAC submission titled 'Traditional Knowledge and the Need to Give it Adequate Intellectual Property Protection',⁴ the mandate of a newly created body, namely the IGC, was adopted and extended so as to also include the protection of traditional knowledge (TK) and expressions of folklore (TCE). Since its inception, the IGC has proven to be an open forum for discussion on the concerns expressed by biodiversity-rich countries and TK holders in relation to the IP system. It has generated a much higher level of awareness of key concerns and solutions proposed. The IGC has also generated a significant amount of research and analysis in the form of fact-finding mis-

sions. It has further allowed for the introduction of technical reforms, such as the inclusion of some TK journals within the Patent Cooperation Treaty (PCT) minimum documentation, and the integration of TK classification tools and technical standards for TK documentation in order to contribute to the defensive protection of GRs and TK. The IGC has also provided guidance on IP-related clauses in access and benefit-sharing (ABS) agreements. Contributions have also been made through a series of documents that could culminate in an international instrument(s) such as a list of principles and objectives on GRs and draft articles on TK and Traditional Cultural Expressions (TCEs).

Although advances have been made, the normative outcomes of the IGC seem quite modest compared to the expectations placed on and the level of investment made in the process so far. There are several reasons for this. The first reason is that while significant attention has been given to the objectives of avoiding granting erroneous patents and other IP titles, and of improving examination quality, fierce resistance has been given to another important objective, that of ensuring that those using genetic information or associated traditional knowledge in patent applications comply with national access and benefit-sharing legislation in the country of origin. Second, the level of disagreement and, to some extent, of mistrust on these issues between different actors (including user and provider countries as well as indigenous peoples and business groups) remains high, leaving little space for bridging proposals that would make the IP system more responsive to sustainable and equitable imperatives.

In 2009, an important step was taken when the WIPO General Assembly instructed the IGC to accelerate its work towards developing an international instrument or instruments to protect genetic resources, traditional knowledge and traditional cultural expressions. Three years ago, the WIPO General Assembly adopted a new mandate for the IGC that pointed towards more solid and specific international outcomes. The 2009 mandate indicated: "Without prejudice to the work pursued in other fora," the IGC will "continue its work and undertake text-based negotiations with the objective of reaching agreement on a text of an international legal instrument (or instruments) which will ensure the effective protection of GRs, TK and TCEs."⁵

In this mandate the sentence "to ensure the effective protection of GRs, TK and TCEs" is of great importance. 'Protection' in an IP system usually implies granting economic/market rights, which range from protection against unfair competition to exclusive rights. In some cases moral rights can also be recognized. Protection needs to be differentiated from 'preservation', which in the case of GRs and TK would imply the conservation of ecosystems and traditional context. The term 'effective' means that the system actually fulfils its purpose (in this case protecting GRs, TK and TCEs) and that there are available means to ensure this protection (usually

enforcement measures). The text also mentions a "text of an international legal instrument(s)." International instruments could include a variety of options, such as binding international treaties, but also different sorts of soft law such as understandings, recommendations, guidelines, declarations, and resolutions.

The 2009 mandate led to a higher level of engagement by all parties in the IGC and increased attention to the texts of specific proposals that could end in a binding—or at least in a soft law—type of instrument. The recent adoption of the Nagoya Protocol in November 2010 has also clarified many aspects of both national and the nascent international access and benefit-sharing regimes. This has generated some impetus to consolidate outstanding reforms in the IP system in response to concerns over erroneous patents, the low quality of patent examinations, and the lack of benefitsharing. The Nagoya Protocol represents a fundamentally new piece of an increasingly complex multilateral system governing the rights over, access to, and utilisation of GRs and TK. The objective of the Protocol is the fair and equitable sharing of benefits arising from the utilisation of genetic resources, including by appropriate access and transfer of technology, thereby contributing to the conservation and sustainable use of biodiversity.

In October 2012, during the WIPO General Assembly, Member States reached an agreement on a work program for 2013 for the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore.⁶ The IGC will continue intensive negotiations and engagement in good faith, with appropriate representation, oriented towards concluding the text(s)⁷ of an international legal instrument(s) which will ensure effective protection of genetic resources (GRs), traditional knowledge (TK) and traditional cultural expressions/expressions of folklore (TCEs). The IGC was "requested to submit to the 2013 General Assembly the text(s) of an international legal instrument(s) which will ensure the effective protection of GRs, TK and TCEs. The General Assembly in 2013 will take stock of and consider the text(s), progress made and decide on convening a diplomatic conference."⁸

The report that follows aims to present the questions currently under discussion and shall try to give a Catholic perspective on what may be included in an international legal instrument for ensuring the protection of genetic resources.

NOTES

1. In the course of the discussions leading to the adoption of the Patent Law Treaty (PLT) under the auspices of the World Intellectual Property Organization (WIPO), Colombia proposed the inclusion of the Requirement in the Treaty.

2. Report of the Third Session of the SCP, WIPO Standing Committee on the Law of Patents, §§ 202–209, 6–14 September 1999. SCP/3/11. Available at http://www.wipo. int/edocs/mdocs/scp/en/scp_3/scp_3_11.doc (accessed 9 December 2013).

3. Information Provided by WIPO Member States Concerning Special Provisions to Ensure the Recording of Some Contributions to Inventions, Meeting on Intellectual Property and Genetic Resources, 14 April 2000. WIPO/IP/GR/00/3 Rev.1.

4. GRULAC, *Traditional Knowledge and the Need to Give it Adequate Intellectual Property Protection*, WIPO Committee on the Relationship Between Intellectual Property, Genetic Resources and Traditional Knowledge, 14 September 2000. WO/GA/26/9. Available at http://www.wipo.int/meetings/en/doc_details.jsp?doc_id=1482 (accessed 9 December 2013).

5. Matters Concerning the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), WIPO General Assembly, 38th Session, 22 September 2009. Available at http://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_15/wipo_grtkf_ic_15_ref_decision_28.pdf (accessed 9 December 2013).

6. See *IGC Work Program 2013*. Available at http://www.wipo.int/tk/en/documents/pdf/ igc_work_program_2013_-_ga_decision.pdf (accessed 9 December 2013).

7. Matters Concerning the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), WIPO General Assembly, 41st Session, 1–9 October 2012. WO/GA/41/15. Available at http://www.wipo.int/edocs/mdocs/govbody/en/wo_ga_41_15.pdf (accessed 9 December 2013).

8. Matters Concerning the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), WIPO General Assembly, 43rd Session, 23 September 2013. WO/GA/43/14. Available at http://www.wipo.int/edocs/mdocs/govbody/en/wo_ga_43/wo_ga_43_14.pdf (accessed 9 December 2013).

GENETIC RESOURCES PATENTS AND CATHOLIC SOCIAL TEACHING

A Caritas in Veritate Foundation Report by ROMAN CHOLIJ¹ Von Hügel Institute, St Edmund's College, University of Cambridge

his paper considers the question of patents and genetic resources, as currently being discussed in various international fora, in the light of Catholic Social Teaching. The main fora in question are the World Intellectual Property Organisation (WIPO), the Council for the Trade-Related Aspects of Intellectual Property Rights (TRIPS) of the World Trade Organisation (WTO), and the Convention on Biological Diversity (CBD). The particular issue that requires satisfactory resolution is that of the proposal to require in an international legal instrument mandatory disclosure of the origin of genetic resources and associated traditional knowledge (TK) in patent applications with a view to realising fair and equitable benefits sharing as required by the CBD. This is sometimes referred to for convenience as the 'patentability of genetic resources'—as is done occasionally in this paper—although strictly speaking genetic resources as encountered in nature cannot be directly protected as intellectual property.²

A particularly important underlying issue of this proposal is the need for better legal arrangements to protect indigenous and local communities in developing countries against misappropriation of their genetic resources and TK. Several cases of so-called biopiracy have drawn international attention in recent years to this problem.

As these issues touch on matters of social justice and therefore of the common good, disclosure of origin of genetic resources in patent applications can legitimately be considered a public policy objective of the intellectual property regime for developing countries whose material interests are most at stake. It is also the case that many of the societies in these countries are characterised by extreme poverty. This makes them vulnerable to unscrupulous or unfair approaches from powerful actors from the developed world who have the resources necessary to exploit the traditional knowledge and biological assets of these communities in ways that could be profitable to them but not always to the original communities.

Catholic Social Teaching evaluates issues affecting society in the light of a number of principles that have been summarized in the *Compendium of the Social Doctrine of the Church.*³ Among the most important of these princi-

¶ Introduction

ples when applied to the particular issues of patents and genetic resources under discussion are: the search for the common good; social justice; the acceptance of private property, but seeing this also in the context of the wider society and entailing responsibilities to society; and, finally, 'the preferential option for the poor'. Based on these principles, and given the particulars of the underlying issues, the position of the Catholic Church is that Christian ethics, and considerations of the social function of intellectual property, dictate full support for the proposal on mandatory disclosure.

The relationship between the international intellectual property system and public policy objectives in areas such as health and biodiversity, and how the system has addressed public interest demands and development concerns, has brought worldwide attention to intellectual property, which had remained until the late 1990s a self-contained technical area of regulation largely absent from wider policy debates.

Recently, and especially as a consequence of the Holy See's ongoing active engagement in the debates of the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), which directly affects some of the most vulnerable and poorest communities in the world, the Caritas in Veritate Foundation, which serves the Catholic community in Geneva by providing it with academic and practical intellectual resources, has commissioned this paper to provide a background resource and set of arguments to explain the position the Catholic Church takes towards intellectual property, and towards the question of mandatory disclosure, or 'patentability of genetic resources'.

¶ Structure of this paper

A fter explaining and discussing the issues that form the context of the current WIPO negotiations, in particular the convention on biological diversity, an analysis of the developments in the social philosophy of intellectual property—its place in society and in the developing world—will follow. This section also explains in broad outline the politics of power that have been and remain in the background of IP issues on a world scale, thereby providing a broader context to the debates at WIPO. How Catholic Social Teaching views the nature and purpose of intellectual property will form the third and final section, demonstrating that the benchmark factor in the justification of the IP regime is the extent to which it serves the true common good of society, including the international society of nations, to which the reward-for-innovation theory is subordinate. It is from this perspective of the 'social theology' of intellectual property that final conclusions will be drawn.

It is hoped overall that those in the Catholic or other Churches responsible for articulating views on intellectual property and in particular on patenting of genetic resources may be assisted in some modest way by the discussions in this paper.

The paper is divided into three parts, and ends with final conclusions and

reflections.

- Part one: 'The Convention on Biological Diversity and the issues surrounding mandatory disclosure in patent law'.
- Part two: 'The wider context of intellectual property: its social function, and TRIPS'.
- Part three: 'Catholic Social Teaching & intellectual property.'

Part I

The Convention on Biological Diversity and the issues surrounding mandatory disclosure in patent law

The Convention on Biological Diversity is an international legal instrument for the conservation and sustainable use of biological diversity presented for signature at the Rio 'Earth Summit' in 1992. It asserts the sovereign rights of nations over their national resources, and their right to determine access according to national legislation with the aim of facilitating the sustainable use of these resources, promoting access and their common use. It requires that access to genetic resources be on the basis of prior informed consent, and on mutually agreed terms that provide fair and equitable sharing of the results of R&D and the benefits of commercialisation and utilisation.⁴ It also calls for the fair and equitable sharing of the benefits derived from the use of traditional knowledge (TK).⁵ The custodians of genetic resources with associated TK are (the often marginalised) indigenous peoples and/or poor local communities of developing or least developed countries.⁶ The geographic spread of indigenous communities, however, also covers developed nations such as the USA, Canada and Australia where protection of genetic resources, traditional knowledge, and traditional life styles are also urgent issues. Representatives of indigenous communities from across different regions and countries have participated in the discussions of the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC) to represent their interests as "the titleholders, proprietors and ancestral owners of traditional knowledge that is inalienable, nonforfeitable and inherent to the genetic resources . . . conserved and utilized in a sustainable manner within [their] territories."7

Independently, in 2008 indigenous peoples from around the world gathered together before the 34th G8 Summit in Hokkaido, Japan. The *Nibutani Declaration* that followed called upon the G8 nations to "stop the theft and piracy of our traditional indigenous knowledge, traditional cultural expressions . . . bio-genetic resources including our human genetic resources, by biotechnology corporations, cultural industry, and even by States and individual scientists and researchers."⁸ ¶ Permanent sovereignty and conservation of genetic resources The principle from which the CBD begins in order to anchor the rights of indigenous and local communities over the biological material in their custody is that of *permanent sovereignty*. This is a fundamental principle of international law and of the nation state system. Independent states have permanent sovereignty over their territories including their natural biological resources. This is explicitly upheld in the CBD, although, by way of balance, it also states that "States are responsible for conserving their biological diversity and for using their biological resources in a sustainable manner," biological diversity being a common concern of mankind. The CBD underlines that biological life is a resource to which access can be given to another by a custodian/provider, rather than being considered part of a common heritage (except in a loose ethical sense).⁹

The relation of indigenous people and local communities to the State with regard to property ownership, including land and its biological and natural resources, which may involve the institution of communal property for a tribe or people, is dictated by national law subject to obligations of international treaties, including the CBD¹⁰ and the Indigenous and Tribal Peoples Convention of the ILO.¹¹ It is an internationally accepted principle that indigenous peoples should fully participate in decisions that affect their livelihood and development including, implicitly, arrangements of benefit sharing with regard to third party access to the genetic resources under their custody.¹² The institutional proprietary nature of biological life as found on land within a territory, determined by international and national law, permits control of access to what are now regarded as 'resources' in the CBD. This control is not necessarily in conflict with the idea of biological or genetic resources being part of the 'common heritage' of mankind, in the sense given by conservationists, as this concept is not a legal one and pertains to the ethical sphere. In controlling access, the authorities are also bound to act with a mind to the common or public international good. They must achieve a balance for permitting access on reasonable termsfor example for research that could lead to medical breakthroughs for the benefit of all mankind—and preventing the blocking of access to potential researchers because of unreasonable terms, due for instance to unrealistic commercial expectations.¹³ Without this appropriate balance, allowing free exchange of information based on reasonable access, situations could arise such as that of the assertion of 'viral sovereignty' where a nation prevents access for foreign medical researchers to new viruses that could potentially cross borders and cause pandemics affecting all peoples of the world.¹⁴

A related proprietary issue is the protection against misappropriation of TK as such, a knowledge that reflects historical and on-going communal shared-inventiveness regarding, inter alia, the uses of genetic resources, where such knowledge is used without consent.¹⁵ If the notion of legal ownership and legal rights is to be applied to TK, especially for the purpos-

es of intellectual property, and potentially as a *sui generis* right, it is above all to the communal aspect of these rights that attention needs to be paid.¹⁶ Several bodies and agencies have taken an interest in this matter, and this is the subject of separate advanced negotiations at WIPO.¹⁷ A flavour of the concern by UN agencies is expressed in the 2010 report of the United Nations Conference on Trade and Development (UNCTAD), where it is stated: "There is a feeling that there is a lack of balance in the current intellectual property rights (IPR) system as enshrined in the TRIPS Agreement and various treaties. One type of IP—that generally produced and owned by entities in developed countries—is well protected. That category of IP in which developing countries have comparative advantage, namely TK, is generally considered free for all takers."¹⁸

How the recommendations of the Convention impact on intellectual property, and in particular the TRIPS IP regime which sets global minimum standards and requirements, has been the subject of protracted study and negotiation at the CBD, the TRIPS Council,¹⁹ and at WIPO. The CBD states that access to and transfer of genetic resources should be "consistent with the adequate and effective protection of intellectual property rights." It notes that patents and other IPRs may have an influence on implementation of the Convention, and governments should cooperate (subject to national and international law) in order to ensure that such rights are supportive of and do not run counter to the CBD's objectives.²⁰

The political background to the third objective of the Convention on Biological Diversity—an objective stated in Article 1: "the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies"—is that of 'biopiracy' or unauthorised bioprospecting. The perception that developing countries are the victims of past and ongoing unethical activity on the part of the developed world was articulated by the Asian Group of delegations at WIPO in 2012:

"The Delegation . . . speaking on behalf of the Asian Group, was of the view that development objectives were at the heart of the IGC. . . . It observed that, at the moment, there was no binding rule or convention to preserve the moral and economic rights of the beneficiaries of TK, TCEs and GRs. In the absence of internationally binding rules for the effective protection of TK, TCEs and GRs, bio-piracy and misappropriation of GRTKF for commercial benefit had become prevalent phenomena all over the world, particularly in developing countries. This rather unfortunate and rampant situation continued to deprive developing countries of greater leverage over the use of their potential resources resulting in undermining their sustainable development and competitiveness in the international market. It advised that the only way to remedy this unfair situation was by establishing new international norms and binding rules to help developing countries protect their potential resources in order to

utilize and commercialize them at the international level for the benefit of their people."²¹

¶ Biopiracy or bioprospecting?

B iopiracy is a political term that describes ways that corporations from the developed world are perceived to steal, free-ride on or obtain access to and commercialise without appropriate authority the genetic resources and traditional knowledge and technologies of developing countries.²² 'Misappropriation', on the other hand, is a more juridical concept that could be defined as the consequence of biopiracy.²³

How the term biopiracy is used in the literature is very varied²⁴ and its meaning can depend on context. The following have been described as 'biopiracy':²⁵

- 1. The *granting of 'wrong' patents*. These are patents granted for inventions that are either not novel or are not inventive having regard to traditional knowledge already in the public domain. Such patents may be granted due either to oversights during the examination of the patent or simply because the patent examiner did not have access to the knowledge. This may be because it is written down but not accessible using the tools available to the examiner, or because it is unwritten knowledge.
- 2. The *granting of 'right' patents*. These are patents that may have been correctly granted according to national law on inventions derived from a community's traditional knowledge or genetic resources. It can be argued this constitutes 'biopiracy' on the following grounds:
 - Firstly, patenting standards are too low. Patents are allowed, for instance, for inventions which amount to little more than discoveries. Or the national patent regime (for example as in the US until recently) may not recognise some forms of public disclosure of traditional knowledge as prior art (e.g. oral disclosure).
 - Secondly, even if the patent represents a genuine invention, however defined, no arrangements may have been made to obtain the prior informed consent (PIC) of the communities providing the knowledge or resource, and for sharing the benefits of commercialisation to reward them appropriately and in equity in accordance with the principles of the CBD.

There is considerable literature on biopiracy produced by various human rights, environmental, and other advocacy groups, as well as from academics.²⁶ The term 'bioprospecting', on the other hand, expresses an activity involving the practice of collecting and screening plant and other biological material for scientific or industrial purposes. It may also involve collecting associated local knowledge, such as from healers. It has also been argued that bioprospecting plays a wider role in encouraging the preservation of

biodiversity.27

Researchers have provided detailed studies on the commercial use of biodiversity, illustrating that the annual market for products derived from genetic resources can be in the hundreds of billions of dollars. The industrial sectors, which depend to a greater or lesser degree on biogenetic resources include: pharmaceuticals, botanical medicines, agricultural produce (including agricultural seed), ornamental horticultural products, crop protection products, biotechnologies in fields other than health care and agriculture, and personal care and cosmetics products. In 1990, the estimated market value of plant-based medicines sold in OECD countries was US \$61 billion.²⁸ Not all authors, however, expect these past impressive overall global figures to be sustained.²⁹

What also sometimes complicates discourse on this matter of biopiracy is that there is a continuum of activities ranging from the criminal to the legal but perhaps unethical that have been classed as biopiracy. Examples may be: unauthorised and/or uncompensated use of common TK; the deceptive acquisition of TK; the commercial use of TK based on a literature search without compensating the source holders; claiming TK within a patent in the form it was acquired; claiming a refinement of TK; claiming an invention based on TK; the unauthorised and uncompensated extraction and use of widespread genetic resources; a patent claim claiming the resource or purified version of the resource or a derivative; as well as other variants.³⁰

A. Neem case

A n oft-cited example of 'biopiracy', or misappropriation of traditional knowledge in association with a genetic resource, is that involving neem (*Azadirachta indica*). Neem ('Indian Lilac') is a plant that is endemic to the Indian subcontinent and traditional medicine practitioners for its various therapeutic properties. The neem tree has been the subject of a considerable number of patents, with more than 40 in the US alone and at least 150 worldwide. Traditional knowledge was used as a starting point in each case. This appropriation (or misappropriation) of TK together with a GR has aroused considerable controversy, especially in India.³¹ One patent, a '[m]ethod for controlling fungi on plants by the aid of a hydrophobic extracted neem oil', owned by a US company, was revoked at the European Patent Office when challenged based on evidence supplied to show that there was a lack of novelty and inventive step.³²

B. Turmeric case

A nother patent on a "[m]ethod of promoting healing of a wound by administering turmeric to a patient afflicted with the wound," owned by the University of Mississippi, involved turmeric, a herbaceous plant native to tropical South Asia, likewise known through tradi-

¶ Classical case studies of biopiracy

tional knowledge to have healing properties.³³ This was similarly challenged successfully, based on evidence of prior art that consisted in TK. In this case an ancient Sanskrit text was used by the Indian government to show lack of novelty (the US at that time not accepting non-written oral knowledge).³⁴

C. Ayahuasca case

or generations, shamans of indigenous tribes throughout the Amazon basin have used the bark of *Banisteriopsis caapi* to produce a ceremonial drink known as 'ayahuasca' which they use in religious and healing ceremonies to diagnose and treat illnesses, meet with spirits, and divine the future. The word ayahuasca means 'vine of the soul'. An American, Loren Miller, obtained a US plant patent granting him rights over an alleged variety of *B. caapi* he had called 'Da Vine'.35 The patent description stated that the "plant was discovered growing in a domestic garden in the Amazon rainforest of South America." The patentee claimed that Da Vine represented a new and distinct variety of *B. caapi* primarily because of the flower colour. Eight years later, in 1994, an umbrella organisation representing over 400 indigenous groups (COICA, the Coordinating Body of Indigenous Organisations of the Amazon Basin) found out about the patent to their great dismay and chagrin. On their behalf the Centre for International Environmental Law (CIEL) filed a re-examination request on the patent. CIEL protested that Da Vine was neither new nor distinct, given the prior art, and they argued that the granting of the patent would be contrary to the public morality aspects of the Patent Act because of the sacred nature of Banisteriopsis caapi throughout the Amazon region. As a result the patent was revoked.³⁶

What the above examples show, of which there are several more documented examples,³⁷ is that patents can be, and have been, awarded erroneously based on patent criteria that have not been properly applied by examining authorities and which have ignored the contributions, the interests, and the sensibilities of the custodians of traditional knowledge and of indigenous communities.

These celebrated cases, together with the Prior Informed Consent and Access and Benefit Sharing arrangements of the CBD, provide the context for the pursuit, primarily by the developing countries, for an effective international legal instrument that would tie the objectives of the CBD and the interests of custodians of traditional knowledge strictly with the patent system through a strict requirement of disclosure, as explained below.³⁸

¶ Relationship of CBD to TRIPS he most obvious and the most appropriate place to integrate the IP related objectives of the CBD is the TRIPS Agreement, as this is global in its extent and has a well-established and effective enforcement mechanism potentially involving trade sanctions. However, the de-

veloped countries, in particular the US, the principal architect of the agreement, argue that since TRIPS says nothing about the CBD, nor indeed the CBD about TRIPS, there can be no conflict between the two agreements. As patenting often leads to commercialisation, which generates the benefits that are a prerequisite to any benefit sharing arrangement, TRIPS, it is further argued, actually supports the CBD in its objectives.

The developing countries, NGOs, academics, independent studies, and some sympathetic developed countries, have to the contrary argued that since patenting based on the use of genetic resources is allowed under TRIPS (subject to meeting patentability criteria) this does not support the objectives of the CBD because the criteria do not include prior informed consent or mutually agreed terms for benefit sharing. Nor is there any provision for the protection of traditional knowledge as such. The absence of these requirements and provisions, it is argued, in fact encourage biopiracy and inequitable behaviour towards poorer nations and the underprivileged.

n 2002, the Sixth Meeting of the Conference of the Parties (COP) to the CBD adopted the Bonn Guidelines to address access to genetic re-L sources and fair and equitable benefit sharing arising from use of those resources.³⁹ In the Bonn Guidelines, the CBD COP invited Parties and governments to encourage disclosure of the country of origin of genetic resources and associated traditional knowledge in applications for intellectual property where the subject matter of the application concerns or makes use of such knowledge in its development. Since 2002, various proposals to facilitate or to mandate such 'disclosure of origin' requirements within the world intellectual property law system have been submitted by countries to intergovernmental organisations, notably the WTO and WIPO. In 2004, at its seventh meeting, the CBD COP invited WIPO and UNCTAD to analyse in a technical way issues relating to implementation of disclosure of origin requirements in the intellectual property law system.⁴⁰ The types of disclosure required within the patent applications would be principally: a) genetic resources utilised in the development of the claimed inventions; b) the country of origin of such genetic resources; c) associated traditional knowledge (ATK), innovations, and practices utilised in the development of the claimed inventions; d) the source of ATK, innovations, and practices; and e) evidence of prior informed consent. Five distinct topics were put forward for particular analysis and discussion. These were:

- Options for model provisions on proposed disclosure requirements;
- Practical options for patent application procedures with regard to the triggers of disclosure requirements;
- Options for incentive measures for applicants;
- Identification of the implications for the functioning of these requirements in various WIPO-administered treaties; and

¶ Incorporating CBD obligations into patent law

• Intellectual property related issues raised by proposed international certificates of origin/source/legal provenance.

A rticle 27(1) of TRIPS establishes that patents should be available for all inventions, whether products or processes, in <u>all</u> fields of technology, provided that they are new, involve an inventive step (or are 'non-obvious to someone skilled in the art'), and are capable of industrial application (or, as in the US are 'useful'—i.e. not just knowledge for its own sake).

What is important to emphasise is that at the core of an award of a patent is demonstration that what is being claimed for protection is truly new and not in the public domain, and involves intellectual industry that is not obvious but truly inventive, deserving of or qualifying for this intellectual property 'award'. All claims, in theory, are examined and checked by expert scientist patent examiners, in particular against databases of other patents from around the world, and other sources, that theoretically could constitute 'prior art'. An inbuilt limitation of the system is that different jurisdictions have different ways of applying these minimum standards. For example, some countries might not recognise sources of knowledge that would constitute prior art that is not written down (such as the US until very recently). Oral traditional knowledge, therefore, would not feature in the examination for novelty, and where there might be indigenous knowledge, say of a therapeutic application of a genetic resource (a powdered herb for a wound infection, for example), all it takes is for a 'bioprospector' to access this knowledge through interviewing, for example, a tribal Shaman in the Amazon and using this knowledge as a component, if not the basis, for a patent application in the US.

A related issue is the lack of access to relevant prior art information on the part of patent examiners even where oral traditional knowledge is not excluded.⁴¹

Exclusions from the strict requirement under TRIPS to give patent protection to applications within a Member's jurisdiction include:

- Patents "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));
- Surgical or therapeutic methods (Article 27(3)(a)); and
- "Plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes." Plant varieties have to be given protection, however, albeit not necessarily by a patent (Article

9 Some basics of patent law

27(3)(b)).

The above represent the criteria for subject matter. What is implied is that a genetic resource found or discovered in nature as such cannot be patented (lacking inventiveness), but neither can any technology as such, such as biotechnology that deals with living matter/genetic resources, be *a priori* excluded as long as the other criteria for patentability are met.

Another core aspect of the rationale of patent law is the *disclosure* requirement. As part of the societal bargain, there must be full disclosure "in a manner sufficiently clear and complete for the invention to be carried out by a person skilled in the art. . . . "⁴² If no one is able to understand how the invention works, then knowledge is not furthered and other researchers and inventors are not helped. Without this disclosure the patent would be invalid. Patent law, therefore, concerns more than whether a given invention is intrinsically technically patentable or not, even though this determination is the prime task of the patent examiner. To receive and sustain a valid patent, applicants may be required to disclose the claimed invention is patentable, the identity of the true inventor, and the legal basis for entitlement to be granted the patent. Each of these may be relevant to disclos-ing relevant GR or TK.

In summary, then, patentability concerns characteristics of the invention as such. Other substantive legal requirements for receiving and maintaining a valid patent may be relevant to disclosure and compliance with access and benefit sharing—in particular, the law that governs the *entitlement* to apply for and be granted a patent. In the context of our discourse, 'patentability of genetic resources' refers to the whole set of conditions required for grant, but in particular disclosure in the 'wide' CBD sense.

There is no one single disclosure scenario that captures all the existing concerns about GR/TK relevant to patent inventions. One way of clarifying and ordering disclosure scenarios is to consider what relationship would need to exist between the claimed invention in certain GR/TK to trigger a specific requirement to disclose relevant information. For instance, the nature and reach of disclosure may be very different depending on whether the GR/TK was <u>incidental</u> or <u>fundamental</u> to the development of the invention; whether the GR/TK contributed to one earlier step in a chain of innovations that over time culminated in the invention, or was a direct input to the claimed inventive step; whether particular qualities of the GR were essential to the invention, or the GR was in effect only a vehicle for a separate innovative concept; or whether a GR was used in a particular embodiment or one example in a description of the invention, but was not indispensable to arriving at (or replicating) the invention as claimed.

Finally, technically the right conferred on a patent owner is in fact a neg-

ative right—the right to exclude third parties not having the owner's consent from the acts of making, using, offering for sale, selling, or importing that product, or if a process, excluding third parties from using the process or using, offering for sale, selling, or importing products obtained directly by that process.⁴³ Positive use of the right may in fact be excluded due, for example, to statutory regulations on health and safety (e.g. use of pharmaceuticals under patent; growing genetically modified crops; pesticides, etc.) or because the embodied form of the technology may require use of other intellectual property owned by third parties and needing authorisation through a licence. In relation to the debates on patents on living organisms (or 'life form patents'), it is not unimportant to keep this distinction between positive and negative rights in mind as a way of clarification of the conceptual issues.

¶ Ownership

The nature of patent ownership is that of ownership of 'intangible personal property', namely a type of personal property that cannot actually be moved, touched, or felt but instead merely represents something of value. This is in distinction to tangible personal property like a car or computer, or a cat, as well as the category of 'real' immoveable property (or real estate) like land or a house. In addition, in common law traditions intellectual property rights are considered to be of the nature of personal '*choses in action*', namely a right that has no existence apart from the recognition given by the law, and is essentially just a legal right to sue.

Ownership of a living organism patent is therefore not technically ownership of the living organism as personal property, like a house plant or seed, nor personal possession of a species or variety (such as a patented plant variety or patented genetically engineered type of mouse with a certain artificial gene trait not found in nature), but a control in third party use, consisting of ownership of rights to exclude others in the manner explained above. Hence the ownership rights of a box of patented seed would be transferred from the supplier to the buyer, but the package of IP rights in the seed still remains with the patent holder (consider how the possessor of a book written by an author has ownership of the physical book but is not permitted under IP law to reproduce the text for sale to others). Theological and ethical discourse on life patent ownership needs, therefore, to bear in mind this distinction, especially in the manner in which expressions such as 'owning life' or 'ownership over life' are used, and the corollary of the (rather ambiguous) concept of 'commodification of life', referring to the commercial transaction side of patent rights on living organisms.⁴⁴

In summary, a patent is a grant of IP rights whose legal effect is to exclude others from unauthorised acts; is dependent on the substantive condition of novelty, inventiveness, and usefulness; and requires full disclosure of how it works so as to be of real benefit to other researchers and inventors. s explained above, disclosure is an already established pre-requisite of patent law. GR or TK may already, according to what is being claimed as inventive, have to be disclosed, including its source, as the way to enable a person skilled in the art to carry out the invention or its best-known mode. The provider of TK, also, may need to be disclosed as a joint or even the sole inventor. TK may need to be disclosed, furthermore, in order to allow for a proper examination of novelty and/or non-obviousness. These are all conventional disclosure requirements. The disclosure requirements relating to the CBD, however, go beyond these to include not only the link between the invention as such and GR or TK, but the legal relationship between the applicant/inventor and the access to GR or TK.

The WIPO technical study, undertaken at the invitation of the CBD COP at its seventh meeting in 2004, provides a substantive and significant contribution to understanding how the implementation of the CBD objectives could be achieved via the patent system, including an analysis of application procedures and requirements and the various options of the consequences of failure to fully disclose. From the study, it is apparent that the two regimes could be integrated but it does not offer any direct recommendations as such as it sees its work as a technical input only. The study states: "The IP system plays a practical role in promoting the sharing of benefits from access to genetic resources and associated TK,"45 and that the essence of the patent system is in fact transparency and disclosure (the concept of laying open for public inspection being the source of the English word 'patent'). The grant of a patent, and the effective exercise of patent rights, is founded on the principle of sufficient disclosure. Patent law systems can support and give effect to policy interests connected with the interaction between genetic resources and TK and claimed inventions.⁴⁶ It concludes by noting that the core issues raised are the subjects of ongoing international policy debate. Technical feasibility is not the main problem to moving forward.47

On the other hand, the UNCTAD study requested by the CBD COP, 'Analysis of options for implementing disclosure of origin requirements in intellectual property applications', under the authorship of Joshua Sarnoff and Carlos Correa, which builds on and goes beyond the WIPO technical study, is very clear about the appropriateness of and need for the adoption of mandatory disclosure requirements and why the TRIPS agreement, ideally, should in their view be amended accordingly. Their considered conclusion is: "An international system of mandatory disclosure of origin requirements is needed to prevent misappropriation of genetic resources and associated traditional knowledge, to promote compliance with CBD access and benefit sharing requirements, and to prevent misuse of the intellectual property system. . . . Objections raised to mandating adoption of disclosure of origin requirements through new international treaty provisions either do not stand up to analysis or do not outweigh the benefits to be ¶ Disclosure as prerequisite to GR patentability in the context of the CBD obtained."48

An independent international study commissioned by the British Government in 2002 also concluded in favour of more being done with the IP system to promote the objectives of the CBD.⁴⁹ The report notes that mechanisms and incentives exist outside the IP system to encourage compliance with the ABS principles of the CBD, such as through court action under the doctrine of misappropriation or breach of contract. However, seeking recompense in this way is time-consuming and costly, and of limited use for many holders of traditional knowledge. The stigma of being identified as a 'corporate biopirate' may also act as a disincentive for an organisation to engage in activity contrary to the CBD. Known violators of the CBD could also be denied future access to material by a country. Nonetheless, the report states, "we believe that it is important to recognise the force of the CBD, even if only a few countries have implemented specific access and benefit sharing legislation. We conclude therefore that where a country has established a clear legal framework governing access to biological material and/or traditional knowledge then that country should be able to take action where IPR is granted over material and knowledge which was acquired illegally from that country."50

Although this report does not go into detail on how the IP system should be, according to its authors, modified so as not to reward inequitable conduct or those without 'clean hands', it is in support of a mandatory disclosure of information of the geographical source of genetic resources with sanctions applied in cases where patentees fail to make this disclosure or deliberately mislead about the source. It also recommends a system whereby patent offices examining patent applications which identify the geographical source of genetic resources or traditional knowledge pass on that information, either to the country concerned, or to WIPO which may act as a depository for patent related information on alleged biopiracy. Through these measures, the report states, it will be possible to monitor more closely the use and misuse of genetic resources.⁵¹ The report concludes that the IP regime should be adapted "to promote the underlying mutuality of interest that should exist between the providers of genetic resources, mainly in developing countries, and the users who are mainly based in developed countries."52 In other words, we might say, the IP regime is supposed to work for the common good, rather than just for private interests such as the biotechnology industries. And yet the 'tremendous' influence of political interest groups on the expansion and strengthening of IP protection-groups who may not properly consider the wider aspects of their actions—is very real.⁵³

¶ Local vs. international legal mechanisms to implement CBD obligations S everal countries have implemented CBD obligations through their national laws, requiring applicants for intellectual property to disclose the source and country of origin of genetic resources and associated traditional knowledge, along with relevant documentary information

regarding compliance with access and benefit sharing requirements.⁵⁴ Similarly, contracts providing for compliance with access and benefit sharing requirements may also require such disclosures, even when national laws do not. In theory, national laws and contracts may mandate such disclosure of origin in patent applications filed in foreign jurisdictions. However, complex foreign legal rules may preclude the enforcement of these undertakings, and even when they can be enforced, the burden and costs of such actions can be high. "It would be more cost-effective to establish an internationally accepted solution . . . to prevent biopiracy than to divert national resources to expensive judicial processes for the revocation of patents that include illegal genetic resources. . . . Developing countries, in particular, do not have the resources to follow each and every patent issued outside their territories on the use of their resources."55 Similarly, indigenous and local communities typically lack the resources to effectively enforce patent and other rights relating to genetic resources and traditional knowledge. New international treaty provisions imposing mandatory disclosure of origin obligations would reduce uncertainties regarding recognition and enforcement of such national disclosure requirements in foreign intellectual property applications, and would thereby reduce the burdens and costs of preventing and remedying biopiracy and misappropriation.⁵⁶

t should be noted that achievement of cross-border harmonisation on ABS regimes as obligated by the CBD has been significantly advanced L by the Nagoya Protocol (2010), a side agreement of the CBD, which is waiting to be ratified.⁵⁷ It provides for an international regime on access to genetic resources and benefit-sharing, at the same time providing for greater legal certainty and transparency for both providers and users of genetic resources, thereby also strengthening the ability of indigenous and local communities to benefit from the use of their knowledge, innovations and practices. A significant innovation of this protocol is the provision of specific obligations to support compliance with domestic legislation or regulatory requirements of the party providing genetic resources and contractual obligations reflected in mutually agreed terms. The protocol specifically notes the potential role of ABS in contributing to achieving the Millennium Development Goals through the conservation and sustainable use of biological diversity, poverty eradication, and environmental sustainability.⁵⁸ Furthermore, its innovative proposal of a global multilateral benefit-sharing mechanism⁵⁹—dealing with areas of uncertainty over origin of source or over where necessary prior informed consent is to be obtained⁶⁰—also potentially deals with a number of objections related to disclosure for patentability.

¶ Nagoya Protocol

¶ Intergovernmental negotiations on disclosure at the WTO and WIPO uring the WTO Ministerial Conference of 2001 in Doha, Qatar, on 14 November 2001, the Doha Declaration on the TRIPS Agreement and Public Health was adopted (informally known as the 'Doha Development Agenda'). Although primarily focused on public policy issues of health, it affirmed that every part of the whole agreement, according to the customary rules of interpretation of public international law, should be read in light of the object and purpose of the agreement as expressed. In particular, this applies to the expressed objectives and principles, i.e. of being at the service of development. In paragraph 19 it mandated that the TRIPS Council should look at the relationship between the TRIPS Agreement and the UN Convention on Biological Diversity and at the protection of traditional knowledge and folklore.⁶¹

WIPO, however, is today the main centre for discussions and negotiations on the CBD compliance disclosure requirement with regard to the patentability of genetic resources.⁶² The differences, broadly speaking, between North and South, or developed and developing countries, is manifest in the manner in which the 'Consolidated Document Relating to Intellectual Property and Genetic Resources',63 the negotiation text of the IGC, is divided into two sets of diametrically opposed propositions. The first proposition is entitled Option 1 - Disclosure Protection, the other is Option 2 - No Disclosure Requirement. The position today, as before at the TRIPS Council, is that delegates from the developing countries, such as China, the African Group, Brazil, India, and Peru from the cross regional 'Like-Minded Countries' and the Development Agenda Group (DAG)⁶⁴ are for Option 1, whilst the developed countries, in particular the US—backed by a small handful of other countries (such as Japan, Canada, and South Korea)-maintains its 'no change to the patent system' position (except in regard to facilitating better examination procedures to eliminate 'bad' patents through uses of TK databases, as proposed particularly by Japan). These countries, along with Norway, have even proposed a 'soft law' option of guidelines to support CBD objectives but without altering the patent system as it now is.⁶⁵ The US has also proposed that the WIPO secretariat conduct a study on how well in practice existing mandatory disclosure mechanisms support access and benefit sharing agreements (so as to base its decisions on 'data and evidence'), although developing countries reject such a call as either unnecessary or inappropriate or just contributing to delay.⁶⁶

There are also other, more nuanced positions. Switzerland, for example, has proposed a middle way allowing that joining the instrument be voluntary, but once adopted its terms be mandatory.⁶⁷ The EU has a softer position compared to the US and in principle is in favour of a disclosure requirement of some sort which is uniform globally, providing transparency, but which does not act as a *de facto* or *de jure* formal or substantial patentability criterion. Legal consequences of non-compliance, it is suggested, would generally lie outside the ambit of patent law.⁶⁸ In a judgement of the European Court of Justice (now the CJEU), it was even stated: "It cannot be assumed, in the absence of evidence, that the mere protection of biotechnological inventions by patent would result . . . in depriving developing countries of the ability to monitor their biological resources and to make use of their traditional knowledge."⁶⁹ The EU Directive on Biotechnology also excludes the link between disclosure and formal invalidity, suggesting that disclosure of geographical origin be voluntary.⁷⁰

The US maintains its position that patent laws are not the appropriate means to address the misappropriation of genetic resources and traditional knowledge. While claiming to be supportive of the objectives of the CBD in principle,⁷¹ it believes the best way of achieving these ends is through contractual obligations which might include disclosure of origin within a patent application, the absence of which would become a breach of contract but would not invalidate the patent.⁷² The US and Northern countries are the greatest users of the IP regime (In 2012 the whole African continent accounted for just 0.21% of the 194,400 total applications using the PCT system, mostly from South Africa,⁷³ although China⁷⁴ is in fact rapidly becoming one of the biggest filers of new applications). Not only is it therefore not in the particular interest of the US or Northern countries to address these issues through the patent system, but it is argued new degrees of legal uncertainty would be introduced as well as administrative and fiscal burdens that would not be justifiable if there are alternative mechanisms available to achieve the same end. Prior informed consent and recording of interests in inventions that arise from access to or use of genetic resources are not relevant to traditional patentability criteria unless they impact on prior art and/or enabling disclosure to 'work' the invention. There is no vision of evolving the system to include new pro-development objectives.

As discussed above, however, these arguments do not appear to be either insurmountable or particularly compelling given the reasons, setting aside private interests, which argue in favour of amending the global patent regime in view of the common good of the international community and the benefits to be achieved. Mandatory disclosure has been seen to be workable in various countries, including Switzerland.⁷⁵

The Holy See's position is also that of the developing countries in support of Option 1 of the Consolidated Document—a point we will revisit in Part $3.^{76}$

Having now analysed the immediate issues connected with patenting in relation to genetic resources and associated traditional knowledge, to gain a better appreciation of the agendas and sub-context of the WIPO negotiations, our next step is to look at the wider picture of the philosophy and the politics of intellectual property, especially as it relates to and impacts

¶A clash of interests

developing nations, taking TRIPS as a particular example.

Part II The wider context of intellectual property: Its social function and TRIPS

his second part prepares the ground for the subsequent analysis of the perspective of the Catholic Church in relation to intellectual property and its international aspects, including the problem of the patentability of genetic resources.

The following sections will describe some of the problems of the IP regime, caused by the almost exclusive emphasis of seeing it as a mere economic tool to drive prosperity and, in the international context, as a tool of promotion of trade that in practice most benefits rights holders of developed countries. This traditional emphasis, born of the economic theories predominant in Northern countries, contrasts with the newer developments of viewing IP much more as having a more rounded social purpose in society, including international society. It is our view that these different emphases on the nature and purpose of IP, which we might call the 'old' versus the 'new', are at the heart of the divisions between North and South at both WIPO and the WTO on IP matters that impact on the societies of the developing world. This includes matters on the patenting of living forms, where there are deep divisions, and the willingness to adapt the IP system to accommodate the newer thinking on the purpose of IP in relation to the objectives of the CBD.

ur starting point is that traditionally, and in most countries, IP has been thought of exclusively in its economic rationale: "Intellectual property protects applications of ideas and information that are of commercial value."⁷⁷

In the Constitution of the United States the basis of the US IP regime is laid: "The Congress shall have power . . . [t]o promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."⁷⁸

Addressing this clause, the US Supreme Court in *Mazer v. Stein* (1954) noted that there was a simple economic philosophy underpinning this thinking—personal gain is the incentive to encourage individual effort, thereby advancing public welfare through the contribution to science and the useful arts.⁷⁹ The philosophy is that of economic utilitarianism.

The grant of a patent monopoly is given in order to stimulate innovation through the reward to an innovator of a legal property right that facilitates market advantage through a time limited monopoly. This is given in return for sharing publicly details of inventiveness which are socially useful and

¶ Classic formulation of the purpose of intellectual property—extracting economic and commercial benefit

¶ Nature of intellectual

property

which benefit society through public disclosure of new and useful information which might stimulate yet further innovation by others and allow advancement through technology transfer, usually by licensing. This arrangement, which is in essence a legal 'property' fiction—namely a bundle of rights that can be bought and sold and transferred like real property—is a long established⁸⁰ 'quid pro quo' arrangement with society that although creating a temporary market inefficiency, has generally been seen, especially with its own appropriate checks and balances, to facilitate economic progress. It is there to protect legitimate economic interests, as well as being an encouragement to benefit, with the approval of society, from one's own intellectual labours.

A recent independent *Review on Intellectual Property and Growth* commissioned by the UK Government (the 'Hargreaves Review'), published in May 2011, was explicit about the importance of having an IP regime that is 'fit for purpose' for the economic life of developed countries (in this instance the UK):

"Today's advanced economies live or die by their ability to get smarter. Growth . . . depends on our capacity to innovate, especially in the high margin, knowledge intensive businesses which now exist across all sectors of the UK economy. . . . Intellectual Property Rights (IPRs) support growth by promoting innovation through the offer of a temporary monopoly to creators and inventors. But such rights can also stifle growth where transaction costs are high or rights are fragmented in a way that makes them hard to access. Poorly designed IP rules can help established players in a market obstruct new players by impeding their access to technology and content. . . . Michael Heller, an American law professor, coined the phrase 'tragedy of the anticommons' to describe this situation."⁸¹

It is clear, then, that intellectual property rights can work against the interests of society, even in developed economies, especially in relation to encroachment on the intellectual commons,⁸² perhaps through patent thickets (high numbers of patents or patent applications within a particular industry that block new comers), the problem of patent trolls (rent collecting entities that enforce patent rights over technologies that are not being worked or manufactured), or unfair monopolistic pricing of patent-ed products or processes. What appears so absent in these scenarios are values such as justice, fairness and human rights, which need to be part of the equation in the operation of the system.⁸³

prominent issue with the traditional utilitarian approach to understanding intellectual property—incentivising the creation of more 'knowledge goods' within the conceptual framework of markets and the economy—is that it does not embrace 'non-utility' concerns, ¶ Towards a more inclusive concept of the nature of intellectual property such as rights, freedoms, and the ability to participate in the process of knowledge creation. Utilitarianism does not ask the question who makes the goods or whether they are fairly distributed in society to all who need them. A broader understanding is needed to see IP as an end and a means to integral human development.⁸⁴ One author, Kathleen Liddell, Faculty of Law, University of Cambridge, writes also that the overarching goal of patent law, which regulates industrially useful innovations, should be "the promotion of socially beneficial inventions compatible with just and fair social organisation."⁸⁵

A more expansive treatment of what good intellectual property policy should be, as expressed by an international group of artists, scientists, lawyers, politicians, economists, academics, and business experts, is found in the 2006 'Adelphi Charter on Creativity, Innovation and Intellectual Property'.⁸⁶ This statement is anchored in the framework of human rights, and calls upon governments and the international community to adopt, inter alia, the following principles:

- Laws regulating intellectual property must serve as means of achieving creative, social and economic ends and not as ends in themselves.
- These laws and regulations must serve, and never overturn, the basic human rights to health, education, employment, and cultural life.
- The public interest requires a balance between the public domain and private rights. It also requires a balance between the free competition that is essential for economic vitality and the monopoly rights granted by intellectual property.
- Intellectual property laws must take account of developing countries' social and economic circumstances.

hat is happening internationally regarding intellectual property, as a result of the TRIPS Agreement, provides important insights into the features, the nature and the purpose of intellectual property as designed historically and adapted for modern times. The international aspects of IP, especially in relation to developing countries, contextualise our previous discussions on genetic resources, IP, and disclosure.

All members of the World Trade Organization (WTO) are at the same time signatories to the agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). TRIPS emerged from the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) negotiations which took place between 1986 and 1994. It represented a victory for industry groups and multinational companies who had lobbied hard for raised international IP standards and increased protection of their intellectual asset interests in developing countries.

Dr. Carolyn Deere, a leading authority and exponent of the politics of

¶ The international IP regime of TRIPS and its impact on developing countries the spread of tough IP laws from the developed world to developing countries writes:

"As U.S. pharmaceutical, agrochemical, electronic, software, and entertainment industries faced increasing threats from foreign competitors, the United States recruited Japan and the European Union to support their campaign to extend the length and breadth of IP rights at the international level. In order to gain 'maximum returns' from increasing trade in IP-related goods and services, they worked to add IP to the agenda of the Uruguay Round of GATT negotiations. Developing countries opposed this effort. They viewed the prospect of strengthened and binding international IP rules in the world trading system as an aggressive intrusion into the preserve of domestic regulation that would reinforce existing inequalities. . . . [Indeed], in January 1989, the Group of 77 developing countries (G77) issued a collective statement in which they described the GATT IP negotiations as an attempt to use IP protection 'as a mere device and instrument for promoting the trade competitive interests of developed countries and their TNCs⁸⁷ . . . advancing 'protectionist IP policies in order to safeguard and increase their dominant positions in the world market.' "88

Deere tells us that the intensity of the TRIPS debate was fuelled by major social and economic interests, including the estimated US \$650 billion per year global pharmaceutical industry, the estimated \$21 billion per year commercial seed industry, and the estimated \$800 billion per year global software and entertainment industries. These industries—where often just a handful of companies monopolized the markets—were thoroughly dependent on securing IP protection. These corporations, together with other research centres and individuals from developed countries, together held over 80% of the world's IP rights, making the negotiating table an uneven playing field.⁸⁹

At the negotiating table the proponents of stronger IP protection in developing nations argued that this would encourage foreign direct investment (FDI), innovation, and technology transfer, and spur the development of national cultural and creative industries. Given the growing trade in counterfeit medicines and other products, stronger IP protection was presented as a way to help protect public health and safety.

On the other hand, critics of this approach warned that while stronger IP protection *might* foster such outcomes in some cases, it would require the right conditions, carefully tailored policies and laws, and a range of complementary measures. In fact, the critics warned, industrial development could actually be slowed by constraining opportunities to copy and adapt technologies. Many developing countries have sought to employ the same strategies of copying and reverse-engineering that had served developed countries at similar stages of development.

IP law making has always been a political process involving disputes, policy shifts, and revisions. The powerful industrialized countries of today have themselves in the past—in fact for centuries—adopted IP policies quite fluidly to advance their own industrial policies and trade interests without regard to any broader implications affecting other countries and their interests.

In this regard, the United Nations Development Programme (UNDP) Human Development Report in 2001 notes:

"Many of today's advanced economies refused to grant patents throughout the 19th and early 20th centuries, or found legal and illegal ways of circumventing them—as illustrated by the many strategies used by European countries during the industrial revolution... They formalized and enforced intellectual property rights gradually as they shifted from being net users of intellectual property to being net producers; several European countries ... completed what is now standard protection only in the 1960s and 1970s."⁹⁰

A 2010 UNCTAD report also gives examples of how IP protection has historically mirrored the state of industrial and economic development of developed countries:

"... Numerous countries had—at times—exempted various kinds of invention in certain sectors of industry from patent protection. Major industrial countries such as Italy, Japan, and Switzerland serve as examples: they adopted pharmaceuticals patent protection only when their per capita income had reached about \$20,000.... For some countries, notably, those at a very low level of technological and economic development, the protection of IPRs ... may not generate any positive implications. These differences suggest that there is need for flexibility allowing each country to design the IP system that best suits its particular developmental needs, and to carefully weigh the costs and benefits of IPRs in each specific circumstance."⁹¹

At the time of the negotiations that led to TRIPS, for the majority of developing countries for whose national IP agendas were potentially being dictated by third parties, the technical expertise necessary to handle the negotiations was absent and their approach was more reactive than proactive. Their participation was far from optimal, leading to an outcome that was one sided. For example, even within the flexibilities of the agreement allowing staged implementation, the criteria set—namely specific deadlines, considered by many to be completely arbitrary—left no consideration of either the actual level of development reached by that deadline for the countries concerned or whether in the round implementation would be for the overall good of the country as determined by the country itself.

Deere states that her book sets itself out to give "substance to the view

that developing countries' policies are often set by others . . . detailing the mechanisms through which developing countries were both coerced and persuaded to identify with and mimic the IP policies of richer countries."⁹²

Other commentators have argued that as the WTO is essentially a free trade organisation, the global enforcement of IP standards among nations at very different levels of social and economic development should not have fallen within its terms of reference. IP is not in itself a matter concerned with trade. A leading exponent of this view is Jagdish Bhagwat:

"TRIPS does not involve mutual gain; rather, it positions the WTO primarily as a collector of intellectual property-related rents on behalf of multinational corporations (MNCs). This is a bad image for the WTO and in the view of many, especially the non-governmental organisations, reflects the "capture" of the WTO by the MNCs."⁹³

To exacerbate the problem, following the conclusion of the negotiations, and as developing nations were struggling to put into place the mechanisms that would allow implementation of the new obligations, they faced mounting pressures from developed countries, multinational corporations, and some international organisations (IOs) to adopt even higher IP standards than TRIPS requires, including not using the flexibilities they were entitled to-all through bilateral free trade agreements that have come to be known as 'TRIPS-plus'.94 The extra burdens placed on poorer developing countries were brought up by the Holy See at the 6th Ministerial Conference of the WTO in Hong Kong.⁹⁵ In Carolyn Deere's words, "[a] midst growing debates on globalization and inequality, TRIPS became a symbol of the vulnerability of developing countries to coercive pressures from the most powerful developed countries and galvanized critics of the influence of multinational corporations on global economic rules."96 Even US Senators have voiced their concerns about that their Government's IPR trade related policies.97

he 'imbalance' in the global IP regime —what has been called the 'TRIPS development deficit'—has led to important initiatives in recent years. Sir Hugh Laddie, former English High Court Judge, stated in the introduction to the influential UK Government IP Commission's 2002 report:

"For too long IPRs have been regarded as food for the rich countries and poison for poor countries. Poor countries may find them useful provided they are accommodated to suit local palates. The Commission suggests that the appropriate diet for each developing country needs to be decided on the basis of what is best for its development, and that the international community and governments in all countries should take decisions with that in mind."⁹⁸ **9** Addressing the imbalances of intellectual property regimes A report in August 2000 on intellectual property and human rights by the United Nations High Commissioner for Human Rights stressed the primacy of human rights obligations over economic policies and agreements, whilst noting what might be called the potential 'human rights deficits' of TRIPS.⁹⁹ It calls upon governments and intergovernmental organisations to integrate within their laws and/or policies "provisions, in accordance with international human rights obligations and principles, that protect the social function of intellectual property."¹⁰⁰

The UK Government Commission on Intellectual Property also stated in this regard the following:

"An IP right is best viewed as one of the means by which nations and societies can help to promote the fulfilment of human economic and social rights. In particular, there are no circumstances in which the most fundamental human rights should be subordinated to the requirements of IP protection. IP rights are granted by states for limited times (at least in the case of patents and copyrights) whereas human rights are inalienable and universal.

For the most part IP rights are nowadays generally treated as economic and commercial rights, as is the case in TRIPS, and are more often held by companies rather than individual inventors. But describing them as 'rights' should not be allowed to conceal the very real dilemmas raised by their application in developing countries, where the extra costs they impose may be at the expense of the essential prerequisites of life for poor people.

Regardless of the term used for them, we prefer to regard IPRs as instruments of public policy which confer economic privileges on individuals or institutions solely for the purposes of contributing to the greater public good. The privilege is therefore a means to an end, not an end in itself."¹⁰¹

The WTO Doha Ministerial Declaration on the TRIPS Agreement and Public Health in 2001, as well as the modified amendment of the TRIPS Agreement at Hong Kong in 2005, reaffirmed the flexibilities of the agreement in favour of development policy. It was a major statement to remind the developed countries of the WTO membership of the Objectives and Principles of the TRIPS Agreement articulated in Articles 7 and 8, which until that time had not been operationalised in any meaningful way, but which in theory provided balance in the direction of policy space in the text of the agreement.¹⁰²

A development in the direction of this growing 'paradigm shift' in the thinking of the purpose of IP, as embracing policy objectives of matters of genuine public interest, as well as the traditional equation of 'reward for innovation', has been the adoption of a new Development Agenda at WIPO, the fruit of an initiative in September 2004 of a group of 14 developing countries, including Brazil and Argentina.

n 2007 the WIPO General Assembly adopted *The Development Agenda*, a set of development policy principles that resonate with the Human L Development policies and programmes of other United Nations organs.¹⁰³ This marked a fundamental change from the founding mission and principles of the organisation-set up in 1967 independently of the UN, of which it only became a part in 1974—which were to "promote the protection of intellectual property throughout the world"-in developed and developing countries alike with a maximalist approach to IP outreachwhere IP was thought of as a 'power tool' for economic development and wealth creation.¹⁰⁴ From 2007 WIPO could be said to admit openly that the neoliberal approach of the 'Washington Consensus' that dominated development policy in the 1980s and early 1990s-that unregulated markets, with unhindered cross-border trade and the ever increasing spread of formal intellectual property rights-is not the best tool to promote economic growth and development. Instead, a more nuanced approach to IP as a tool for generating economic growth is needed, especially in developing countries—one that pays more than lip service to issues of social justice, the importance of local conditions, laws and customs, and human rights. Hence the thesis was rebuffed that was not only the driving force behind WIPO's own treaty initiatives of world-wide IP harmonisation, but also which underpinned the principles of the WTO and TRIPS.¹⁰⁵ Broad IP rights alone would not bring affordable technology, innovation and foreign direct investment to developing countries. As N.W. Netanel puts it:

"The Development Agenda places the benefits of a rich and accessible public domain, national flexibilities in implementing IP treaty norms, access to knowledge, UN development goals, curbing of IP-related anti-competitive practices, and the need to balance the costs and benefits of intellectual property protections firmly within WIPO's central mission."¹⁰⁶

Economic development and wealth creation are no longer the sole metrics for measuring development.¹⁰⁷

In its Handbook, WIPO currently expresses the rationale for IP law thus:

"One is to give statutory expression to the moral and economic rights of creators in their creations and the rights of the public in access to those creations. The second is to promote, as a deliberate act of Government policy, creativity and the dissemination and application of its results and to encourage fair trading which would contribute to economic and social development."¹⁰⁸

On the Home Page of the website, the Mission Statement reads:

¶ The development agenda of WIPO "Our mission is to promote innovation and creativity for the economic, *social and cultural* development of all countries, through a *balanced* and effective international intellectual property system [emphasis add-ed]."¹⁰⁹

And on the web page 'Intellectual Property for Development' we read:

"IP for Development is an emphatic articulation of the notion that IP is not an end in itself but rather is a tool that could power countries' growth and development. WIPO, as the lead United Nations agency mandated to promote the protection of intellectual property through cooperation among states and in collaboration with other international organizations, is committed to ensuring that all countries are able to benefit from the use of IP for economic, social and cultural development."¹¹⁰

Implied in all this are the notions of balance, accessibility, and reward for creativity and innovation. WIPO's challenge is to implement this agenda.¹¹¹

The Catholic Church in its own teaching provides a number of insights that complement the above considerations on the social and development function of intellectual property, whilst adding its own contribution principally through its doctrines of the common good and the universal destination of goods.

In this next section we will outline the principal elements of the social teaching of the Catholic Church and draw out their implications for intellectual property. Part 3 ends with general conclusions drawn from this discussion on the Church's position on using the patent system to support and promote the objectives of the Convention on Biological Diversity as discussed in part 1.

Part III Catholic Social Teaching and intellectual property

¶ What is Catholic Social Teaching (CST)? Being an 'expert in humanity',¹¹² the Catholic Church has evolved a body of social doctrine that touches on subjects such as economics, politics, and culture, and articulates its reflections on these and other complex realities of human existence, in society and in the international order, in the light of faith and of the Church's tradition. Its aim is to "*interpret* these realities, determining their conformity with or divergence from the lines of the Gospel teaching on man and his vocation [and] to *guide* Christian behaviour."¹¹³ This body of doctrine comes from listening to the problems of the modern world, and to receiving expert input from many different branches and disciplines of knowledge. "This interdisciplinary dialogue also challenges the sciences to grasp the perspectives of meaning, value, and commitment that the Church's social doctrine reveals and to open themselves to a broader horizon, aimed at serving the individual person."114

The permanent principles of CST, which form the very heart of Catholic Social Teaching, are *the dignity of the human person*, *the common good*, *subsidiarity*, and *solidarity*.

In the following discussions we will look in particular at the concepts of the common good and solidarity, the latter being particularly pertinent to the international dimension of intellectual property where there are divisions between parties of unequal position and power. This will be followed by a CST discussion on the nature of property, the principle of the universal destination of goods, the preferential option for the poor, and how these apply to intellectual property. The final discussion, forming the conclusion to this whole paper, will refer to the matter of the patentability of genetic resources and the perspective that the Catholic Church brings to bear on these discussions at WIPO.

The principle of the common good, to which every aspect of social life must be related if it is to attain its fullest meaning, stems from the dignity, unity, and equality of all people.¹¹⁵ According to its primary and broadly accepted sense, the common good indicates "the sum total of social conditions which allow people, either as groups or as individuals, to reach their fulfilment more fully and more easily."¹¹⁶ It does not consist in the simple sum of the particular goods of each subject of a social entity. "Belonging to everyone and to each person, it is and remains 'common', because it is indivisible and because only together is it possible to attain it, increase it and safeguard its effectiveness, with regard also to the future." Contrasting this to the moral good, the *Compendium* continues: "Just as the moral actions of an individual are accomplished in doing what is good, so too the actions of a society attain their full stature when they bring about the common good. The common good, in fact, can be understood as the social and community dimension of the moral good."¹¹⁷

The social nature of man, and ultimately the fact that man was created in the image of God, who is Trinity and who has an inner communitarian life, is the root Christian metaphysical reason for his dependence on others for his own self-fulfilment. The *Compendium* continues: "The human person cannot find fulfilment in himself, that is, apart from the fact that he exists 'with' others and 'for' others. . . . No expression of social life—from the family to intermediate social groups, associations, enterprises of an economic nature, cities, regions, States, up to the community of peoples and nations—can escape the issue of its own common good, in that this is a constitutive element of its significance and the authentic reason for its very existence."¹¹⁸

Distinctive, if not unique, to Catholic teaching is the extension of the idea of the common good internationally, challenging mentalities of national self-interest: "Nor must one forget the contribution that every na-

¶ The common good in Catholic Social Teaching

tion is required in duty to make towards a true worldwide cooperation for the common good of the whole of humanity and for future generations also."¹¹⁹ This point was more recently stressed by Pope Benedict XVI: "In an increasingly globalized society, the common good and the effort to obtain it cannot fail to assume the dimensions of the whole human family, that is to say, the community of peoples and nations, in such a way as to shape the earthly city in unity and peace, rendering it to some degree an anticipation and a prefiguration of the undivided city of God."¹²⁰

This concept of the common good is not new, nor indeed an exclusively Christian concept, although it has been developed over the centuries by the Church.¹²¹ The great medieval Catholic theologian St Thomas Aquinas (d. 1274) in the *Summa Contra Gentiles*, for example, identified the common good with God Himself, since "the good of all things depends on God."¹²² The pursuit of the common good carried out the Bible's double commandment of loving God, and loving one's neighbour as oneself—which is also in brief the whole of the Gospel message.¹²³ All law, according to St Thomas Aquinas, is also directed by its nature to the good, and especially to the universal or common good.¹²⁴ It is addressed not primarily to private persons but to the whole people meeting in common or to persons who have charge of the community as a whole. Intellectual property law, therefore, to be good law by this reasoning, must also be ordered to the common good.¹²⁵

¶ The principle of solidarity

S olidarity highlights in a particular way, the *Compendium* affirms, the intrinsic social nature of the human person. "In the presence of the phenomenon of interdependence and its constant expansion, however, there persist in every part of the world stark inequalities between developed and developing countries. The acceleration of interdependence between persons and peoples needs to be accompanied by equally intense efforts on the ethical-social plane."¹²⁶

The *Compendium* continues: "Solidarity is also an authentic moral virtue, not a 'feeling of vague compassion or shallow distress at the misfortunes of so many people, both near and far. On the contrary, it is a firm and persevering determination to commit oneself to the common good. That is to say to the good of all and of each individual, because we are all really responsible for all.' "Solidarity rises to the rank of fundamental social virtue since it places itself in the sphere of justice. It is a virtue directed par excellence to the common good, and is found in "a commitment to the good of one's neighbour with the readiness, in the Gospel sense, to 'lose oneself' for the sake of the other instead of exploiting him, and to 'serve him' instead of oppressing him for one's own advantage."

The principles of the universal destination of goods and the preferential option for the poor are also central to our theme. These will be mentioned below in connection with the discussion on the nature and use of property, embracing also intellectual property. s intellectual property is a central pillar of all developed economies, as well as having an increasingly important role in the economic life of developing nations, it is clearly important that the Catholic Church, and indeed any religious body or organisation, has clearly thought out and articulated views on the nature and purpose of IP. Within the body of Catholic Social Teaching there are clear guide lines on the general purpose, ends, and objectives of intellectual property, these principles providing parameters and context for more detailed reflection on particular issues of importance. A modest body of statements from the Holy See can also be drawn on for this purpose.¹²⁷

Pope John Paul II, along with his predecessors, affirms a quasi-natural right to property: "It is through work that man, using his intelligence and exercising his freedom, succeeds in dominating the earth and making it a fitting home. In this way, he makes part of the earth his own, precisely the part which he has acquired through work; this is the origin of individual property."¹²⁸ He then states: "In our time, in particular, there exists another form of ownership which is becoming no less important than land: the possession of know-how, technology and skill. The wealth of the industrialized nations is based much more on this kind of ownership than on natural resources."¹²⁹ There is therefore a strict relationship between man's labour and its intellectual fruit which has particular qualities of ownership.

In an intervention of the Holy See at WIPO this quasi-natural right is expressed thus: "The ultimate cause that intellectual property protection works for is the recognition of the dignity of man and his work, in its double dimension, namely as a medium of expression and growth of the individual personality and as a contribution to the common good."¹³⁰

These teachings, however, are of a general nature and do not stipulate the parameters or conditions of this ownership. The principle of intellectual property ownership is affirmed, without, however, it being declared a natural right nor necessarily being the only type of claim on the fruits of personal work. In other words Catholic doctrine affirms an ownership that legitimately *might* take the shape of intellectual property laws. However, intellectual property ownership does not necessarily or in all instances reflect Catholic doctrinal principles.Furthermore, the latter also affirms important qualifying features of ownership.

a. Universal destination of goods

Despite a Christian's right to ownership, "Christian tradition has never upheld this right as absolute and untouchable. On the contrary, it has always understood this right within the broader context of the right common to all to use the goods of the whole of creation: the right to private property is subordinated to the right to common use, to the fact that goods are ¶ What the Catholic Church has to say on intellectual property

¶ Nature of property and its use—the universal destination of goods

PATENTS ON GENETIC RESOURCES?

meant for everyone."¹³² "God gave the earth to the whole human race for the sustenance of all its members, without excluding or favouring anyone. This is the foundation of the universal destination of the earth's goods."¹³³

The doctrine of the universal destination of goods expresses and describes the social dimension of private property. This is not to deny legitimate possession, but to express the social duty essentially inherent in the right, which can never be absolute and unconditioned, or exercised to the detriment of the common good: "*God destined the earth and all it contains for all men and all peoples so that all created things would be shared fairly by all mankind under the guidance of justice tempered by charity.*"¹³⁴ This is of particular importance in the era of globalisation and in relation to the other fundamental principle of Church teaching and tradition, namely the preferential option for the poor.¹³⁵ Following from this principle is the universal right to access the resources of the earth necessary for health, well-being, and other essentials of life and full development.¹³⁶

The principle of the universal destination of goods is therefore an invitation to all, in particular developed countries, to develop an economic vision inspired by social moral values not losing sight of the origin or purpose of these goods, so as to bring about a world of fairness and solidarity, in which the creation of wealth can take on a positive function.¹³⁷

b. Preferential option for the poor

Of pertinence to the discussion of fair distribution of goods, including knowledge goods, is the principle of the preferential option for the poor, which has always been central to the Church's social mission. The *Compendium* states:

"The principle of the universal destination of goods requires that the poor, the marginalized and in all cases those whose living conditions interfere with their proper growth should be the focus of particular concern. To this end, the preferential option for the poor should be reaffirmed in all its force. This is an option, or a special form of primacy in the exercise of Christian charity [that] . . . applies . . . to our social responsibilities and hence to our manner of living, and to the logical decisions to be made concerning the ownership and use of goods. Today, furthermore, given the worldwide dimension which the social question has assumed, this love of preference for the poor, and the decisions which it inspires in us, cannot but embrace the immense multitudes of the hungry, the needy, the homeless, those without health care and, above all, those without hope of a better future."¹³⁸

9 The social obligations associated with intellectual property rights



ccording to the *Compendium*, intellectual property, like all property, needs to be oriented "to an economy of service to mankind, so that . . . [it] contribute[s] to putting into effect the principle of

the universal destination of goods. . . . The issue of ownership and use of new technologies and knowledge—which in our day constitute a particular form of property that is no less important than ownership of land or capital—becomes significant in this perspective. These resources, like all goods, have a universal destination; they too must be placed in a context of legal norms and social rules that guarantee that they will be used according to the criteria of justice, equity and respect of human rights."¹³⁹

This fundamentally important doctrine of the universal destination of goods provides a particularly Christian qualifier on the exercise of IP rights that emphasises the 'social dimension' of intellectual property and possession of knowledge goods. It likewise provides an important orientation for matters touching TRIPS and other international negotiations on intellectual property. The *Compendium* continues: "New technological and scientific knowledge must be placed at the service of mankind's primary needs, gradually increasing humanity's common patrimony. Putting the principle of the universal destination of goods into full effect therefore requires action at the international level and planned programmes on the part of all countries. It is necessary to break down the barriers and monopolies which leave so many countries on the margins of development, and to provide all individuals and nations with the basic conditions which will enable them to share in development."¹⁴⁰

This Christian social perspective or dimension on intellectual property has also been referred to as its 'social mortgage' or encumbrance.¹⁴¹ "The intellectual property rights system exists not just to protect creative and innovative impetus but also and primarily to serve the common good of the human family. As a universal common good, intellectual property demands that control mechanisms should accompany the logic of the market."¹⁴²

The principle of solidarity also requires that inventors and IP owners be aware that they too are debtors to society, with its consequence of social moral responsibility with regard to the use and exercise of their rights, especially in an international development context. The *Compendium* stresses that members of society ought to cultivate a greater awareness that they are debtors of the society of which are a part. "They are debtors because of those conditions that make human existence liveable, and because of the indivisible and indispensable legacy constituted by culture, scientific and technical knowledge, material and immaterial goods and by all that the human condition has produced. A similar debt must be recognized in the various forms of social interaction, so that humanity's journey will not be interrupted but remain open to present and future generations, all of them called together to share the same gift in solidarity."¹⁴³

The concept of the ultimate social function of property, with the corresponding notion of proper or improper use of one's property or goods has a long Christian tradition, with the Church Fathers of the 4th century expressing clear and forthright views.¹⁴⁴ In the Middle Ages, St Thomas Aquinas also argued both for private property and for responsible social use. First, he answers the question of 'whether it is lawful for a man to possess something of his own' in an affirmative manner in harmony with later papal pronouncements:¹⁴⁵

"First because every man is more careful to procure what is for himself alone than that which is common to many or to all: since each one would shirk the labour and leave to another that which concerns the community, as happens where there is a great number of servants. Secondly, because human affairs are conducted in more orderly fashion if each man is charged with taking care of some particular thing himself, whereas there would be confusion if everyone had to look after any one thing indeterminately. Thirdly, because a more peaceful state is ensured to man if each one is contented with his own. Hence it is to be observed that quarrels arise more frequently where there is no division of the things possessed."¹⁴⁶

St Thomas distinguishes between a) the power to manage and dispense and b) the use of external things. With regard to the distinction between ownership and use, in the same *quaestio* in the *Summa*, St Thomas states: "man ought to possess external things not as his own but as common, so that, to wit, he is ready to communicate them to others in their need."¹⁴⁷ Elsewhere, in consideration of the principle of the universal destination of goods which denies absolute rights in property, he even says that faced with extreme need or imminent danger, one can take another's property for ones' own benefit and even to take another's property for the benefit of a neighbour in need.¹⁴⁸ In summary, St Thomas' position could be stated thus: "Responsibility for material resources should be an individual matter, but access to them should be communal."¹⁴⁹

We may also note in passing that this social function of property is very much part of the Jewish tradition too.¹⁵⁰ Also, some academic property legal theorists today emphasise the social aspects of property as a counterbalance to the traditional emphasis on individual proprietary rights. If this is true for real property, then *mutatis mutandis*, the same principles would hold for intellectual property.¹⁵¹

Another principle from the body of Church teaching that can be applied to our topic is that of stewardship. Embedded within Christian tradition is the notion that not only are we stewards of God's creation in terms of nature (Gen 1: 27-28)¹⁵² and the material goods with which we have been gifted (the parable of the talents: Mt 25: 14-30), but also of our own intellectual talents. The 4th century St John Chrysostom, in one of his homilies on the Gospel of St Matthew, comments on this parable of the stewardship of talents and applies it to beyond real and personal property:

"But these things are spoken not of money only, but also of speech, and of power, and of gifts, and of every stewardship, wherewith each is entrusted. This parable would suit rulers in the State also, for everyone is bound to make full use of what he has for the common good."¹⁵³

The conclusion to be drawn, therefore, is that there is always a social aspect or dimension to how we use our knowledge and how we relate to our 'knowledge goods'. There is a moral duty not to treat legal rights granted as a result of this knowledge—in patents for example—as our absolute possession without regard to the needs or impact on others. This is even more the case if one accepts the communal character of human knowing and creativity, one's own inventiveness being often or usually the product of many influences from others, especially educators. Patents in reality are therefore the result of a cumulative inventive process.¹⁵⁴ Given this reality of the nature of IP, the inherent indebtedness to society for the protected knowledge, and given the social encumbrances that it implies from an ethical perspective, the private IP rights of an owner allowing him to control access to an inventive process or product ought always to be exercised within a context of social responsibility.¹⁵⁵

Final Conclusions

r n this paper we have described the background issues to the negotiations, discussions and disputes at WIPO and elsewhere regarding L patent protection of inventions based on genetic resources and/or associated traditional knowledge. The 1992 Convention on Biological Diversity set an agenda of challenging policy and law makers to investigate how the international patent regime could do more to support the objectives of the CBD, in particular the requirement of prior informed consent of users from the providers of genetic resources and associated traditional knowledge when the latter is accessed. The convention itself commits the members of the international treaty to the triple objective of conserving biological diversity, using natural resources sustainably, and fairly and equitably sharing benefits deriving from the use of genetic resources. This latter objective is of particular importance to developing countries as they are holders of vast reserves of biologically diverse resources, and yet they have received comparatively little if any benefit from the exploitation of these resources by parties from the developed world. Within the developing countries, it is the indigenous peoples, with their communal store of traditional knowledge relating to the beneficial uses of genetic resources, who have lost out most, these being the communities who are the poorest and whose living habitats and way of life are under threat.

It is the view of the developing countries, a view shared by the Holy See, that introducing a mechanism within the patent regime at an international level requiring mandatory disclosure of the source of the genetic resource with associated traditional knowledge would ultimately be of benefit to the poor and poorest of this world. Such a mechanism would reveal whether or not proper prior consent had been obtained from the relevant authority, together with a benefit sharing arrangement.

The resistance by developed countries, on the other hand, to introducing such changes to the patent regime has been analysed in this paper in terms of a view of intellectual property ownership that does not sufficiently take account of its social dimensions and the overall purpose of intellectual property to promote the common good and not just the individual good and interest of industry and commerce. An understanding of the power politics at the time of the TRIPS negotiations also helps one to appreciate the reasons for some of the resistance to making changes to the patent system today.

The Church has principles in its body of social teaching from which it derives prudential judgments on particular issues in a given set of circumstances. The principle of solidarity dictates the Church's pro-development attitudes in international matters, and its preferential option for the poor directs it to do all in its power to help the poor and most vulnerable in the world and in particular in developing or least developed countries. Solidarity invites organisations and powers to work on a practical level for the common good, helping others in more need, and not deciding on matters that affect others solely on the basis of individual, corporate or national self-interest. Working for the common good must embrace the good of other nations who are part of the whole community of nations world-wide. CST principles invite a view of the world that is one of cooperation and mutual support. International legal instruments where appropriate, and where dealing with parties of unequal stature, should also reflect these principles, the international patent regime being no exception. IP rights should benefit and empower the poor in general, and where their own contributions, through traditional knowledge or being careful custodians of biological resources, have led to benefiting others and to ownership claims of IP, they in return deserve in justice to share in the fruits of exploitation and to be empowered, through technology transfer and building of infrastructure, to exercise their own creativity and productivity to better their own futures and to contribute to the cultural, economic, political, and social life of the civil community to which they belong.¹⁵⁶

For the reasons discussed in this paper, the Holy See takes the view that there is compelling reason for embracing a policy change that instigates a formal disclosure requirement for genetic resources and associated traditional knowledge in patent applications at an international level.

If the disagreements between the parties at WIPO were simply about patent law technicalities, the Catholic Church would not have any particular reason to proffer a technical solution. Pope John II once stated:

"The Church has no models to present; models that are real and effective can only arise within the framework of different historical situations, through the efforts of all those who responsibly confront concrete problems in all their social, political and cultural aspects as these interact with each other."¹⁵⁷

However, the Church does offer guidance in these cases, which recognises the autonomy of institutions whilst directing them to work for the common good:

"For such a task the Church offers her social teaching as an indispensable and ideal orientation, a teaching which . . . recognises the positive value of the market and of enterprise, but which at the same time points out that these need to be oriented towards the common good."¹⁵⁸

It is from this overall perspective that the Catholic Church, through a statement by the Holy See, has already declared its position in favour of a mandatory disclosure requirement. It respects the need for experts in the field to work out the technicalities of the patent regime for the subject matter of GR and ATK (such as the manner by which non-compliance is addressed, the particular trigger points for disclosure, the mechanism by which information is shared that can lead to confirmation of prior informed consent, etc.). However, its prudential judgement is that of the need for structural change, especially given the unanimity of views of the poorest countries of the world.

At the First Session of the IGC, held in Geneva, 30 April – 3 May, 2001, the Holy See stated:

"With regard to the specific work of the Intergovernmental Committee, it would be desirable that new legal machinery be successfully created that is fully integrated in and consistent with the international provisions currently in force, and imposes on the legislation of all Member States of WIPO certain minimum protection requirements for those sectors whose rights and interests are not fully catered for in systems now in force. In the case of biological resources, the Holy See considers that the proposed tasks ... as a whole should result in the drafting of guidelines *that guarantee the following objectives*: a) acceptance of the institution of the informed, free consensus of persons, peoples and States as a prerequisite of patenting."¹⁵⁹

This position of the Holy See reflects its view that what is at stake is the common good of societies, especially the poorest who stand to lose most if this opportunity for their betterment is passed over. It is the concerted effort of the international community, motivated by concern for the well-being of its poorest members, which is needed.

We recall here the words of Pope John Paul II in his 1990 Message on the World Day of Peace, which although relating to issues relating to the environment, are useful also in our context:

PATENTS ON GENETIC RESOURCES?

"The concepts of an ordered universe and a common heritage both point to the necessity of a more internationally coordinated approach to the management of the earth's goods... Recently there have been some promising steps towards such international action, yet the existing mechanisms and bodies are clearly not adequate for the development of a comprehensive plan of action. Political obstacles, forms of exaggerated nationalism and economic interests—to mention only a few factors—impede international cooperation and long-term effective action."

The Pope urged those in a position to provide effective help (in relation to helping the poor): "This will require *courageous reform of structures*, as well as new ways of relating among peoples and States [emphasis added]."

The imperative to help the poor, in whatever manner possible, has been most recently expressed in the Catholic Church by Pope Francis in his apostolic exhortation *Evangelii Gaudium*. It is our view that it is with the mentality and vision expressed by Pope Francis that the negotiations on the patentability of genetic resources should be concluded. Change is needed. We conclude this paper with his prophetic words:¹⁶⁰

"Just as the commandment 'thou shalt not kill' sets a clear limit in order to safeguard the value of human life, today we also have to say 'thou shalt not' to an economy of exclusion and inequality. Such an economy kills. How can it be that it is not a news item when an elderly homeless person dies of exposure, but it is news when the stock market loses two points? This is a case of exclusion. Can we continue to stand by when food is thrown away while people are starving? This is a case of inequality. Today everything comes under the laws of competition and the survival of the fittest, where the powerful feed upon the powerless. As a consequence, masses of people find themselves excluded and marginalized: without work, without possibilities, without any means of escape. . . . In this context, some people continue to defend trickle-down theories which assume that economic growth, encouraged by a free market, will inevitably succeed in bringing about greater justice and inclusiveness in the world. This opinion, which has never been confirmed by the facts, expresses a crude and naïve trust in the goodness of those wielding economic power and in the sacralized workings of the prevailing economic system. Meanwhile, the excluded are still waiting. To sustain a lifestyle which excludes others, or to sustain enthusiasm for that selfish ideal, a globalization of indifference has developed. Almost without being aware of it, we end up being incapable of feeling compassion at the outcry of the poor, weeping for other people's pain, and feeling a need to help them, as though all this were someone else's responsibility and not our own. The culture of prosperity deadens us; we are thrilled if the market offers us something new to purchase; and in the meantime all those lives stunted for lack of opportunity seem a mere spectacle; they fail to move us."

NOTES

1. Roman Cholij is a Research Associate at the Von Hügel Institute, St Edmund's College, University of Cambridge. He has a doctorate in theology from the University of Oxford and holds a Master's Degree in Intellectual Property from the University of London. He is in addition a practising trade mark attorney.

2. The patent application would be on a life form or derivative from a genetic resource with or without associated TK. The genetic resource could be a plant, fungus, microorganism, or animal poisons and toxins (such as from snakes, frogs, and toads) from which substances could be extracted and isolated. It could also be a human genetic resource such as a blood sample, saliva swab, etc. from an indigenous person. The CBD itself does not address the latter but theoretically it is embraced by the WIPO texts.

3. Pontifical Council for Justice and Peace, *Compendium of the Social Doctrine of the Church*, 2005. Available at http://www.vatican.va/roman_curia/pontifical_councils/ justpeace/documents/rc_pc_justpeace_doc_20060526_compendio-dott-soc_en.html (accessed 11 December 2013).

4. The concept of 'genetic resource' (GR) appears to have been first used as such by the Commission on Plant Genetic Resources of the Food and Agriculture Organization of the United Nations (FAO), which predated the CBD. It was defined in the CBD thus: "Genetic resources' means genetic material of actual or potential value." Genetic material in turn is defined as "... any material of plant, animal, microbial or other origin containing functional units of heredity."

5. For historical background on the development of the Convention on Biological Diversity (CBD) and the subsequent NagoyaProtocal, see preceding section of this publication: Carlo Marenghi, Historical Overview: The Patentability of Genetic Resources at the World Intellectual Property Organization. The text of the Convention (1992) and the texts of its further developments-the Cartagena Protocol on Biosafety (2000) and the Nagoya Protocol on Access and Benefit Sharing-can be accessed at http://www.cbd. int/. Article 1 states the objectives of the Convention: "The objectives of this Convention, to be pursued in accordance with its relevant provisions, are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding." See also in particular Article 15 and Article 8(j). The Bonn Guidelines (http://www.cbd.int/abs/bonn/) provide further guidelines on access to genetic resources via prior informed consent and the fair and equitable sharing of the benefits arising from their utilization. The Nagoya Protocol provides a transparent legal framework for the effective implementation of one of the three objectives of the CBD: the fair and equitable sharing of benefits arising out of the utilization of genetic resources. It deals with a number of uncertainties that can arise from identification of beneficiaries and suggests international mechanisms and procedures, such as in Article 10, on a global multilateral benefit-sharing mechanism used to support the conservation of biological diversity and the sustainable use of its components globally. http://www.cbd.int/abs/about/default.shtml#objective

6. Indigenous and Tribal Peoples Convention (C169), International Labour Organization, 1991, describes indigenous peoples thus in Article 1: (a) tribal peoples in independent countries whose social, cultural, and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations; b) peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonisation or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural, and political institutions. Available at http://www.ilo.org/indigenous/Conventions/

PATENTS ON GENETIC RESOURCES?

no169/lang--en/index.htm (accessed 11 December 2013).

7. *Statement of the International Indigenous Forum*, WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, 20th Session, 14–22 February 2012. Available at http://www.ip-watch.org/weblog/wp-content/uploads/2012/02/IGC-International-Indigenous-Forum-Statement-Feb-2012. pdf (accessed 11 December 2013).

8. Nibutani Declaration of the 2008 Indigenous Peoples Summit in Ainu Mosir, § 17. Available at http://www.galdu.org/govat/doc/nibutani_declaration_of_indigenous_ peoples_final_copy3.pdf (accessed 11 December 2013). Several years earlier, in 1994, delegates representing indigenous organisations of the Amazon basin, together with various NGOs, at a meeting in Santa Cruz de la Sierra, Bolivia, produced a consensus document which declared Western intellectual property regimes to be "instruments of domination and incompatible with indigenous cultures." The document also deemed the granting of intellectual property rights over life forms to be unacceptable to indigenous peoples. Cf. L.R. Helfer & G.W. Austin, HUMAN RIGHTS AND INTELLECTUAL PROPERTY: MAPPING THE GLOBAL INTERFACE, Cambridge, UK, 2011, p. 460.

9. The 1983 International Undertaking on Plant Genetic Resources ('IU') treated plant genetic resources as part of common heritage. This was not seen as being in contradiction to the principle of sovereignty but as a way to stop third party IPRs, particularly plant variety protection. The seed industry found this threatening and as a result a special resolution of the FAO Commission on Plant Genetic Resources was issued declaring plant breeder's rights are not incompatible with the IU. *Report on Disclosure of Origin in Patent Applications*, Queen Mary Intellectual Property Research Institute for the European Commission, DG-Trade ('QM Report'), October 2004, pp. 27-28. Available at http:// trade.ec.europa.eu/doclib/docs/2005/june/tradoc_123533.pdf (accessed 11 December 2013).

10. CBD, supra note 5, Art. 8(j) states: "The peoples concerned shall have the right to decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control, to the extent possible, over their own economic, social and cultural development. In addition, they shall participate in the formulation, implementation and evaluation of plans and programmes for national and regional development which may affect them directly."

11. *Supra* note 6. Art. 14(1), for example, states: "The rights of the peoples concerned to the natural resources pertaining to their lands shall be specially safeguarded. These rights include the right of these peoples to participate in the use, management and conservation of these resources."

12. Ibid, Art. 7. "The peoples concerned shall have the right to decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control, to the extent possible, over their own economic, social and cultural development. In addition, they shall participate in the formulation, implementation and evaluation of plans and programmes for national and regional development which may affect them directly."

13. See Graham Dutfield, INTELLECTUAL PROPERTY, BIOGENETIC RESOURCES AND TRADITIONAL KNOWLEDGE, 2004, pp. 3–13, where in chapter entitled 'Sovereignty, Common Heritage and Property Rights', inter alia, some of the complexities of sovereign control are discussed.

14. Literature on the subject can be accessed here: http://www.syndromic.org/storage/ documents/PHIN_Release_1.9/MU_Resources/ISDS_Webinar_Aug_14_Resources.pdf (accessed 11 December 2013). In Indonesia in 2008, for example, the Health Minister of the time asserted that deadly viruses are the sovereign property of individual nations in the context of Indonesia having had, according to the WHO, 53 outbreaks of bird flu viruses appearing in both humans and chickens. Cf. Richard Holbrooke and Laurie Garrett, 'Sovereignty' That Risks Global Health, Washington Post, 10 August 2008. Available at http://articles.washingtonpost.com/2008-08-10/opinions/36864341_1_flu-outbreaks-bird-flu-siti-fadilah-supari (accessed 11 December 2013).

15. Called a "silent theft of centuries of knowledge from some of the poorest communities in developing countries." *Human Development Report (1999),* United Nations Development Programme (UNDP), p. 20. Available at http://hdr.undp.org/en/media/HDR_1999_EN.pdf (accessed 11 December 2013).

16. This does not preclude, however, the possibility of unique inventive contributions of single individuals.

17. See *The Protection of Traditional Knowledge: Draft Articles (Rev. 2)*, WIPO, 26 April 2013. WIPO/GRTKF/IC/24.

18. UNCTAD, Intellectual Property in the World Trade Organization: Turning it into Developing Countries' Real Property, 2010, p. 42. Available at http://unctad.org/en/docs/ditctncd20068_en.pdf (accessed 11 December 2013). The question of the most appropriate IP vehicle, in particular that of a sui generis right, to protect the interests of the holders of traditional knowledge, is a matter that is outside the remit of this particular paper, but the subject has been extensively treated and the literature on the subject is vast. For one possible summary, see for example Hagan, W. P. Nagan et al., Misappropriation of Shuar Traditional Knowledge (TK) and Trade Secrets: A Case Study on Biopiracy in the Amazon (2010), 15 J. TECH. L. & POL'Y 9, 27–63. See also the resources on the website of WIPO: http://www.wipo.int/tk/en/.

19. A special body, the Council for TRIPS (commonly known as the TRIPS Council), on which each WTO Member is represented, was established to administer the operation of TRIPS. The TRIPS Council is responsible for reviewing various aspects of TRIPS as mandated in the agreement itself and also as requested by the biennial WTO Ministerial Conference.

20. CBD, supra note 5, Art. 16(2).

21. Excerpted from *Matters Concerning the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC)*, WIPO General Assembly, 41st Session, 1–9 October 2012. WO/GA/41/15.

22. First coined, it is claimed, by the ETC Group (Action Group on Erosion, Technology and Concentration). See http://www.etcgroup.org/issues/patents-biopiracy: "Biopiracy, a term originally coined by ETC Group, refers to the appropriation of the knowledge and genetic resources of farming and indigenous communities by individuals or institutions that seek exclusive monopoly control (patents or intellectual property) over these resources and knowledge. ETC Group believes that intellectual property is predatory on the rights and knowledge of farming communities and indigenous peoples."

23. The term 'misappropriation' has legal significance in many jurisdictions, which includes the concept of taking the value of the intellectual or other property through use. It can further be defined as the consequence of violating authorised conditions of access, or of using the genetic resources to derive unjustified or inequitably shared benefits. It has several possible legal remedies depending on the particular legal doctrine applicable to the jurisdiction.

24. What also sometimes complicates discourse on this matter of biopiracy is that there is a continuum of activities, ranging from the criminal to the legal but possibly unethical, which have been classed as biopiracy. Examples may be: unauthorised and/or uncompensated use of common traditional knowledge; its deceptive acquisition; or even commercial use based on a literature search without compensating the source holders; claiming TK within a patent in the form it was acquired; claiming a refinement of TK; claiming an invention based on TK; the unauthorised and uncompensated extraction and use of widespread genetic resources, a patent claim claiming the resource or purified version of the resource or a derivative, as well as other variants. Cf. *QM Report, supra* note 9, pp. 17–20.

25. Integrating Intellectual Property Rights and Development Policy, Commission on

PATENTS ON GENETIC RESOURCES?

Intellectual Property Rights, 2002, p. 74. Available at http://www.iprcommission.org/papers/pdfs/final_report/CIPRfullfinal.pdf (accessed 11 December 2013).

26. See for example, D.F. Robinson, CONFRONTING BIOPIRACY: CHALLENGES, CASES AND INTERNATIONAL DEBATES, London, 2010; Nagan, *Misappropriation, supra* note 18; Chen, *There's No Such Thing as Biopiracy... and It's a Good Thing Too* (2006), 37 McGEORGE L. REV. 1; C.M. Ho, *Biopiracy and Beyond: A Consideration of Socio-Cultural Conflicts with Global Patent Policies* (2005–06), 39 U. MICH. J.L. REFORM 433 [my thanks to Sun Thathong, PhD student at Cambridge University for pointing out items in this bibliography]. See also sources at http://www.scidev.net/global/search-results.html?q=biopiracy (accessed 11 December 2013).

27. Graham Dutfield, *Bioprospecting: legitimate research or biopiracy?*, Policy Briefs SciDev Net, 26 May 2003. The topic of biopiracy and bioprospecting is a highly polemical topic given also that there is a widely held conviction among developing countries and many NGOs a) that biodiversity and associated traditional knowledge have tremendous economic potential and b) that the feature of the patent system in TRIPS allowing patent claims that may incorporate biological and genetic material including life forms encourages and facilitates misappropriation/biopiracy of native genetic resources.

28. Dutfield, INTELLECTUAL PROPERTY, supra note 13, pp. 18-21.

29. "The disappointing results of the last 1–2 decades of bioprospecting suggest that the commercial potential of the large stocks of biogenetic resources existing in many developing countries may be much lower than many people think." Dutfield, INTELLECTUAL PROPERTY, *supra* note 13, p. 17. Dutfield also quotes from an important 1999 study (Kerry ten Kate and Sarah A. Laird, THE COMMERCIAL USE OF BIODIVERSITY: ACCESS TO GENETIC RESOURCES AND BENEFIT SHARING, 1999): "local products are likely to remain an important, although minor, component of drug discovery. . . . However, the techniques of molecular biology and genetic engineering are likely to become the dominating factor in drug discovery, design and development." Dutfield himself notes, in regard to new crop varieties, that "the large stocks of biogenetic resources in many developing countries may not have as much commercial potential as many people think. But this is not the same as saying that they have no potential. This is recognised by the many companies that are still keen to access and screen these resources." *Ibid*, 20.

30. Cf. Ibid, 17-20.

31. *QM Report, supra* note 9, p. 21. The search term 'neem' entered into the database of Espacenet of the European Patent Office produced 560 patents worldwide, the first entries including herbal topical formulation, stretch mark preventer, method for controlling and/ or repelling pests, etc.

32. European Patent No. 0436257 B1, 1994. The abstract reads: "A novel insecticide and foliar fungicide derived from a neem seed extract comprising neem oil which is substantially free of azadirachtin and salannin, said neem oil being prepared by extracting dried, coarsely ground neem seeds with a non-polar, hydrophobic solvent to obtain a neem oil extract, and then removing the solvent to obtain the neem oil. These neem oil pesticides exhibit the ability to repel insects from plant surfaces, prevent fungal growth, and kill insect and fungal pests at various life stages." See Thermo Trilogy Corporation, et al. v. Aelvoet, Magda, MEP, The Green Group in the European Parliament, et al., Boards of Appeal of the European Patent Office, T 0416/01 - 3.3.2, 8 March 2005. Available at http://www.epo.org/law-practice/case-law-appeals/pdf/t010416eu1.pdf (accessed 11 December 2013).

33. U.S. Patent No. 5,401,504, 1993.

34. This turmeric case was in fact the first case, chronologically speaking, where a patent based on the traditional knowledge of the developing country had been successfully challenged. There are a number of other dubious applications on the patents' database for patent protection, based on turmeric, including from Korea to protect such 'inventions' as 'chocolate containing turmeric and method for preparing the same', 'turmeric vinegar', and similar.

35. U.S. Plant Patent No. 5,751, 1986.

36. However, the patentee then filed further arguments which successfully reversed this action. CIEL, according to the rules of the time, was unable to give its own observations in reply.

37. E.g. patents on the enola bean, the rosy periwinkle, hoodia, quinoa, maca, etc. See, for example, INTELLECTUAL PROPERTY AND HUMAN DEVELOPMENT, CURRENT TRENDS AND FUTURE DEVELOPMENTS, eds. Tzen Wong and Graham Dutfield, Cambridge, UK, 2011, pp. 151–153; *QM Report, supra* note 9, pp. 20–23.

38. The other component is effective sharing of data through accessible and comprehensive databases, which is also the favoured approach (of the US and Japan in particular) as against the disclosure requirements requested by others. Cf. *Consolidated Document Relating to Intellectual Property and Genetic Resources (Rev. 2)*, 8 February 2013, § 3.19 (Defensive Protection). Available at http://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_23/wipo_grtkf_ic_23_www_230222.pdf (accessed 11 Deccember 2013); Japan submission: *Patent System and Genetic Resources*, 17 October 2011. WIPO/GRTKF/IC/20/INF/9.

39. Report of the Sixth Meeting of the Conference of the Parties to the Convention on Biological Diversity, 2002. UNEP/CBD/COP/6/20.

40. See Technical Study on Disclosure Requirements Related to Genetic Resources and Traditional Knowledge, Conference of the Parties to the CBD, Seventh Meeting, 2004. UNEP/CBD/COP/7/INF/17. Available at https://www.cbd.int/doc/meetings/cop/cop-07/information/cop-07-inf-17-en.pdf (accessed 11 December 2013).

41. Remedies proposed to deal with this include efficient, accessible TK database systems. Cf. *supra* note 38.

42. TRIPS, Art. 29(1).

43. TRIPS, Art. 28.

44. This concept may be more justly applied to matters such as human and human body part trafficking.

45. Technical Study on Patent Disclosure Requirements Related to Genetic Resources and Traditional Knowledge, WIPO, 2004, p. 13. UNEP/CBD/COP/7/INF/17.

46. *Ibid*, p. 6.

47. Ibid.

48. UNCTAD, Analysis of Options for Implementing Disclosure of Origin Requirements in Intellectual Property Applications, 2006. UNCTAD/DITC/TED/2004/14.

49. Integrating Intellectual Property Rights, supra note 25.

50. Ibid, p. 86.

51. Ibid, p. 87.

52. *Ibid*, p. 85: "Given the understandable difficulties faced by developing countries in formulating or enforcing laws on access and benefit sharing, we take the view that developed and developing countries should do more to ensure their IP systems help to promote the objectives of the CBD, and to promote the underlying mutuality of interest that should exist between the providers of genetic resources, mainly in developing countries, and the users who are mainly based in developed countries."

53. Dutfield, INTELLECTUAL PROPERTY, supra note 13, p. 21.

54. Such as India, Brazil, China, the Andean community. See also responses to a questionnaire on this topic: WIPO/GRTKF/IC/Q.3, Part 1, Annex; Michael Blakeney, *Proposals for the Disclosure of Origin of Genetic Resources in Patent Applications*, Queen Mary Intellectual Property Research Institute. WIPO/IP/GR/05/01, Annex.

55. Cf. Submission to WTO, 24 June 2002, § 12: WTO/IP/C/W/356.

56. Analysis of Options, supra note 48, pp. 21-22.

57. Nagoya Protocol, supra note 5.

58. United Nations Millennium Development Goals. Available at http://www.un.org/millenniumgoals/ (accessed 11 December 2013).

59. Nagoya Protocol, supra note 5, Art. 10. This proposal is inspired by the FAO

International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). Available at http://www.planttreaty.org (accessed December 09 2013). A multi-lateral system for access to gemplasm is established for a defined list of crops, together with a benefit sharing system. Farmers' rights are also codified. Article 1 states: "*The objectives* of this Treaty are the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity, for sustainable agriculture and food security." 60. The mechanism provides in such cases a solution of benefits being distributed evenly

to different groups for conservation and sustainability purposes.

61. Paragraph 19 reads: "We instruct the Council for TRIPS, in pursuing its work programme including under the review of Article 27.3(b), the review of the implementation of the TRIPS Agreement under Article 71.1 and the work foreseen pursuant to paragraph 12 of this declaration, to examine, inter alia, the relationship between the TRIPS Agreement and the Convention on Biological Diversity, the protection of traditional knowledge and folklore, and other relevant new developments raised by members pursuant to Article 71.1. In undertaking this work, the TRIPS Council shall be guided by the objectives and principles set out in Articles 7 and 8 of the TRIPS Agreement and shall take fully into account the development dimension." 62. Reasons for the shift from the TRIPS Council include the current stalemate of the Doha development agenda. On this subject, see June Dong Kim, Jin Kyo Suh, Backhoon Song, and Dukgeun Ahn, The Stalemate of the Doha Development Agenda Negotiation and Some Policy Implications for Its Completion, KIEP World Economy Update, 14 March 2008. Available at http://www.kiep.go.kr/include/filedown.jsp?fname=WEU-13-08. pdf&fpath=EngWorld&NO=27&FNO=20 (accessed 11 December 2013). See also, Blakeney, Proposals, supra note 54, pp. 3–4; Marenghi, Historical Overview, supra note 5. 63. Consolidated Document, supra note 38.

64. The members of the 'Like-Minded' group of countries include: Algeria, Angola, Bangladesh, Botswana, Brazil, Ecuador, Egypt, Guatemala, India, Indonesia, Iran, Malaysia, Mexico, Nepal, Oman, Peru, the Philippines, Senegal, South Africa, Sri Lanka, Thailand, Yemen, Zambia and Zimbabwe The DAG is a group of developing countries committed to mainstreaming the development dimension into all areas of WIPO's work. Members also overlap with those of the Like-Minded group. Proposals from the developing countries can be seen at WIPO/GRTKF/IC/20/INF/12 (African Group); WIPO/GRTKF/IC/20/20/6 (Like-Minded Countries). We might note, also, that some developing countries (e.g. Bolivia and Venezuela), and the indigenous communities, are opposed in principle to the patenting of living organisms, even if modified by human intervention.

65. Joint Recommendation on Genetic Resources and Associated Traditional Knowledge, IGC, 21 February 2012. WIPO/GRTKF/IC/20/9 Rev. Annex.

66. Cf. Catherine Saez, WIPO Achieves Single Legal Text On Genetic Resources, Intellectual Property Watch, 23 February 2012. Available at http://www.ip-watch.org/2012/02/23/ wipo-delegates-reach-single-legal-text-on-genetic-resources-indigenous-peoples-back/; Saez, WIPO Members Work Through Differences in Genetic Resources Document, 19 February 2012. Available at http://www.ip-watch.org/2012/02/19/wipo-members-work-throughdifferences-in-genetic-resources-document/ (accessed 11 December 2013).

67. Switzerland itself has a national disclosure requirement in its patent law, adopted in 2008. See WIPO/GRTKF/IC/20/5, § 83; WIPO/GRTKF/IC/20/INF/10.

68. IP/C/W/383, § 53. QM Report, supra note 9, p. 38.

69. *Kingdom of the Netherlands v Parliament and Council*, Case C-377/98, 9 October 2001. Available at http://eur-lex.europa.eu/LexUriServ/LexUriServ. do?uri=CELEX:61998CJ0377:EN:PDF (accessed 11 December 2013).

70. Directive 98/44/EC of the European Parliament and of the Council on the legal protection of biotechnological inventions, 6 July 1998. Preamble (27): Whereas if an invention is based on biological material of plant or animal origin or if it uses such material,

the patent application should, where appropriate, include information on the geographical origin of such material, if known; whereas this is without prejudice to the processing of patent applications or the validity of rights arising from granted patents.

71. Although the US has not in fact accepted or ratified it.

72. QM Report, supra note 9, p. 43.

73. *PCT Yearly Review, 2013*, WIPO, pp. 27, 30. Available at http://www.wipo.int/ export/sites/www/freepublications/en/patents/901/wipo_pub_901_2013.pdf (accessed 11 December 2013). Of the 425 patent applications filed (compared to 51,207 in the US, 43,660 by Japan and 18,855 by Germany), over 71% (314) were from South Africa, 19 from all of Eastern Africa, 16 from Western Africa and 3 from Middle Africa.

74. Statistics for 2012 show China, with 18,627 PCT filings, in the top 5 global filers (office of origin), just behind Germany (US and Japan being in the first places), but expected to surpass Germany in the 2013 statistics.

75. The following is a report of the intervention of a Swiss expert at the 3rd intersessional working group (IWG 3): WIPO/GRTKF/IC/20/5, § 83 dealing with some of the most common objections which we report here in full because of their value to this argument: "Martin Girsberger stated that the Swiss proposals were submitted because the importance of increasing transparency with regard to ABS was recognized. The new provisions on the disclosure of the source of the Swiss Patent Law entered in force in 2008, so there had been only a limited number of cases where this requirement applied. The patent experts in Switzerland stated that there had been no problems with putting those provisions into practice. He was also not aware of any negative reaction of patent applicants so far. As regards to the trigger of the disclosure requirement, the disclosure of the source was required where the inventor had had access to the GR or related TK. Furthermore, the invention had to be directly based on the GR or TK. As regards the concept of source, he did not see how patent applicants were unnecessarily burdened. In fact, the concept of source was specifically chosen to avoid any undue burden. Source should be understood in a broad sense to include all possible sources of GR and TK. Consequently, no complicated inquiries or searches were to be carried out by the patent applicant. He recalled that Article 17 of the Nagoya Protocol in the context of checkpoints referred to the concept of source. According to his national solution, the patent office did not have to verify the truthfulness of the declaration of the source. The disclosure of the source to the competent authorities was intended to further enhance the transparency and increasing function of the disclosure requirement. With regard to a national and contractual approach as the means to resolve the issues arising with regard to ABS, he wondered: how a purely national and contractual approach would address problems arising with regards to transboundary ABS; how a purely contractual approach would address cases where no ABS had been concluded between the provider of GR or TK; and how the proposed approach would take into account the generally long-term nature of research and development activities involving GR. In particular, how a purely contractual approach could ensure that the obligations arising from the contract would be fulfilled, even if between the conclusion of that contract and the end of the research activities lied several years and the people originally involved might no longer be involved. He also wondered what specific proposals beyond the establishment of a database would increase transparency in ABS."

76. Document of the Holy See on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, 26 April 2001, § 10. WIPO/GRTKF/IC/1/7: "With regard to the specific work of the Intergovernmental Committee, it would be desirable that new legal machinery be successfully created that is fully integrated in and consistent with the international provisions currently in force, and imposes on the legislation of all Member States of WIPO certain minimum protection requirements for those sectors whose rights and interests are not fully catered for in systems now in force. In the case of biological resources, the Holy See considers that the proposed tasks . . . as a whole should result in the drafting of guidelines that guarantee the following objectives: a) acceptance of the

institution of the informed, free consensus of persons, peoples and States as a prerequisite of patenting."

77. W. Cornish and D. Llewelyn, Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights, 6th ed., London, 2007, p. 6.

78. CONSTITUTION OF THE UNITED STATES, 1787, Arts. 1, 8. Available at http://www.archives.gov/exhibits/charters/constitution_transcript.html.

79. Mazer v. Stein, 347 U.S. 201, 219 (1954).

80. The first international instrument was the Paris Convention in 1883, as administered by WIPO. Available at http://www.wipo.int/treaties/en/ip/paris/trtdocs_wo020.html.

81. Ian Hargreave, *Digital Opportunity. A Review of Intellectual Property and Growth*, May 2011, pp. 14–17. Available at http://www.ipo.gov.uk/ipreview-finalreport.pdf (accessed 11 December 2013). Cf. Three main reports which provide an overview and empirical findings are: 1.) Federal Trade Commission, *To promote innovation: The proper balance of competition and patent law*, 2003. Available at http://www.ftc.gov/os/2003/10/ innovationrpt.pdf; 2.) S.A. Merrill, R.C. Levin, and M.B. Myers, eds., A PATENT SYSTEM FOR THE 21ST CENTURY, 2004; 3.) S.A. Merrill and A. Mazza, eds., REAPING THE BENEFITS OF GENOMIC AND PROTEOMIC RESEARCH: INTELLECTUAL PROPERTY RIGHTS, INNOVATION, AND PUBLIC HEALTH, 2006. For the original formulation of the Tragedy of the Anticommons, see: M.A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets* (1998), 111 HARVARD L. REV., 621–88; or M.A. Heller and R.S. Eisenberg, *Can Patents Deter Innovation? The Anticommons in Biomedical Research* (1998, SCIENCE 1, Vol. 280, No. 5364, pp. 698–701. For the economic model see: J.M. Buchanan and Y.J. Yoon, *Symmetric Tragedies: Commons and Anticommons* (2000), 43 J. LAW & ECON.

82. Cf. Jonathan M. Barnett, *Private Protection of Patentable Goods* (2004), 25 Cardozo L. Rev. 1251, 1272–75.

83. Cf. A. Chapman, Approaching Intellectual Property as a Human Right: Obligations Related to Article 15(1)(c), UN Economic and Social Council, 3 October 2000. E/C.12/2000/12.
84. Cf. Tzen Wong, Intellectual property through the lens of human development, INTELLECTUAL PROPERTY AND HUMAN DEVELOPMENT, supra note 37, p. 31.

85. K. Liddell, *Immorality and patents: The exclusion of inventions contrary to ordre public and morality*, New FRONTIERS IN THE PHILOSOPHY OF INTELLECTUAL PROPERTY, Annabelle Lever, ed., Cambridge, UK, 2012, p. 170.

86. In the preamble the statement says: "Human rights call on us to ensure that everyone can create, access, use and share information and knowledge, enabling individuals, communities and societies to achieve their full potential. Creativity and investment should be recognised and rewarded. The purpose of intellectual property law (such as copyright and patents) should be, now as it was in the past, to ensure both the sharing of knowledge and the rewarding of innovation. The expansion in the law's breadth, scope and term over the last 30 years has resulted in an intellectual property regime which is radically out of line with modern technological, economic and social trends. This threatens the chain of creativity and innovation on which we and future generations depend." *Promoting innovation and rewarding creativity. A balanced intellectual property framework for the digital age*, The Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA). Available at http://www.thersa.org/action-research-centre/past-projects/adelphicharter (accessed 11 December 2013).

87. Transnational corporations—i.e. in this case with headquarters in a developed country but subsidiary offices in developing countries.

88. Carolyn Deere, THE IMPLEMENTATION GAME. THE TRIPS AGREEMENT AND THE GLOBAL POLITICS OF INTELLECTUAL PROPERTY REFORM IN DEVELOPING COUNTRIES, Oxford, UK, 2009. Dr Carolyn Deere is Senior Researcher at the Global Economic Governance Programme at the University of Oxford, founder and Chair of the Board of Directors of Intellectual Property Watch—the world's leading news service on international

intellectual property policy debates. http://www.ip-watch.org/.89. *Ibid.*

90. Human Development Report 2001: Making New Technologies Work for Human Development, UNDP, p. 102.

91. Intellectual Property in the World Trade Organization, supra note 18.

92. THE IMPLEMENTATION GAME, *supra* note 88, p. 23.

93. *Integrating Intellectual Property Rights, supra* note 25, p. 160. J. Bhagwati, What It Will Take to Get Developing Countries into a New Round of Multilateral Trade Negotiations, New York, 2000, p.21.

94. The proponents of TRIPS had not achieved everything they had wanted in the Agreement and there were still a number of gaps, ambiguities and issues for further discussion. *Ibid*, p. 66. See also *Intellectual Property in the World Trade Organization, supra* note 18, pp. 11–20. In 2002, the UK Commission on Intellectual Property Rights stated categorically: "We believe that developed countries should discontinue the practice of using regional/bilateral agreements as a means of creating TRIPS-plus IP regimes in developing countries as a matter of course." *Integrating Intellectual Property Rights, supra* note 25. The report adds that developing countries should be free to choose, within the confines of TRIPS, where to pitch their IP regimes.

95. Address of H.E. Mons. Silvano Tomasi, *Intervention by the Holy See at the 6th Ministerial conference of World Trade Organization (WTO)*, 18 December 2005.

96. THE IMPLEMENTATION GAME, *supra* note 88, p. 2. Deere also states that her book sets itself out to give "substance to the view that developing countries' policies are often set by others . . . detailing the mechanisms through which developing countries were both coerced and persuaded to identify with and mimic the IP policies of richer countries."

97. For example, Sen. Edward Kennedy made a statement at the US Senate in 2005 criticising the Bush administration for making use of bilateral free trade agreements that restricted further the rights of developing countries given under TRIPS. Cf. *Intellectual Property in the World Trade Organization, supra* note 18, p. 23.

98. Integrating Intellectual Property Rights, supra note 25, Foreword, iv.

99. "Since the implementation of the TRIPS Agreement does not adequately reflect the fundamental nature and indivisibility of all human rights, including the right of everyone to enjoy the benefits of scientific progress and its applications, the right to health, the right to food and the right to self-determination, there are apparent conflicts between the intellectual property rights regime embodied in the TRIPS Agreement, on the one hand, and international human rights law, on the other." Sub-Commission on the Promotion and Protection of Human Rights, Res. 2000/7. Available at http://www.unhchr.ch/Huridocda/Huridoca.nsf/TestFrame/c462b62cf8a07b13c12569700046704e?Opendocument (accessed 11 December 2013)..

100. Ibid, §§ 5 & 6.

101. *Integrating Intellectual Property Rights, supra* note 25, p. 6. The authors compare IP to taxation: just because some is good and necessary for the well-being of society, this doesn't mean that more is always better.

102. Intellectual Property in the World Trade Organization, supra note 18, pp. 27–28. Article 7: "Objectives: The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to the balance of rights and obligations." Article 8: "Principles: Members may in formulating or amending their laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that such measures are consistent with the provisions of this agreement. Appropriate measures, provided that they are consistent with the provisions of this agreement, may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices

PATENTS ON GENETIC RESOURCES?

which unreasonably restrain trade or adversely affect the international transfer of technology." 103. Development Agenda available at http://www.wipo.int/ip-development/en/agenda/.

104. N.W. Netanel, THE DEVELOPMENT AGENDA. GLOBAL INTELLECTUAL PROPERTY AND DEVELOPING COUNTRIES, 2008, p. 2. See also WIPO Convention available at http://www. wipo.int/treaties/en/convention/trtdocs_wo029.html.

105. Cf. TRIPS Art. 7.

106. Netanel, THE DEVELOPMENT AGENDA, supra note 104, p. 2.

107. Cf. Ibid, 1-4.

108. WIPO INTELLECTUAL PROPERTY HANDBOOK, § 1.1.

109. See http://www.wipo.int/about-wipo/en/.

110. See http://www.wipo.int/ip-development/en/.

111. A recent accomplishment implementing this objective, the results of years of negotiations that concluded on June 28, 2013, is the World Intellectual Property Organization Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled. Available at http://www.wipo. int/dc2013/en/.

112. Pope Paul VI, Populorum progressio, 13.

113. *Compendium of the Social Doctrine of the Church*, Pontifical Council for Justice and Peace, 2004. § 72. Available at: http://www.vatican.va/roman_curia/pontifical_councils/justpeace/documents/rc_pc_justpeace_doc_20060526_compendio-dott-soc_en.html.

114. *Ibid*, §§ 76, 78.

116. Ibid, § 164.

117. Ibid.

118. *Ibid*, § 165.

119. *Ibid*, §§ 164–166.

120. Pope Benedict XVI, *Caritas in veritate*, 7. In this encyclical Pope Benedict XVI emphasises the practical aspects of charity that the common good invites.

121. In the Nicomachean Ethics, for example, the Greek philosopher Aristotle concluded that a good life is oriented to goods shared with others—the common good of the larger society of which one is a part. The good life of a single person and the quality of the common life persons share with one another in society are linked, and indeed are inseparable. The common good in Aristotle's thought is a higher good—nobler and 'more divine'—than any particular goods of private persons: Nicomachean Ethics, 1094b.

122. Summa Contra Gentiles, III, 17.

123. Cf. David Hollenbach SJ, THE COMMON GOOD & CHRISTIAN ETHICS, Cambridge, UK, 2002, p. 4. The classical and medieval concept of common good involves a bond and sense of sharing that is immanent to the relationships that bring a community or society into being. Analogous secular concepts include 'general welfare', 'public interest', and 'public goods', although these tend to lack the ontological dimension of reciprocal interrelationships that reflect the intrinsically social nature of man. The idea of the common good, however, is challenged by pluralism and diversity in the understanding of what constitutes social goods, radical individualism, and the positing of 'equality' above common good. Nonetheless, a good rational case can be made for the relevance of this concept as a useful intellectual construct in light of those values in society that are in fact shared, including human rights, such as the rights to a safe environment, employment, housing, shelter, health and education, and security. Common adherence to these and similar values provides the basis for societal solidarity, as both pre-requisite and expression. Put another way, human rights are the moral claims of all persons to be treated, by virtue of their humanity, as participants in the shared life of the human community. Protection of human rights is part of the common good, not an individualistic alternative to the common good. Hollenbach, ibid, 159

124. Summa Theologica, II, i, q.90,3.

^{115.} *Ibid*.

125. This refers ultimately to all forms of intellectual property. For an introduction to the various forms of intellectual property (patents, design rights, trade marks, copyright, geographical indications, plant variety rights, etc.). See *What is Intellectual Property* and WIPO INTELLECTUAL PROPERTY HANDBOOK. Available at http://www.wipo.int/about-ip/en/ (accessed 11 December 2013).

126. Compendium, supra note 113, § 192.

127. These include, inter alia, Document of the Holy See, supra note 76 (this could be considered a foundational text); Pontifical Council for Justice and Peace, Trade, Development and the Fight Against Poverty. Some Reflections on the Occasion of the World Trade Organisation 'Millennium Round', 18 November 1999: http://www.vatican.va/roman_curia/pontifical_ councils/justpeace/documents/rc_pc_justpeace_doc_19991118_trade-devel_en.html; Statement to the Third Ministerial Conference of the World Trade Organisation, 2 December 1999: http://www.vatican.va/roman_curia/secretariat_state/1999/documents/rc_segst_19991202_wto_en.html; Intervention by H.E. Msgr. Diarmuid Martin to the Plenary Council of the World Trade Organisation on Trade Related-Aspects of Intellectual Property Rights, 20 June 2001, http://www.vatican.va/roman_curia/secretariat_state/documents/ rc_seg-st_doc_20010620_wto_en.html; Intervention of the Holy See at the World Trade Organisation, Address of H.E. Msgr. Diarmuid Martin, 20 December 2002: http:// www.vatican.va/roman_curia/secretariat_state/documents/rc_seg-st_doc_20021220_ martin-wto_en.html; Intervention by the Holy See at the Fifth Ministerial Conference of the World Trade Organisation (WTO), Address of Msgr. Frank J. Dewane, Cancun, Mexico, 13 September 2003: http://www.vatican.va/roman_curia/secretariat_state/2003/ documents/rc_seg-st_20030913_wto-cancun_en.html; Intervention by the Holy See at the Sixth Ministerial Conference of the World Trade Organisation (WTO), Address of H.E. Msgr. Silvano M. Tomasi, Hong Kong, 18 December 2005: http://www.vatican. va/roman_curia/secretariat_state/2005/documents/rc_seg-st_20051218_wto_en.html; Intervention by the Holy See at the General Assembly of the World Intellectual Property Organisation (WIPO), Address of H.E. Msgr. Silvano M. Tomasi, Geneva, 22 September 2008: http://www.vatican.va/roman_curia/secretariat_state/2008/documents/rc_segst_20080922_wipo_en.html; Intervention by the Permanent Observer of the Holy See at the 61st Session of the Commission of the United Nations on Human Rights on Access to Medication in the Context of Pandemics Such as HIV/AIDS, Tuberculosis and Malaria, Statement by Msgr. Silvano Maria Tomasi, Geneva, 29 March 2005: http://www.vatican. va/roman_curia/secretariat_state/2005/documents/rc_seg-st_20050329_tomasi-hivaids_en.html.

128. Pope John Paull II, *Centesimus annus*, 31. This can be contrasted with John Locke's natural right theory to property as found in the second of his Two Treaties of Government (1689). In Church teaching, however, the right is not absolute, as discussed below. 129. *Ibid*, 32.

130. Document of the Holy See, supra note 76, § 2. The whole paragraph reads: "The raison d'être of intellectual property protection systems is the promotion of literary, scientific or artistic production and inventive activity for the sake of the common good. That protection officially attests the right of the author or inventor to recognition of the ownership of his work and to a degree of economic reward, at the same time as it serves the cultural and material progress of society as a whole. The ultimate cause that intellectual property protection works for is the recognition of the dignity of man and his work, in its double dimension, namely as a medium of expression and growth of the individual personality and as a contribution to the common good." References are made to the Universal Declaration of Human Rights, Article 27, 2; International Covenant on Economic, Social and Cultural Rights, Article 15.1(c); Pope John Paul II, *Laborem exercens*, §§ 5, 6, 9 & 15. 131. It is important to note that intellectual property law may deny ownership even of independent intellectual creativity where a legal right has been established by another unknown party. Indeed, enjoyment of the fruit of one's own intellectual labour may even

be prohibited as an infringement of the right of another. This may occur where a patent claim has been made giving the author an absolute right to forbid without authorisation (and usually payment) another party who may subsequently have come up with the same idea without knowing about the patent. This illustrates the difference, and the necessary nuances that need to be made, when trying to establish a 'theology' of intellectual property that is based on an analogy with real estate property.

132. Pope John Paul II, Laborem exercens, 14.

133. Centesimus annus, 31.

134. Second Vatican Council, Gaudium et Spes, 69.

135. See here the insightful study of Thomas C. Berg, *Intellectual Property and the Preferential Option for the Poor*, JOURNAL OF CATHOLIC SOCIAL THOUGHT, Vol. 5, 2007. Available at http://papers.ssrn.com/abstract=966681.

136. Compendium, supra note 113, §§ 171-172.

137. Ibid.

138. Ibid, 182.

139. Cf. Centesimus annus, 32; Compendium, supra note 113, § 283.

140. Cf. Compendium, supra note 113, § 179.

141. Pope John Paul II, *Sollicitudo Rei Socialis*, 42. This language is borrowed from residential property sales in which the buyer borrows some of the funds needed for the purchase. For an analysis of this concept in the thought of John Paul II, see Edward J. O'Boyle, *Social Mortgage: Origins, Questions, Norms*, JOURNAL OF MARKETS AND MORALITY, 2012. Available at http://www.mayoresearch.org/files/SOCIAL%20MORTGAGEjan302012. pdf. See also David Carey, *The Social Mortgage of Intellectual Property*, CHRISTIAN SOCIAL THOUGHT SERIES 11, 2007, pp. 59–62; Intervention by H.E. Msgr. Diarmuid Martin, *supra* note 127, § 11: "The Holy See, consistent with the traditions of Catholic social thought, underlines that there is a 'social mortgage' on all private property, namely, that the reason for the very existence the institution of private property is to ensure that the basic needs of every man and woman are met and sustained. This 'social mortgage' on private property must also be applied today to 'intellectual property' and to 'knowledge'...

. . The law of profit alone cannot be applied to that which is essential for the fight against hunger, disease and poverty. Hence, whenever there is a conflict between property rights, on the one hand, and fundamental human rights and concerns of the common good, on the other, property rights should be moderated by an appropriate authority, in order to achieve a just balance of rights."

142. Intervention by the Holy See at the Fifth Ministerial Conference, *supra* note 127.

143. Compendium, supra note 113, § 195.

144. On the improper use of goods, the 4th century Eastern Church Father St Basil the Great, for example, writes: "The person who can cure such an infirmity and because of avarice refuses his medicine, can with reason be condemned as a murderer." *Homily Delivered in Times of Famine and Drought*, 7. Cited in Michael, *Learning, infra* note 146. 145. "Utrum liceat alicui rem aliquam quasi propriam possidere." *Summa Theologiae II-II*, q.66, a.2

146. *Ibid*. See Gabriel J. Michael, *Learning from the ethics of obligation*, CATHOLIC THOUGHT AND INTELLECTUAL PROPERTY, p. 13 (available at http://ssrn.com/abstract=1349769), on which I am basing this part of my analysis, which notes that "Thomas' justifications are almost a medieval forerunner to the modern notion of the 'tragedy of the commons', the idea that resources held in common will inevitably be damaged or destroyed by overuse of individuals because each person attends only to their own individual interests."

147. Summa Theologica at pt. 2.2, 66 art 2

148. Ibid, art 7

149. Carey, The Social Mortgage, supra note 141, p. 16.

150. Michael, Learning, supra note 146, pp. 7-8.

151. Seen in the work, for example, of Eric T Freyfogle, Private Ownership and Human

Flourishing With Notes on a Progressive Theory of Property (pro manuscripto), which advocates "an understanding of property as a dynamic, flexible, evolving social institution; one that can bring both gains and costs; one that can promote both flourishing and exploitation."

152. "So God created mankind in his own image, in the image of God he created them; male and female he created them. God blessed them and said to them, 'Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish in the sea and the birds in the sky and over every living creature that moves on the ground.' "

153. *Homily LXXVII on the Gospel of Matthew, 3*. The Nicene and Post-Nicene Fathers, Vol X, 1986, 465–66.

154. Cf. Michael, Learning, supra note 146, pp. 22, 24-25.

155. The reported examples of social irresponsibility led Pope Benedict XVI to state in *Caritas in veritate:* "On the part of rich countries there is excessive zeal for protecting knowledge through an unduly rigid assertion of the right to intellectual property, especially in the field of health care."

156. Cf. *Compendium, supra* note 113, § 189; Berg, *Intellectual Property, supra* note 135, pp. 10–12.

157. Centesimus annus, 43

158. *Ibid.* Elsewhere, in his Address for the Jubilee of the Agricultural World, 11 November 2000, Pope John Paul II states: "The Church obviously has no 'technical' solutions to offer. Her contribution is at the level of Gospel witness and is expressed in proposing the spiritual values that give meaning to life and guidance for practical decisions, including at the level of work and the economy." Available at http://www.vatican.va/holy_father/ john_paul_ii/speeches/documents/hf_jp-ii_spe_20001111_jubilagric_en.html.

159. *Document of the Holy See, supra* note 76, § 10. Point d) in the same paragraph also expresses a common social concern: "assurance that patents for biological discoveries do not constitute an undue obstacle to subsequent research and scientific teaching." Point c) mentions human genetic resources.

160. Pope Francis, Evangelii gaudium, 53-54.

PART TWO

Recent Texts and Interventions by the Magisterium on Intellectual Property and Genetic Resources

INTRODUCTION TO MAGISTERIAL DOCUMENTS AND HOLY SEE INTERVENTIONS ON GENETIC RESOURCES

JOSEPH GRØDAHL BIEVER

ll too often, "the fruits of scientific progress, rather than being placed at the service of the entire human community, are distributed in such a way that unjust inequalities are actually increased or even rendered permanent. The Catholic Church has consistently taught that there is a 'social mortgage' on all private property, a concept which today must be also applied to 'intellectual property' and to 'knowledge'. The law of profit alone cannot be applied to that which is essential for the fight against hunger, disease, and poverty."1

These words of John Paul II continue to ring true. Through both private and public investment, we continue to see incredible scientific advancement in the understanding and use of biological resources, the applications of which hold great social value and potential to improve the lives of people, particularly in the medical, pharmaceutical, and agricultural fields. To continue incentivizing such innovation and to spread the benefits of these innovations widely, just legal frameworks for intellectual property protection play an essential role. Yet while we recognise the value of intellectual

property protection, the scope of those rights must always be measured in relation to greater principles of justice in service of the common good. In the important discussion over the scope of these rights, the Catholic Church in its official voice plays the role not of offering "technical" solutions, but of "proposing the spiritual values that give meaning to life and guidance for practical decisions, including at the level of work and the economy."2 Other parts of this publication explore how these principles of justice might be applied in the debate over the patenting of genetic resources, but the task of this introduction is to lay out the values and principles which the Church asserts ought to guide this debate.

he Church recognises two important objectives in the legal framework of intellectual property rights: creating incentives for innovation and spreading the benefits of the innovations as widely as possible.³ The scientific progress in the understanding and adaptation of genetic resources has led to commercial and social value potential in medical, pharmaceuticals, agriculture, and other fields. This may, for instance, include a

¶ Relevant issues

drought-resistant crop variety or a plant extract with medicinal properties. Legal frameworks and policies which incentivise innovation can serve the common good, in part because the potential for future profit has motivated private interests to invest in research on genetic resources and discover or create new applications of these resources. Yet justice may require that the products of scientific progress, particularly genetic resources, serve everyone equally and not only the sectors with the greatest acquisitive potential. The fundamental principle of the common good must be applied to ensure that progress in researching genetic resources does in fact benefit all mankind, serving the pursuit of the common good.

"The issue of ownership and use of new technologies and knowledge- which in our day constitute a particular form of property that is no less important than ownership of land or capital-becomes significant in this perspective. These resources, like all goods, have a universal destination; they too must be placed in a context of legal norms and social rules that guarantee that they will be used according to the criteria of justice, equity and respect of human rights. The new discoveries and technologies, thanks to their enormous potential, can make a decisive contribution to the promotion of social progress; but if they remain concentrated in the wealthier countries or in the hands of a small number of powerful groups, they risk becoming sources of unemployment and increasing the gap between developed and underdeveloped areas."⁴

The Church offers guidance in how we are to understand the principles at stake. We must look to the nature of property and the universal destination of goods, the purpose for intellectual property protection, and the rights of traditional communities and developing countries. At all times we must focus on the underlying principle of service to the common good.

he "goods of this world are originally meant for all. The right to private property is valid and necessary, but it does not nullify the value of this principle. Private property, in fact, is under a 'social mortgage', which means that it has an intrinsically social function, based upon and justified precisely by the principle of the universal destination of goods."⁵

A discussion of the patentability of genetic resources must begin with understanding the nature of private property, including the granting of intellectual property rights. "The right to private property, acquired or received in a just way, does not do away with the original gift of the earth to the whole of mankind. The universal destination of goods remains primordial, even if the promotion of the common good requires respect for the right to private property and its exercise."6 Thus the respect for the exercise of private property rights is clearly subordinated to the common good. It serves as

¶ A 'social mortgage' on all property

a means to an end rather than an end unto itself. Individuals do not exist solely to serve their own individual interests, and all goods, all resources entrusted to particular persons, are subject to a 'social mortgage' based upon the principle of the universal destination of goods. This principle is explained thus: "God destined the earth and all it contains for all men and all peoples so that all created things would be shared fairly by all mankind under the guidance of justice tempered by charity."⁷

The respect for private property rights is indeed a just cause, worthy of upholding and defending. Yet this respect for private property rights, including intellectual property rights, must always be understood as a means to an end. Private property rights are not unconditional, absolute rights, but rather an instrument, a means by which to serve the common good. The ability of these rights to be at the service of the common good can be threatened at both ends by excessive tendencies of the State or of "a blurred, economistic view of life":

"Private property, ultimately, is for no one an unconditional, absolute right but rather, and above all, an instrument with which to achieve effective access to property destined for the whole of mankind, ensuring at the same time that all individuals and all families have their essential environment of freedom and just autonomy in the face of all kinds of totalitarian tendency — both that which comes from the State and that which is attributable to a blurred, economistic view of life."8

Stemming from the principle of the universal destination of goods, all people have the right to draw from the resources available to provide for their subsistence and growth.⁹ It is because of this right that legal instruments for the protection of private property rights, including intellectual property rights, cannot lose sight of the universal destination of goods, the 'social mortgage' to which all private property is subject.

he "ultimate cause that intellectual property protection works for is the recognition of the dignity of man and his work, in its double dimension, namely as a medium of expression and growth of the individual personality and as a contribution to the common good."¹⁰

The legal framework for the protection of intellectual property rights serves the just purpose of promoting and protecting inventive activity, always bearing in mind that the primary purpose of this protection is the service of the common good. "The raison d'être of intellectual property protection systems is the promotion of literary, scientific or artistic production and inventive activity for the sake of the common good."11 Policies and laws must maintain this understanding, oriented toward the ultimate cause for the recognition of the dignity of man and his work, both as an expression of the inventor and as a contribution to the common good. However, the Magisterium states: "On the part of rich countries there is excessive zeal for protecting

¶ The purpose of intellectual property protection

knowledge through an unduly rigid assertion of the right to intellectual property."¹² It is such imbalances in understanding intellectual property rights which must be addressed, calling for the protection of intellectual property to always be in the service of the common good.

Scientific research, motivated often by commercial interest, to derive beneficial uses for genetic resources is indeed praiseworthy. In light of the tremendous scientific progress in the applications of genetic resources, the role of intellectual property rights must clearly be recognised. Some level of recognition of such rights, intended to encourage and protect investments of time and capital into promising research, may indeed be just and "may promote the common good by accelerating the search for solutions to problems in the modern world."13 For example, in the pursuit of new medical treatments, "special protections are needed to ensure that producers are able to recover their massive expenditures on researchincluding just wages for scientists and others who carry out such research, as well as compliance with regulations that ensure the safety of their products."14

But the Holy See recognises that the acceleration of "the search for solutions to problems in the world" which intellectual property rights protection may promote, has been accompanied by an acceleration in the influence of investment capital to transform 'intellectual property' from an economic asset and compensation for individual innovators into a capital asset or production factor for industry:

"The ever-strengthening bond between applied science and industry, which is particularly strong in certain leading sectors (industrial use of applications and results of knowledge of the structure of matter and life mechanisms) has caused "intellectual property" to evolve from an economic asset and remuneration for individuals (men or women) into a capital asset or production factor. Thus the capacity of companies for scientific research (undertaken on their own or in association with academic bodies) and the corresponding legal protection of the intellectual heritage that results have become one of the most important parameters governing their economic strength and their ability to attract investment."15

While this creates greater complexity in understanding the various actors and interests involved in researching genetic resources and seeking corresponding intellectual property rights protection, it does not alter the underlying principles, the ultimate cause of intellectual property rights protection as a mechanism in service of the common good. "The intellectual property rights system must exist not only to protect creative and innovative impetus but also and primarily to serve the common good of the human family. As a universal common good, intellectual property demands that control mechanisms should accompany the logic of the market."16 Thus, the Church recognises

the value of intellectual property rights protection while pointing to the purpose of such rights and to the effects of imbalances in the current system of intellectual property rights protection, as it impacts traditional communities, developing countries, and in general impacts the common good.

The patent regime for genetic resources must respect the rights of traditional communities to use and protect those genetic resources to which they have a claim, as well as to share in the benefits of exploitation of those genetic resources whose development derives at least in part from traditional knowledge those communities have collectively accumulated over generations. It must also recognise the moral duty to include developing countries in the benefits of new technological innovation in the research of genetic resources, particularly as these innovations pertain to essential elements of life and development, namely agriculture (food) and medicine (health).

"The biological environment tends in addition to be closely associated with the culture of [traditional communities], and constitutes an integral factor of their identity and social cohesion. Such rights of native populations in the land and its fruits exist, and have to be protected, even where modern systems of property protection both movable and immovable property as well as intellectual property, do not contain elements that allow it to be recognized and protected to a sufficient extent."17

Respect for the rights of traditional communities in regard to IP protection of genetic resources requires a view of traditional knowledge as "a common asset of that same community, which has grown with small, anonymous contributions over a great many generations."18 Whatever agreements are made "should guarantee the achievement of equitable economic participation of native populations in the benefits deriving from the commercial exploitation of biological resources, and the promotion of effective means of ensuring respect for the collective ownership of traditional knowledge."19

Research on genetic resources in developed countries has developed new plant and seed varieties using in part the traditional knowledge of traditional communities in developing countries. Restrictions on the flow of this knowledge through intellectual property rights mechanisms have followed. This has impacted farmers' dependency on private firms, as well the costs they pay, for seeds, pesticides, and fertilizers. The impact of such an industrialised, capital-intensive agriculture on traditional communities, biodiversity, and developing countries requires careful evaluation.²⁰ Agreements for access to both genetic resources and traditional knowledge regarding those resources must be shaped by principles of justice, taking into account the relative positions of the various parties to the agreements. These agreements should neither become an opportunity for excessive rent-seeking, nor be tainted by

¶ Traditional communities and developing countries

an economic dictatorship of highly developed nations over the developing world.²¹

"The knowledge economy is increasingly becoming a driving force in the global economy. Thus there is a need to protect intellectual property rights as an incentive for innovation and technology creation, yet it is also important to ensure broad access to technology and knowledge especially for low-income countries. The new goods derived from progress in science and technology are key to world trade integration. Improved technology and know-how transfer from the developed countries is necessary so that less-developed countries can catch-up and gain international trade competitiveness."22

Understanding that the protection of intellectual property rights "as an incentive for innovation and technology creation" is subject to the 'social mortgage' on all property, the fruits of such innovation are therefore subject to the universal destination of goods, and cannot be withheld from developing countries. Indeed, "States, in accord with the duty of solidarity and giving due consideration to the rights of the developers of such technology, have an obligation to ensure a just and equitable transfer of appropriate technology which is favourable to sustaining the development process and protecting the environment."23 Advancement in the understanding and use of genetic resources, which may be promoted by a level of protection for intellectual property rights, must contribute to the common good, which includes developed and developing countries

alike.

The role of intellectual property rights protection is clearly recognised for its contribution to promoting research and innovation with the potential to contribute greatly to the common good. The Church recognises the role of private property and private enterprise as actors who may contribute to the common good:

"Successful businesses identify and seek to address genuine human needs at a level of excellence using a great deal of innovation, creativity and initiative. They produce what has been produced before but often-as in the arenas of medicine, communication, credit, food production, energy, and welfare provision-they invent entirely new ways of meeting human needs. And they incrementally improve their products and services, which, where they are genuinely good, improve the quality of people's lives."24

Intellectual property rights protection has an important role to play in promoting scientific research and contributing to the common good. Bearing in mind the 'social mortgage' to which any such intellectual property rights are subject, the interest and rights of a variety of actors must be properly balanced to ensure that such IP protection does contribute to the common good. These rights include:

• The rights of the native populations that have developed the traditional knowledge and

¶ The way forward

the expressions of folklore or who occupy the territories from which the genetic material comes. (e.g. the right to be fully informed on a given project and the right to fair participation in the benefits)

- The right of the countries to the resources associated with biological diversity.
- The right of the inventor or discoverer to remuneration for any intellectual value that he may have added.
- The possible rights and interests of companies.
- Society's right to or interest in the stimulation of inventive activity and the development of science and the arts.

NOTES

1. John Paul II, Address to 'Jubilee 2000 Debt Campaign', 23 September 1999.

- 3. H.E. Mgr. Silvano M. Tomasi, Intervention by the Holy See at the Sixth Ministerial
- Conference of World Trade Organization, 18 December 2005. WT/MIN(05)/ST/164. *Compendium of the Social Doctrine of the Church*, Pontifical Council for Justice and

Peace, 2004, § 283.

5. John Paul II, Solicitudo rei socialis, 42.

6. Catechism of the Catholic Church, § 2403.

7. Second Vatican Council, Gaudium et spes, 69.

8. Holy See, Document of the Holy See on Intellectual Property and Genetic Resources, Traditional Knowledge and Fully 2(April 2001, § 8, WIDO/CPTVF/IC/1/7

Traditional Knowledge and Folklore, 26 April 2001, § 8. WIPO/GRTKF/IC/1/7

9. *Ibid*.

- 10. *Ibid.*, § 2.
- 11. *Ibid*.

12. Benedict XVI, Caritas in veritate, 22.

13. H.E. Mgr. Diarmuid Martin, Intervention of the Holy See to the Plenary Council of the WTO on Trade-Related Aspects of Intellectual Property Rights, 20 June 2001.

14. *Ibid*.

15. Document of the Holy See, supra note 8, § 4.

16. Mgr. Frank J. Dewane, Intervention by the Holy See at the Fifth Ministerial Conference of World Trade Organization, 13 September 2003. WT/MIN(03)/ST/147

17. Document of the Holy See, supra note 8, § 5.

- 18. *Ibid*, § 3.
- 19. *Ibid*, § 10.

20. Pontifical Council for Justice and Peace, *Trade, Development and the Fight Against Poverty. Some Reflections on the Occasion of the World Trade Organisation 'Millennium Round'*, 18 November 1999.

21. Paul VI, Populorum progressio, 59.

22. H.E. Mgr. Silvano M. Tomasi, Intervention by the Holy See at the Sixth Ministerial Conference of World Trade Organization, 18 December 2005. WT/MIN(05)/ST/164.

23. Pontifical Council for Justice and Peace, Trade, supra note 20.

24. Pontifical Council for Justice and Peace, *Vocation of the Business Leader: A Reflection*, November 2012, § 40.

^{2.} John Paul II, Address to 'Jubilee of the Agricultural World', '11 November 2000.

CARITAS IN VERITATE

POPE BENEDICT XVI

29 June 2009, § 22.

Oday the picture of development has many overlapping layers. The actors and the causes in both underdevelopment and development are manifold, the faults and the merits are differentiated. This fact should prompt us to liberate ourselves from ideologies, which often oversimplify reality in artificial ways, and it should lead us to examine objectively the full human dimension of the problems. As John Paul II has already observed, the demarcation line between rich and poor countries is no longer as clear as it was at the time of Populorum progressio. The world's wealth is growing in absolute terms, but inequalities are on the increase. In rich countries, new sectors of society are succumbing to poverty and new forms of poverty are emerging. In poorer areas some groups enjoy a sort of "superdevelopment" of a wasteful and consumerist kind which forms an unacceptable contrast with the ongoing situations of dehumanizing deprivation. "The scandal of glaring inequalities" continues. Corruption and illegality are unfortunately evident in the conduct of the economic and political class in rich countries, both

old and new, as well as in poor ones. Among those who sometimes fail to respect the human rights of workers are large multinational companies as well as local producers. International aid has often been diverted from its proper ends, through irresponsible actions both within the chain of donors and within that of the beneficiaries. Similarly, in the context of immaterial or cultural causes of development and underdevelopment, we find these same patterns of responsibility reproduced. On the part of rich countries there is excessive zeal for protecting knowledge through an unduly rigid assertion of the right to intellectual property, especially in the field of health care. At the same time, in some poor countries, cultural models and social norms of behaviour persist which hinder the process of development. (...)

MESSAGE OF THE HOLY FATHER TO THE GROUP JUBILEE 2000 DEBT CAMPAIGN

POPE JOHN PAUL II

Rome, 23 September 1999

Just one hundred days before the beginning of the year 2000, I am happy to extend warm greetings to the leaders and major supporters of the "Jubilee 2000" Debt Campaign. I am particularly grateful for your presence during these days at a series of meetings, in the context of the forthcoming Great Jubilee, on the heavy debt burdens of the poorest countries.

In the Bible, the Jubilee was a time in which the entire community was called to make efforts to restore to human relations the original harmony which God had given to his creation and which human sinfulness had damaged. It was a time to remember that the world we share is not ours, but is a gift of God's love. As human beings, we are only the stewards of God's plan. During the Jubilee, the burdens which oppressed and excluded the weakest members of society were to be removed, so that all could share the hope of a new beginning in harmony, according to God's design.

Today's world has need of a Jubilee experience. So many men, women and children are unable to realize their God-given potential. Poverty and gross inequalities remain widespread, despite enormous scientific and technological progress. All too often, the fruits of scientific progress, rather than being placed at the service of the entire human community, are distributed in such a way that unjust inequalities are actually increased or even rendered permanent.

The Catholic Church looks at the situation with great concern, not because she has any concrete technical model of development to offer, but because she has a moral vision of what the good of individuals and of the human family demands. She has consistently taught that there is a "social mortgage" on all private property, a concept which today must also be applied to "intellectual property" and to "knowledge". The law of profit alone cannot be applied to that which is essential for the fight against hunger, disease and poverty.

Debt relief is, of course, only one aspect of the vaster task of fighting poverty and of ensuring that the citizens of the poorest countries can have a fuller share at the banquet of life. Debt relief programmes must be accompanied by the introduction of sound economic policies and good governance. But, just as important if not more so, the benefits which spring from debt relief must reach the poorest, through a sustained and comprehensive framework of investment in the capacities of human persons, especially through education and health care. The human person is the most precious resource of any nation or any economy.

Debt relief is, however, urgent. It is, in many ways, a precondition for the poorest countries to make progress in their fight against poverty. This is something which is now widely recognized, and credit is due to all those who have contributed to this change in direction. We have to ask, however, why progress in resolving the debt problem is still so slow. Why so many hesitations? Why the difficulty in providing the funds needed even for the already agreed initiatives? It is the poor who pay the cost of indecision and delay.

I appeal to all those involved, especially the most powerful nations, not to let this opportunity of the Jubilee Year pass, without taking a decisive step towards definitively resolving the debt crisis. It is widely recognised that this can be done.

I pray that this Jubilee Year 2000, commemorating the birth of our Lord Jesus Christ, will indeed be a moment of promise and of hope, especially for our brothers and sisters who still suffer abject poverty in our affluent world. Together we can do much, with God's help. May his blessings be upon you and your loved ones.

JUBILEE OF THE AGRICULTURAL WORLD

ADDRESS OF JOHN PAUL II

11 November 2000

am pleased to be able to meet you on the occasion of the Jubilee of the Agricultural World, for this moment of celebration and reflection on the present state of this important sector of life and the economy, as well as on the ethical and social perspectives that concern it.

I thank Cardinal Angelo Sodano, Secretary of State, for his kind words expressing the sentiments and expectations of all those present. I respectfully greet the dignitaries, including those of different religious backgrounds who are representing various organizations and are present this evening to offer us the contribution of their testimony.

The Jubilee of farmers coincides with the traditional "Thanksgiving Day" promoted in Italy by the praiseworthy Confederation of Farmers, to whom I extend my most cordial greetings. This "Day" makes a strong appeal to the perennial values cherished by the agricultural world, particularly to its marked religious sense. To give thanks is to glorify God who created the land and its produce, to God who saw that it was "good" (Gn 1: 12) and entrusted it to man for wise and industrious safekeeping.

Dear men and women of the agricultural world, you are entrusted with the task of making the earth fruitful. A most important task, whose urgent need today is becoming ever more apparent. The area where you work is usually called the "primary sector" by economic science. On the world economic scene, your sector varies considerably, in comparison to others, according to continent and nation. But whatever the cost in economic terms, plain good sense is enough to highlight its real "primacy" with respect to vital human needs. When this sector is underappreciated or mistreated, the consequences for life, health and ecological balance are always serious and usually difficult to remedy, at least in the short term.

The Church has always had special regard for this area of work, which has also been expressed in important magisterial documents. How could we forget, in this respect, Bl. John XXIII's Mater et Magistra? At the time he put his "finger on the wound", so to speak, denouncing the problems that were unfortunately making agriculture a "depressed sector" in those years, regarding both "labour productivity" and "the standard of living of farm populations" (cf. ibid., nn. 123-124). In the time between Mater et Magistra and our day, it certainly cannot be said that these problems have been solved. Rather it should be noted that there are others in addition, in the framework of new problems stemming from the globalization of the economy and the worsening of the "ecological question".

The Church obviously has no "technical" solutions to offer. Her contribution is at the level of Gospel witness and is expressed in proposing the spiritual values that give meaning to life and guidance for practical decisions, including at the level of work and the economy.

Without doubt, the most important value at stake when we look at the earth and at those who work is the principle that brings the earth back to her Creator: the earth belongs to God! It must therefore be treated according to his law. If, with regard to natural resources, especially under the pressure of industrialization, an irresponsible culture of "dominion" has been reinforced with devastating ecological consequences, this certainly does not correspond to God's plan. "Fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air" (Gn 1: 28). These famous words of Genesis entrust the earth to man's use, not abuse. They do not make man the absolute arbiter of the earth's governance, but the Creator's "coworker": a stupendous mission, but one which is also marked by precise boundaries that can never be transgressed with impunity.

This is a principle to be remembered in agricultural production itself, whenever there is a question of its advance through the application of biotechnologies, which cannot be evaluated solely on the basis of immediate economic interests. They must be submitted beforehand to rigorous scientific and ethical examination, to prevent them from becoming disastrous for human health and the future of the earth.

The fact that the earth belongs constitutively to God is also the basis of the principle, so dear to the Church's social teaching, of the universal destination of the earth's goods (cf. Centesimus annus, n. 6). What God has given man, he has given with the heart of a father who cares for his children, no one excluded. God's earth is therefore also man's earth and that of all mankind! This certainly does not imply the illegitimacy of the right to property, but demands a conception of it and its consequent regulation which will safeguard and further its intrinsic "social function" (cf. Mater et Magistra, § 111; Populorum progressio, § 23).

Every person, every people, has the right to live off the fruits of the earth. At the beginning of the new millennium, it is an intolerable scandal that so many people are still reduced to hunger and live in conditions unworthy of man. We can no longer limit ourselves to academic reflections: we must rid humanity of this disgrace through appropriate political and economic decisions with a global scope. As I wrote in my Message to the Director-General of the FAO on the occasion of World Food Day, it is necessary "to uproot the causes of hunger and malnutrition" (cf. L'Osservatore Romano English edition, 1 November 2000, p. 3). As is widely known, this situation has a variety of causes. Among the most absurd are the frequent conflicts within States, which are often true wars of the poor. And there remains the burdensome legacy of an often unjust distribution of wealth in individual nations and at the world level.

This is an aspect which the celebration of the Jubilee brings precisely to our special attention. For the original institution of the Jubilee, as it is formulated in the Bible, was aimed at re-establishing equality among the children of Israel also by restoring property, so that the poorest people could pick themselves up again and everyone could experience, including at the level of a dignified life, the joy of belonging to the one people of God.

Our Jubilee, 2,000 years after Christ's birth, must also bear this sign of universal brotherhood. It represents a message that is addressed not only to believers, but to all people of good will, so that they will be resolved, in their economic decisions, to abandon the logic of sheer advantage and combine legitimate "profit" with the value and practice of solidarity. As I have said on other occasions, we need a globalization of solidarity, which in turn presupposes a "culture of solidarity" that must flourish in every heart.

Thus, while we never cease to urge the public authorities, the great economic powers and the most influential institutions to move in this direction, we must be convinced that there is a "conversion" that involves us all personally. We must start with ourselves. For this reason, in the Encyclical Centesimus annus, along with the discussions of the ecological question, I pointed to the urgent need for a "human ecology". This concept is meant to recall that "not only has God given the earth to man, who must use it with respect for the original good purpose for which it was given to him, but man too is God's gift to man. He must therefore respect the natural and moral structure with which he has been endowed" (Centesimus annus, § 38). If man loses his sense of life and the security of moral standards, wandering aimlessly in the fog of indifferentism, no policy will be effective for safeguarding both the concerns of nature and those of society. Indeed, it is man who can build or destroy, respect or despise, share or reject. The great problems posed by the agricultural sector, in which you are directly involved, should be faced not only as "technical" or "political" problems, but at their root as "moral problems".

It is therefore the inescapable responsibility of those who work with the name of Christians to give a credible witness in this area. Unfortunately, in the countries of the so-called "developed" world an irrational consumerism is spreading, a sort of "culture of waste", which is becoming a widespread lifestyle. This tendency must be opposed. To teach a use of goods which never forgets either the limits of available resources or the poverty of so many human beings, and which consequently tempers one's lifestyle with the duty of fraternal sharing, is a true pedagogical challenge and a very far-sighted decision. In this task, the world of those who work the land with its tradition of moderation and heritage of wisdom accumulated amid much suffering, can make an incomparable contribution.

I am therefore very grateful for this "Jubilee" witness, which holds up the great values of the agricultural world to the attention of the whole Christian community and all society. Follow in the footsteps of your best tradition, opening yourselves to all the developments of the technological era, but jealously safeguarding the perennial values that characterize you. This is also the way to give a hope-filled future to the world of agriculture. A hope that is based on God's work, of which the Psalmist sings: "You visit the earth and water it, you greatly enrich it (Ps 65: 10).

As I implore this visit from God, source of prosperity and peace for the countless families who work in the rural world, I would like to impart an Apostolic Blessing to everyone at the end of this meeting.

STATEMENT TO THE THIRD MINISTERIAL CONFERENCE OF THE WORLD TRADE ORGANIZATION

ADDRESS OF THE HOLY SEE MISSION

2 December 1999

he Holy See is pleased to participate in the Third Ministerial Conference of the WTO, as it acknowledges the importance of a ruled-based Multilateral Trade System (MTS) for the world economy and for the development of each country. As an observer, the Holy See has been following with great interest the ongoing debate on the scope and objectives of the upcoming Millennium Round negotiations, and takes this opportunity to submit some concerns and suggestions on the issues at stake.

The initial implementation of the Uruguay Round agreements has shown significant progress made by developing countries in adopting policies of market liberalization, but poverty and marginalization have not been defeated. Nevertheless, the poorest countries (i.d. those in the U.N. LDC list and many other poor, small or transition economies), still hoping that trade could be a decisive help in their development, are struggling to adapt to the WTO rules and to the global trading system. The Holy See considers that the MTS will only be accomplished when such countries are able to integrate themselves within the international community, while keeping their ability to promote the human and sustainable development of their citizens.

The positive answer of developing countries to the propositions of the Marrakesh Act and of the Singapore and Geneva Conferences should find a corresponding response from the big economic powers in the promotion of a trade environment that is friendly to development and to the fight against extreme poverty. It is especially striking that the LDCs' share of international trade is still only about half of one per cent, having declined since 1990. Further efforts are needed therefore to ensure that all partners have the opportunity to benefit from open markets and the free flow of goods, services and capital. As Pope John Paul II wrote in the Encyclical Letter Centesimus Annus, "The poor ask for the right to share in enjoying material goods and to make good use of their capacity to work, thus creating a world that is more just and prosperous for all. The advancement of the poor constitutes a great opportunity for the moral, cultural and even economic growth of all humanity" (N.28). In his message to the Global Forum for Poverty Eradication, the Director- General of the WTO, Mr. Mike Moore, stated very clearly that "the objective of trade must be the lifting of living standards". The Holy See thus invites negotiators to take into account the needs of developing countries and the difficulties they face in gaining access to international markets.

The inability of LDCs and weak economies to take full advantage of the opportunities provided by the existing WTO Agreements includes, among other problems, a shortage of skilled personnel able to tackle the complexity of WTO working structures and rules, the inability to upgrade domestic regulations, weak institutional infrastructure (especially in sophisticated areas, such as intellectual property law), and the high cost of maintaining missions in Geneva. These constraints should be addressed through a substantial increase in the provision of all kinds of assistance (such as that supplied by the technical cooperation activities of WTO, UNCTAD and ITC) so that the negotiating capacity of these countries may be developed and sustained (Cfr. Pope John Paul II, Encyclical Centesimus Annus (1991), N. 59).

So far, LDCs and other poor countries have been unable to take advantage of the Dispute Settlement mechanism because of their lack of financial resources and paucity of legal expertise. Panels could be made more representative, by including experts from developed, developing and least developed countries. The proposed Legal Advisory Center should be established without further delay, in order to meet the needs of poor countries in terms of securing their rights through the use of the DSU.

Fast-track membership of WTO by those poor, small or transition economies which are not yet members could also be an important part of the efforts of the international community. A clear and simplified procedure could be established for potential members, so that they might be accepted within a year and not be subject to commitments that go beyond those of LDC Members of WTO.

improvement ofThe poor countries legal and managerial expertise will be void if not accompanied by measures designed to promote the substantive participation of their trade in the MTS. These measures should begin with the fulfilment of existing rules in ways that ensure an effective response to the concerns of developing countries. The implementation of the speand differential treatment cial provisions, while providing such countries with technical, legal and financial assistance, are a step in this direction. Viewed comprehensively, special and differential treatment goes beyond preferential tariffs and transition periods, and addresses key elements of economic growth and development - knowledge, technological skills and information.

Among the arrangements which

will further strengthen the trade position of LDCs and other weak countries, an agreement on obligatory duty-free and quota-free market access for all products originating in LDCs seems still very desirable, despite the difficulties implied in its implementation. The Holy See also hopes that the next negotiating round will meet the main expectations of developing countries, in order to promote development and poverty alleviation and to enable all countries, especially the weakest economies, to reap the full benefits of the MTS.

Liberalization of trade in agriculture, which is of great importance to developing countries that are food and raw material exporters, should not be accompanied by undesirable effects on net food-importing developing countries. The poorest countries should be able to take advantage of any further opening of agricultural markets, while keeping their ability to establish appropriate trade policies to promote their own production. Such a specific legal umbrella in favor of LDCs and NFIDCs should be complemented with all the necessary technical and financial assistance, bilateral and multilateral, to increase local food production and to assure food security.

Art. 66.2 of the TRIPs agreement was conceived to compensate the constraints imposed by the new intellectual property regime. Its provisions, therefore, need to be implemented in ways that promote the mobilization of science in favour of development. The poorest countries are subject to particular difficulties in terms of weather, soils, agriculture, basic health and tropical diseases which can only be overcome through a constant flow of specific knowledge. The provisions of the TRIPs should not impede rapid and cheap access to the means for production of essential drugs and to other medicines needed to face the main scourges suffered by the poorest countries' populations. Beyond the existing TRIPs, new legal tools which take into account both the due share of essential technology and the reasonable interests of patents and copyright owners will be helpful in overcoming the technological gap. Further scientific and political work should also be undertaken in order to devise ways of protecting and integrating in the MTS biodiversity, traditional knowledge, folklore and farmers' rights.1

There are some sensitive questions concerning developed countries, as well as middle income and poor countries, such as human rights, labor questions, environmental degradation, biotechnology and health which, notwithstanding their links with trade, will have their full solution beyond the confines of WTO. All of these need to be handled in a spirit of prudence and cooperation, while seeking a broad and long term consensus on the basics of human sustainable development.

Questions of human and labor rights deserve particular attention. The Holy See greatly appreciates the ILO Declaration on Fundamental Principles and Rights at Work, and considers it to be an appropriate response to the challenges presented by the globalized economy. Child labor, organized prostitution, slavery and forced labor, and the proscription of labor unions can never be part of national policy or be defended by a country's right to development (Cfr. Pope John Paul II, Encyclical Laborem Exercens (1981), N. 17). But, in order to facilitate full compliance with the principles enunciated in the ILO Declaration, rich countries need to avoid any kind of protectionism in the guise of the aforesaid principles.

The international debate should acknowledge the Multilateral Environment Agreements in ways that are fair, non-protectionist and able to cope with the most urgent problems of the poorest countries, so as to promote the conditions necessary for authentic human ecology (Cfr. Pope John Paul II, Encyclical Centesimus Annus (1991), N. 38). The economic cost of international environment management should be borne mainly by the richer countries, in order to avoid imposing on LDCs and weak economies additional burdens and strain.²

In addition, the beneficial insertion of LDCs, small, poor and transition economies into the global economy requires an innovative and consistent commitment to relieving the burden of international debt, and to renewing and increasing bilateral and multilateral ODA. This approach goes beyond the competence of WTO, but is necessary for the well-being of the MTS itself.

Finally, civil society is increasingly becoming an important player in global governance. The WTO has undertaken a series of initiatives in order to make the work of the organization more transparent and open towards civil society. However, the WTO has faced a series of constraints in this first phase of dialogue; among others, the lack of adequate personnel, funds and information for systematic contact with civil society groups.

Looking towards the future, it will be important for the WTO to build a more systematic and constructive dialogue with representative civil society groups and to devise mechanisms for permanent accreditation and regular consultation. Sharing the experiences of other international organizations, especially the United Nations system, could also be helpful at this stage. Special efforts should be made to include civic groups from developing countries and ensure a representative spectrum of organizations. NGOs could, for their part, stimulate debate on the issues at stake in the WTO and thus produce a more fruitful exchange at all levels.

NOTES

1. Cf. Convention on Biological Diversity, 5 June 1992.

2. Cf. Rio Declaration on Environment and Development, UNCED, 92. Principle N. 7.

ON INTELLECTUAL PROPERTY AND GENETIC RESOURCES, TRADITIONAL KNOWLEDGE AND FOLKLORE

DOCUMENT SUBMITTED BY THE HOLY SEE FOR THE FIRST SESSION OF THE IGC WIPO COMMITTEE

April 26, 2001

The purpose of this document from the Holy See is to contribute to the implementation of the mandate of the Intergovernmental Committee on Biological Resources, Traditional Knowledge and Folklore, following two directions of thought. First it contains some considerations on intellectual property in general and on the problems that will be considered by the Committee, which are located at the higher legal level of fundamental human rights (paragraphs 2 to 9). Secondly, following on from the above, some suggestions are made for the guidelines to be observed in the work that will be undertaken as from the first session (paragraph 10).

The raison d'être of intellectual property protection systems is the promotion of literary, scientific or artistic production and inventive activity for the sake of the common good. That protection officially attests the right of the author or inventor to recognition of the ownership of his work and to a degree of economic reward, at the same time as it serves the cultural and material progress of society as a whole. The ultimate cause that intellectual property protection works for is the recognition of the dignity of man and his work, in its double dimension, namely as a medium of expression and growth of the individual personality and as a contribution to the common good.¹

The classical protection framework for intellectual rights² always has as its ultimate reference point an innovative intellectual or artistic activity that is attributable to a specific natural person or legal entity and is definable and registrable by means of a series of technical means (writing, registration, multimedia dissemination, etc.). Such a legal system is not well suited, however, to the protection of any moral or economic right that may be derived from innovative or creative activities developed and refined throughout history, which are like the social manifestation of the work of several generations and a genius peculiar to communities, peoples or families. The intellectual manifestations of tradition or folklore nevertheless deserve recognition, because they correspond in all respects to the substantive concepts that afford entitlement to "classical" protection of intellectual property, as on the one hand they constitute a means of constructing and projecting the identity of the members of the community concerned, and on the other they are a common asset of that same community, which has grown with small, anonymous contributions over a great many generations.³

The ever-strengthening bond between applied science and industry, which is particularly strong in certain leading sectors (industrial use of applications and results of knowledge of the structure of matter and life mechanisms) has caused "intellectual property" to evolve from an economic asset and remuneration for individuals (men or women) into a capital asset or production factor. Thus the capacity of companies for scientific research (undertaken on their own or in association with academic bodies) and the corresponding legal protection of the intellectual heritage that results have become one of the most important parameters governing their economic strength and their ability to attract investment.

With regard to the use and exploitation of biological resources, applied microbiological science has highlighted the great social usefulness of those resources and of the products resulting from their industrial transformation, above all in the medical and pharmaceutical field, but also in other areas of biochemistry. This potential has in recent decades brought about a more and more intensive search for new biological resources and genetic materials,⁴ motivated more often than not by the aim of developing derivatives offering a favourable costbenefit ratio.

At the same time, the administrative practice of a number of industrialized countries concerning patents and the corresponding case law have evolved into a broad invention concept that encompasses not only novel creations of the human mind, but also the discovery of genetic material existing in nature, provided that it is possible to replicate it using a biochemical process - a sort of reverse engineering of the complex results of natural evolution.⁵ This legal development has made it possible to patent genetic components of plants, animals and human beings that possess biochemical or pharmaceutical properties of particular usefulness.

Many of the biological resources that possess great economic and social usefulness are located in territory inhabited since time immemorial by native communities within the jurisdiction of countries different from those in which the industrial development of the genetic material takes place and the patents are obtained. At the same time, it happens that those native communities already have some knowledge and make use of some of the biological properties covered by the patent. It has also to be recognized that ancestral concern for the soil on the part of indigenous communities generates a right to its use and usufruct, and it has also to be recognized that this right extends also to the plants and animals that go with the territory. The biological environment tends in addition to be closely associated with the culture of those peoples, and constitutes an integral factor of their identity and social cohesion. Such rights of native populations in the land and its fruits exist, and have to be protected, even where modern both movable and immovable property as well as intellectual property, do not contain elements that allow it to be recognized and protected to a sufficient extent.⁶

Other biological material susceptible of industrialization forms part of the genetic heritage of men and women, and especially the members of those native communities which, owing to their peculiar lifestyles, have in the course of generations developed specific genetic features. Any attempt at economic exploitation of such resources has to be strictly regulated, in order always to ensure full respect for personal dignity and freedom, which includes the right to be fully informed on a given project, the right to fair participation in the benefits, and also the right to object to the use of resources derived from their own body.7

Parallel to the problems of the rights deriving from the use and appropriation of genetic resources and associated knowledge, the interac-

tion between industrial companies and native populations raises the problem of defining and protecting folklore in order to avoid a situation where folklore creations become a commodity capable of being used by anyone at the expense of the interests and rights of the communities with which they originated. The disciplines of intellectual property and labor law have created a network of legal and social institutions whose aim is to defend the rights of individual authors, composers and performers to keep pace with the constant growth of corporate activity in the dissemination of artistic creations, but until now they have not succeeded in creating sufficient elements with which to protect the rights deriving from folklore creations.

In the case of the copyright law and patent law of the period before the 1980s, the two types of legal claim that the intellectual property system had to balance against each other were the right of the author or inventor to recognition of his authorship of the work and to remuneration on the one hand, and on the other hand the interest of society in stimulating intellectual innovations that were of general usefulness. The new legal panorama created, among other things, by the linking of intellectual property protection to international trade policies and by the extension of industrial property to certain scientific discoveries,8 includes a wider range of rights and interests.

What are at stake are the rights of the native populations that have developed the traditional knowledge and the expressions of folklore or who occupy the territories from which the genetic material comes, the right of the countries to the resources associated with biological diversity, the right of the inventor or discoverer to remuneration for any intellectual value that he may have added, the possible rights and interests of companies, society's right to or interest in the stimulation of inventive activity and the development of science and the arts, and finally a more general right of all mankind to be assured that the products of scientific progress will serve everyone equally and not only the sectors with the greatest acquisitive potential.9 The ethical challenge to be met is therefore that of reconciling the various rights and interests at stake in such a way that the legitimate economic interest does not compromise higher values such as the social function of inventions and knowledge and the rights of the peoples with which the knowledge and resources originate.

The Holy See advocates a unitary vision of law that is structured on the basis of fundamental human rights. According to that vision, the value of justice in any set of enactments has to be measured by the possibility of perpetuating it and reconciling it with such human rights. According to that conception, the correct determination of the scope of ownership rights has to be made in relation to another, higher principle of justice, which is the universal destiny of the products of creation.

All men and women of all nations

are entitled to have whatever they need for their subsistence and personal advancement, taking it from all the resources available at any given time in history. The provisions protecting private property cannot therefore ever lose sight of the common destiny of all goods, so much so that it has to be said that all private property is subject to a social encumbrance. Consequently, should there be an institutional conflict between acquired private rights and overriding community demands, it is for the public authorities to set about resolving it with active involvement on the part of individuals and social groups.

Private property, ultimately, is for no one an unconditional, absolute right but rather, and above all, an instrument with which to achieve effective access to property destined for the whole of mankind, ensuring at the same time that all individuals and all families have their essential environment of freedom and just autonomy in the face of all kinds of totalitarian tendency — both that which comes from the State and that which is attributable to a blurred, economistic view of life.¹⁰

It may be said that the classical intellectual property system, under the industrial property (patent) heading as well, included in its original conception the notion of a social encumbrance, manifested in the substantive and time limitations on the rights granted, and, in the case of patents, in the discretion of governments with regard to the choice of the industrial sectors to be protected, the free determination of the scope of the conditions of patentability, the various options for opposing patents and the compulsory license regime.¹¹

On the other hand, the present legislative tendency to include all industrial and commercial activities in the patent regime, together with the uniformization of intellectual property laws, brings with it the risk of total abandonment of the social function of intellectual property and of ever more emphasis on the immaterial-producer-good aspect, the latter having certain legal connotations that even go beyond the protection of the ownership of the material goods: the latter grants only the power to object to thirdparty ambitions to exercise prerogatives of ownership on goods of which one is the owner. Industrial property, meaning the patent, on the other hand, tends to grant, throughout the lifetime of the patent, the right to control each and every act of whatever person that entails a use of the patented knowledge, in any place within the jurisdiction or jurisdictions in which the patent is enforceable, and regardless of the subject matter affected by those acts or the social environment in which they take place. In addition, from the point of view of economic-dynamics, patents constitute a brake on free competition, manifested in the grant to their owners of discretionary power to control or charge for acts involving the content of the patent.

For these reasons, and with a view to ensuring that intellectual property always serves the common good,

case law and administrative practice should abide by prudent and restrictive rules in relation to the extension of their scope, allowing such extension only in cases of proven social usefulness. At the same time there is an urgent need to preserve the possibility of invoking where appropriate the "social encumbrance" mentioned earlier through the application, subject to respect for the rule of law, of the moderating elements devised by legal science and practice, such as compulsory licensing and the exclusion of protection for reasons of public policy and morality in the case of patents, or reasonable exceptions to copyright.12

With regard to the specific work of the Intergovernmental Committee, it would be desirable that new legal machinery be successfully created that is fully integrated in and consistent with the international provisions currently in force, and imposes on the legislation of all Member States of WIPO certain minimum protection requirements for those sectors whose rights and interests are not fully catered for in systems now in force.

In the case of biological resources, the Holy See considers that the proposed tasks (tasks A.1 to A.4) as a whole should result in the drafting of guidelines that guarantee the following objectives:

a) acceptance of the institution of the informed, free consensus of persons, peoples¹³ and States¹⁴ as a prerequisite of patenting and/or defence of industrial secrecy or trade secrets relating to such resources.

b) achievement of equitable eco-

nomic participation of native populations in the benefits deriving from the commercial exploitation of biological resources.¹⁵

c) in the case of human genetic resources obtained from populations or individuals, the integration in the legal institutions of intellectual property, in the appropriate manner, of international designations already existing that relate to biomedicine and human rights.¹⁶

d) assurance that patents for biological discoveries do not constitute an undue obstacle to subsequent research and scientific teaching.¹⁷

In the case of the protection of traditional knowledge, the results of work objectives B-1 to B-4 should be the promotion of effective means of ensuring respect for the collective ownership of traditional knowledge and full recognition and enforcement of the rights resulting from existing common law systems, also where appropriate going beyond the actual territorial scope or national borders.¹⁸

For the purposes of the effective protection of knowledge and folklore creations, the intergovernmental group should concern itself with the updating of the model provisions drawn up by WIPO and UNESCO,¹⁹ the drafting of indications de iure condendo on the protection of craft creations and the effective incorporation of both in national law (task C-1 and C-2).

NOTES

1. Universal Declaration of Human Rights, Article 27, § 2. International Covenant on Economic, Social and Cultural Rights, Article 15.1(c). Cf. John Paul II, Laborem exercens (LE) 1981, §§ 5, 6, 9, and 15.

2. Berne and Paris Conventions and other treaties administered by WIPO.

3. Cf. John Paul II, LE, §§ 3 and 10. Cf. also United Nations Conference on Environment and Development, Convention on Biological Diversity (CBD), 1992, Preamble, § 11; International Labour Organization (ILO), C169 Indigenous and Tribal Peoples Convention, 1989, Articles 4, § 1; 5(a)–(b); 7, § 1; etc. It is also important to be aware, in terms of fundamental principles and where appropriate, of the results of the work of the Working Group on Indigenous Populations of the Human Rights Commission Sub-Commission on Prevention of Discrimination and the Protection of Minorities (UN-ECOSOC).

4. Cf. WIPO/GRTKF/IC/1/3, March 16, 2001, "Matters Concerning Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore – An Overview," Annex 3, Prevalent Use of Relevant Terms.

5. Cf. Directive 98/44/EC of the European Parliament and Council of 6 July 1998 on the legal protection of biotechnological inventions, Articles 3 and 5; WIPO/GRTKF/IC/1/3, §§ 55–58.

6. Cf. ILO C169, Articles 13–18. Cf. Pontifical Council for Justice and Peace, Towards Better Land Distribution — the Challenge of Agrarian Reform, 1997, § 11. Pontifical Council for Justice and Peace, Indigenous Peoples in the Teaching of John Paul II, 1993, § 22.

7. Universal Declaration on the Human Genome and Human Rights, UNESCO,

1997, Articles 4, 5(b), and 10; Council of Europe, Convention on Human Rights and Biomedicine (CETS No. 164), 1997, Article 5.

8. Marrakesh Agreement Establishing the World Trade Organization, Annex IC: Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), Marrakesh, April 15, 1994; European Directive 98/44/EC, Articles 3 and 5, etc. Cf. also WIPO/ GRTKF/IC/1/3, §§ 55 to 61.

9. The latter point is the central theme of the controversy surrounding access to drugs and their connection with intellectual property, a matter that is not directly related to the purpose of the Intergovernmental Committee on Genetic Resources, Traditional Knowledge and Folklore.

10. Cf. John Paul II, Centesimus annus (CA), 1991, §§ 6 and 30; LE, § 14; Paul VI, Populorum progressio (PP), §§ 22 and 23; Vatican Council II, Pastoral Constitution Gaudium et Spes (GS), 1965, §§ 69–71.

11. On the application of the 'social encumbrance' concept to intellectual property, cf. John Paul II, Address to the Jubilee 2000 Debt Campaign, 23 September 1999; CA, §§ 31–33; Message to the United Nations Special Session on Development (UNSSD), August 25, 1980, §§ 2 and 7, L'Osservatore Romano, August 27, 1980.

12. These legal institutions have also been embodied in the provisions of the TRIPS Agreement, see Article 31 on compulsory licensing, footnote 6 to Article 28 and Article 6 on the exhaustion of rights, Articles 7 and 66.2 on the promotion of development and technology transfer, Article 27.2 on the exclusion of patents on grounds of morality or public policy, and Article 13 on reasonable exceptions to copyright.

13. ILO C169, Articles 13 and 15; CBD, Article 8(j).

14. CBD, Article 15.5.

15. CBD, Article 8(j), in fine. Cf. WIPO/GRTKF/IC/1/3, §§ 42–47.

16. Universal Declaration on the Human Genome and Human Rights, Articles 4, 5(b), and 10; CETS No. 164, Article 5.

17. Universal Declaration on the Human Genome and Human Rights, Articles 4 and 13– 15. WIPO/GRTKF/IC/1/3, IV.A.4 Protection of Biotechnological Inventions, including certain related administrative and procedural issues, §§ 55–60.

18. Cf WIPO/GRTKF/IC/1/3, §§ 63–87; ILO C169, Articles 5(b), 6(c), 7(1) and (4), 13(1), 23, 32.

19. UNESCO-WIPO Model Provisions (1982).

INTELLECTUAL PROPERTY AND ACCESS TO BASIC MEDICINES

INTERVENTION BY H.E. MSGR. DIARMUID MARTIN AT THE PLENARY COUNCIL OF THE WTO ON TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS

20 June 2001

▲ he AIDS crisis, together with the worrying return and diffusion of older infectious diseases, such as malaria and tuberculosis, constitutes a global disaster of dramatic magnitude. Most poor people suffering from these diseases receive only very inadequate health care. In so many of the poorest countries, lack of basic medicines together with poor health infrastructures, prevents an appropriate response to urgent public health needs. A heavy burden of disease has considerable negative effects on economic development. A reduction in disease, on the other hand, promotes human well-being, with a consequent improvement in the quality of those human resources which are the essential driving force of the what should be the fundamentally pro-development stance of the WTO.

The Holy See is aware that the

availability of medicines is not the only aspect of access to health. It is, however, an essential aspect. Without access to essential medicine, there is no cure at all! Access to basic medicines depends on a series of factors, such as efficient infrastructure and logistics, informed drug choice and use, adequately controlled production, research and development aimed at specific diseases. Accessible price, however, always remains a determinant factor.

The high price of new drugs seems to be determined both by the burden of research and development of the product itself and by the role each medicine plays in the maintenance of a complex research and development structure. It is not possible, however, ethically to justify a rationale of fixing the highest possible prices in order to attract investors and to maintain and strengthen research, while leaving aside consideration of fundamental social factors. To condition the international reaction to any other natural or humanmade disaster (such as earthquakes, floods, accidents or terrorism) on the victims being able to pay for the treatment and to contribute to the research and development of new assistance devices, would rightly be considered a crime.

The legal protection of intellectual property, especially through patents, gives to the patentees monopoly rights over the product or process, during the patent life-span. Such a right may indeed allow a patentee to produce and supply the product only when and where it is possible to recover, through pricing policies, the costs of the investments contained in its development, as well as the expected revenues, while disregarding those who cannot afford the product prices. Within a open free trade system, intellectual property rights constitute an exceptional monopoly regime. As an exception within a legal regime, its use must be narrowly interpreted and must take due account of and, where necessary be subordinated to, other important principles. IP legal theory and practice have, in fact, created regimes, such as compulsory licences, to curb social/patent abuses. Compulsory licenses have thus been included in the TRIPS framework, to be used as remedies in situations of national emergency or other circumstances of extreme urgency, provided that such mandatory uses respect the rule of law and preserve some essential rights of the patent owner.

It must, of course, be recognized that prices are not the only component contributing to the lack of access to health, and that IP protection is necessary for progress and for the just compensation of researchers and producers. But in order to cope with a world health emergency, IP regimes must be integrated into a broader framework. The unity of humankind and the universality of human rights (among which the right to health) requires that all the economic and political actors involved (international organizations, governments, private foundations, corporations and NGOs) work together, pooling their differentiated responsibility for resolving a global crisis, leaving aside narrow individual or sectorial interest.

In the case of medicines, the supply stakeholders (scientific institutions, pharmaceutical companies and the governments of developed countries) should work together to ensure an adequate supply of urgently needed drugs at prices adequate to the cost of living in a particular country, especially LDCs or HIPCs countries. They should also be open and flexible in an equitable manner to the granting of voluntary licenses for import, production and distribution of basic drugs. They should not create obstacles to national production of drugs in third countries; they should where possible help them, rather, to develop such production in ways that are consistent with their IP duties. Compulsory licenses and other safeguards, as worded in TRIPS, should however be maintained, because they are a national safeguard against eventual imperfections of the IP enforcement.

Full and efficient universal access to basic medicines will most likely require the enactment of an innovative differential pricing system, which can still preserve the incentive for future research and development. Luxury and non-essential pharmaceutical products, for example, such as cosmetics, could well share a greater part of the burden of research and development of essential medicines.

A broad-based commitment of solidarity is the best way to prevent poor countries from falling into the temptation of weakening the intellectual property rights framework.

The solution to the problem of access to basic medicines is far beyond the mandate and the means of the Council for TRIPS. It is the common responsibility of many other international organizations as well as national governments, and in an appropriate manner also of the private sector. However, the Council for TRIPS could make a fundamental contribution, by means of an authoritative interpretation of the TRIPS rules: 1. consistent with a unified vision of law; 2. based on respect for human rights; 3. and applying those articles of the WTO treaty that call for a pro-development interpretation of the whole legal body.

Such a legal interpretation might affirm:

• That any TRIPS clause should not be understood in a way that becomes a practical obstacle to rapid, efficient and universal access to basic medicines, for those who are the victims of the actual dramatic health emergency, and

• That nothing in the TRIPS should prevent countries, including small countries with limited domestic manufacturing ability, from implementing sound health policies.

This would contribute to a broad and not restrictive interpretation of articles 30 and 31, which allow that licensing fees may be fixed in accordance with the real purchasing capacity of the poorest countries, balanced with a system that blocks the re-exports of the licensed products to the original markets.

The Holy See, consistent with the traditions of Catholic social thought, underlines that there is a "social mortgage" on all private property, namely, that the reason for the very existence the institution of private property is to ensure that the basic needs of every man and woman are met and sustained. This "social mortgage" on private property must also be applied today to "intellectual property" and to "knowledge" (John Paul II, Message to the "Jubilee 2000 Debt Campaign" Group, September 23, 1999). The law of profit alone cannot be applied to that which is essential for the fight against hunger, disease and poverty. Hence, whenever there is a conflict between property rights, on the one hand, and fundamental human rights and concerns of the common good, on the other, property rights should be moderated by an appropriate authority, in order to achieve a just balance of rights.

INTERVENTION BY THE HOLY SEE AT THE WORLD TRADE ORGANIZATION GENERAL COUNCIL

ADDRESS OF H.E. MSGR. DIARMUID MARTIN

20 December 2002

he Observer Delegation of the Holy See to the World Trade Organization wishes to address the question of TRIPS and public health, from its humanitarian and ethical dimensions. The Doha Declaration on TRIPS and Public Health, at the time of its adoption, was considered a significant breakthrough in attempting to reconcile two important values for our world community:

• Permitting governments to respond rapidly to urgent public health needs of their people, though assuring access to essential medicines at affordable prices;

• Respecting the creativity and innovative possibilities offered by a rules-based international system for the protection of intellectual property.

The Declaration was, at the time of its adoption, recognised as a victory for all the Member-States of the WTO. It was hoped above all that it would constitute a victory for the poorest and those most vulnerable to health risks and suffering, especially in Africa. My Delegation is thus concerned at the fact that it has not been possible - even after eleven months of negotiation - to arrive, within the deadline set, at a consensus application of the Declaration for those countries that do not have the domestic capacity to produce their own medicines. In these days the Holy See had made its own representation to interested governments in the hope that an adequate agreement might be reached.

In his Message for the World Day of Peace 2003, Pope John Paul II emphasised that, in the search for a new international moral order, it is important that commitments of political summits be honoured by each party. The Pope warned: «promises made to the poor should be particularly binding» and «the failure to keep commitments in the sphere of aid to developing nations is a serious moral question».

The protection of private property - including intellectual property - is an important value, which we must respect. There is however a social mortgage on all property, including intellectual property. The very creative and innovative impetus which the intellectual property rights system offers - especially in the health sector - is there primarily to serve the common good of the human community.

A positive decision on this question would have been an important sign from the World Trade Organization especially in this Christmas season. My delegation hopes that a sense of common responsibility will urge us all to ensure that what has been achieved in these days will not be lost, and that we can arrive at a positive decision for the good of our human family as early as possible in the New Year.

INTERVENTION BY THE HOLY SEE AT THE FIFTH MINISTERIAL CONFERENCE OF WTO

ADDRESS OF H.E. MSGR. FRANK J. DEWANE

13 September 2003

The Delegation of the Holy See wishes to begin by expressing thanks and congratulations to President Vicente Fox and to the people of Mexico for the warm welcome and excellent arrangement that have been made for us on this occasion. My Delegation extends its appreciation also to the Chairman of the General Committee and the Director General for their tireless efforts in preparation for the Conference.

This Fifth Ministerial Conference of WTO represents a time of hope. But for this hope to be realized, all here present must remain faithful to the promises and commitments made to the poor in Doha. There has been unsatisfactory progress in the areas of trade for the poorest countries. Bold and decisive action is needed that will have positive implications for development. As stated by His Holiness Pope John Paul II, «Promises made to the poor should be considered particularly binding» and any breach of faith in this regard is «especially frustrating for them» when it pertains to «promises which they see as vital to their well-being».

The participation of the Holy See as an Observer in the World Trade Organization springs from its characteristic and constant concern for humanity. It takes a profound interest in and acts on all issues that affect the dignity of the human person and participates in numerous areas of policy development, including that of trade, focussing on the development of the person, peoples and society. Further, the presence of the Holy See at this Fifth Ministerial Conference demonstrates the importance it attributes to the activity of the WTO, to this midterm review process and to the issue of trade.

Trade should benefit people and not just markets and economies. Trade rules, therefore, notwithstanding their technical aspects, have a political and social nature, with deep and lasting consequences in the life of humanity. It is those often found in smaller economies who are most in need of an equitable, rules-based system of trade in which all can participate and benefit on the basis of the highest achievable equality of opportunity. But, no set of rules is fair by itself. They must conform to the demands of social justice while enabling and fostering human development.

The recent decision on the implementation of paragraph six of the Doha Declaration on the TRIPS Agreement and Public Health is a positive step in carrying out the Doha commitments. The Delegation of the Holy See compliments all parties that took part in arriving at this crucial and important agreement. In this context as well as for other issues, the Holy See wishes to note that the protection of private property, including intellectual property, is important and must be respected. At the same time all property has a social mortgage. The intellectual property rights system must exist not only to protect creative and innovative impetus but also and primarily to serve the common good of the human family. As a universal common good, intellectual property demands that control mechanisms should accompany the logic of the market.

Recent developments as regards the Agreement on Agriculture have given this process new life. However, further impetus is needed. Agriculture products that are staple foods and on which low-income and poor farmers are dependent should be given special consideration in the context of tariff reductions. These reductions in poor countries, along with the effects of export subsidies and domestic supports in and dumping from developed countries, are particularly harmful for small farmers. Still, any temptation by developing countries toward a crude protectionist path should be avoided. A balancing mechanism is needed that will allow for an increase in small farmer production and productivity as well as for the growth of employment in rural areas. The issues of food security, basic standard of living and rural development are legitimate concerns in agricultural negotiations. Special safeguard mechanisms for poor countries must be developed allowing for temporary action when small farmers are threatened.

With regard to trade in services, it has to be considered that the defence and preservation of certain common goods such as the natural and human environments, cannot be safeguarded simply by market forces since they touch on fundamental human needs which escape market logic. Water, education and health, among others, have been traditionally a State responsibility and viewed as public goods. More efficient services can include involvement of the private sector, but set within a clear legislative framework with the goal of serving the public interest.

There exists no lack of proposed modality options regarding market access for non-agricultural products. The crux of the matter falls on the issues of tariff peaks, tariff escalation and non-tariff barriers, especially for products in which poor countries could be competitive (labor intensive products). Since non-tariff barriers pose a serious threat to further liberalisation of trade in industrial goods, clarity as to the scope and treatment of non-tariff barriers must be articulated with due consideration for weaker economies. In some poor countries industrial development in, for example, textiles and clothing is one of the most important tools in combating poverty and fostering development.

In closing, the Holy See Delegation wishes to associate itself with those who support consideration for the particular needs of the African continent to experience the development that trade can provide. Africa today remains a continent at risk, fragile in terms of trade relations and the corresponding benefits. If the Doha Development Agenda is to be faithful to its mission, WTO must be solicitous about the needs of African countries. In the context of a «family of nations» those countries economically more developed can provide assistance that will allow for attainment of the development which corresponds to our shared human dignity. Precisely because people have been endowed with the same extraordinary dignity no one should be reduced to living without the benefits of trade.

INTERVENTION BY THE HOLY SEE AT THE SIXTH MINISTERIAL CONFERENCE OF THE WTO

ADDRESS OF H.E. MSGR. SILVANO M. TOMASI

18 December 2005

The Delegation of the Holy See wishes to express its gratitude to the Chief Executive of the Hong Kong Special Administrative Region, to the Secretary for Commerce, Industry and Technology, and to the people of Hong Kong for their kind welcome and to congratulate them on the excellent arrangements that have been made for this Conference. Equal appreciation goes to the Chairman of the General Council and to the Director General of the WTO for their efforts throughout the preparatory period.

It was not possible for the Member States to reach a substantial agreement before the Hong Kong Conference. Now, the objective is to draft a document that offers guidelines in order to continue the discussions. Difficulties manifested themselves at the time of making concessions following the guidelines established by the Doha Declaration and the Decision adopted by the General Council on 1 August 2004.¹ While these difficulties could ultimately not be overcome, they still represent an opportunity to examine more carefully the contents of the aforementioned Declaration and Session in favour of development. Such contents should then be taken into account in each and every one of the new agreements, so that «a universal, rules-based, open, nondiscriminatory and equitable multilateral trading system, [which] can substantially stimulate development worldwide»² may be reached.

A few days ago, in his message to the Food and Agriculture Organization (FAO) annual Conference, Pope Benedict XVI spoke about this WTO meeting saying: «In a few days many of the participants in this Conference will be meeting in Hong Kong for negotiations on international commerce, particularly with regard to farm products. The Holy See is confident that a sense of responsibility and solidarity with the most disadvantaged will prevail, so that narrow interests and the logic of power will be set aside. It must not be forgotten that the vulnerability of rural areas has significant repercussions on the subsistence of small farmers and their families if they are denied access to the market."³

The Holy See recognizes the benefit of an equitable and participatory multilateral system of trade relations directed to attaining and developing the common good. A spirit of solidarity among all countries and people should replace the ceaseless competition that aims to achieve and defend privileged positions in international trade. Protectionism too often favours already privileged segments of society. Effective multilateralism, on the other hand, is an inclusive process which acknowledges that at the core of all social and economic relations, and hence of trade relations, is the human person, with dignity and inalienable human rights. Therefore, a rules-based trade system or, better, a fair system of trade rules is indispensable.

A fair system of trade rules should be shaped according to the level of economic development of the Member States and give explicit support and special and differential treatment to the poorest countries. When the levels of development of the members are excessively unequal, the consent of the panties may not be sufficient to guarantee the justice of their agreement: «trade relations can no longer he based solely on the principle of free, unchecked competition, for it very often creates an economic dictatorship. Free trade can be called just only when it conforms to the demands of social justice.»4 Moreover, the question of justice in today's trade rules is problematic because such rules tend to grant more privileges to these who possess more economic power. A fair system of trade rules is an international public good. Without a fair system of trade rules, vulnerable people in many developing and developed countries will be «locked in a poverty trap». In fact, many poor countries are prevented from reaping the benefits of the new opportunities offered in the new scenario.

Trade reforms can, in the shortterm, bring about for the poorest countries adjustment costs that could have a harmful impact on the lives of their citizens. International trade rules should enable governments to adopt the measures necessary to reduce the social costs of trade liberalization. Indeed, the global gain from trade liberalization should allow for «compensating losers».

This approach is in line with the concern to put the human person at the centre of any development and trade strategy, recognizing that only by raising individual's capabilities, enabling every person and every social group to make the most of the opportunities created by trade liberalization, will it be possible to implement a truly mutually beneficial fair trade.

Opening access to new markets offers a real opportunity for developing countries and is an important element of the development process; however, it is not per se a sufficient condition for lifting countries out of poverty. Poor countries need be equipped in order to take this opportunity. Without appropriate infrastructure for access to markets, human capacity-building, it is unlikely that any country could benefit from trade. A generous «Aid for Trade» initiative should be predictable, specific, monitored and country-driven. In this regard, consideration should be given to providing developing countries with the finances needed to address adjustment costs arising from the Doha negotiations as well as their supply side constraints. Indeed, weak economies urgently need support for improving their supply capacity and trade-related infrastructure in order to be able to translate improved market access into increased exports.

The international trading system should guarantee a true partnership based on equal and reciprocal relations among rich and poor countries. The WTO system should encourage participation of all States, above all of the most disadvantaged, in the negotiation process. Trade rules should be negotiated by all, in the interest of all, and adhered to by all, avoiding closed-door decisionmaking that lacks the transparency and democracy necessary for the participation of the weak and voiceless. The benefits that would result for developing countries would be larger, stable and leading to their self-reliance.

Free trade is not an end in itself but rather a means for better living standards and the human development of people at all levels. The universal destination of the goods of the earth requires that the poor and marginalized should be the focus of particular concerns.⁵ Trade exchanges should enable all people to have access to these goods. Thus, essential services such as health, education, water, and food are not normal goods since citizens cannot choose not to use them without harm to themselves and high social costs for society. Although often necessary, food aid can lead to unintended consequences that do not strengthen the food security of poor people.⁶ These public goods often require government intervention in markets to ensure equitable access to them. It is the task of the State to provide for the defence and preservation of common goods which cannot simply be addressed by market forces.

There exist important human needs which escape the market logic. There are goods which due to their very nature cannot and must not be bought or sold.⁷ In a very special way, the movement of professionals and workers, a phenomenon of increasing importance that contributes in a critical way to the production of wealth, should he planned and managed in ways that optimize the benefits both for countries of origin and countries of destination, and above all for the migrants themselves. The discussion on services should address items of interest to the developing countries, especially those related to the movement of people, bearing in mind that the economic interests of the poor and the full respect of all human rights and the rights at work of migrants are paramount in the negotiations.

In today's world, where the knowledge economy is becoming such an essential requirement, the concern for the TRIPS Agreement takes on new significance. While there is a need to protect intellectual property rights as an incentive for innovation and technology creation, it is also important to ensure broad access to technology and knowledge especially for low-income countries. The new goods derived from progress in science and technology are key to world trade integration. Improved technology and knowhow transfer from the developed countries is necessary so that lessdeveloped countries can catch-up and gain international trade competitiveness.

Further, we welcome the recent amendment to the TRIPS Agreement on Public Health. This amendment could assure poor countries access to the means for the production and importation of essential drugs needed to face the main pandemics suffered by their populations. It balanced the two important objectives of intellectual property rules: creating incentives for innovation and spreading the benefits of the innovations as widely as possible. However, care should he taken that this amendment not be weakened by regional and bilateral agreements containing «TRIPS plus» variants, which are more onerous for poor developing countries.

The Ministerial Meeting in Hong Kong could provide not only an important chance to restore confidence in the Doha Development Round, but also to restore full credibility and legitimacy to the WTO system and to have the public at large understand its value. Despite all its inherent constraints, the WTO is unique among international organizations as a members-driven one with an ambitious policy of inclusion. The mechanism of an effective Dispute Settlement Body (DSB) is evidence of a guarantee the equality of all countries before the law, regardless of their economic power, and it protects virtually all Member States from unfair, unilateral commercial actions.

This Ministerial Conference has

the potential to be remembered as a milestone in the establishment of a socially just international trading system. The more the rights and needs of the poor and the weak are taken into account, the greater becomes the possibility for justice and peace in our world, two indispensable conditions for sustainable development and for the alleviation of poverty. These two goals constitute a common ambition to which all members can aspire as the negotiations go forward: this is a guide for the road ahead.

NOTES

- 1. 2004 July Package, WT/L/579, 2 August 2004.
- 2. United Nations, A/RES/60/1, 2005 World Summit Outcome, N. 27.
- 3. Benedict XVI at the 33rd Conference of FAO, November 24, 2005.
- 4. Paul VI, Populorum progressio, § 59.

5. Cf. Compendium of the Social Doctrine of the Church, I. 182, Pontifical Council for Justice and Peace (2004).

6. Cf. John Paul II, at FAO Headquarters, 5 December 1992, § 4: "Food aid can do much good for recipient countries. However, it should not be used by donor countries so as to result in commercial displacement of food commodities. In the long-term, food security problems will not be solved by increasing food aid dependency of entire populations" that should "receive an education that prepares them to provide healthy and sufficient foodstuffs on their own."

7. Cf. Centesimus annus § 40.

INTERVENTION BY THE HOLY SEE AT THE GENERAL ASSEMBLY OF WIPO

ADDRESS OF H.E. MSGR. SILVANO M. TOMASI

22 September 2008

he Delegation of the Holy See joins previous speakers and expresses its congratulations to you for your able leadership and to our new Director General Dr. Francis Gurry. It looks forward to a renewed and dynamic service of the World Intellectual Property Organization (WIPO) as it advances knowledge in the best interest of every human person and for the just progress of every country.

The Holy See is particularly attentive to the ethical and social dimensions that in a unique way flow from, affect, and mark out, the human person and her action. It certainly recognizes in intellectual property the characteristic value of innovation and of creativity, of intelligence in all its aspects. At the same time, in any undertaking of thought and action, in every scientific, technical or juridical approach, intellectual property is called to respect creation both in the area of knowledge and discovery and in the recognition of the nature of things: matter, intellect, living beings, and, above all, the human person.

Human ingenuity is multifaceted, resourceful and capable of finding responses to the challenges that confront the human family. The constant request to register new patents evidences such ingenuity and their regulation requires a balanced norm so that the impact on the economy may be beneficial, as well, to the poorer countries and may value their specificity and identities. In fact, all countries contribute unique gifts stemming from their economic, social, cultural and spiritual traditions.

Among the various important areas of concern that engage the committed staff of WIPO, some new debates are of particular interest to this Delegation:

- The possibilities and the implications of international protection of genetic resources, traditional knowledge, folklore and cultural expressions;
- The requirement of a legal implementation of copy-rights and related issues concerning the protection of the rights of broadcasting organizations;

 And, above all, the process that has allowed the organization of the work in such a way that it now can take into account the expectation of development together with the requirements of norms and technologies related to intellectual property.

In conclusion, Mr. President, with our renewed congratulations to the new DG, and thanks to his predecessor, Dr. Kamil Idris, it has to be stated that, through its creativity and sense of solidarity, WIPO can, and has the responsibility to, contribute in a major way to the strengthening of a peaceful and more equitable international community.

PART THREE

Position of the Caritas in Veritate Foundation: Toward a new legal instrument

THE EMERGENCE OF IP REGIMES AND THE QUESTION OF GENETIC RESOURCES AT WIPO: TOWARD A NEW LEGAL INSTRUMENT

MATHIAS NEBEL AND CARLO MARENGHI

nderstanding the significance of the debate at the World Intellectual Property Organisation (WIPO) over intellectual property protection of genetic resources and traditional knowledge requires first understanding the economic value of genetic resources and their potential.

With regard to the use and exploitation of genetic resources, applied microbiological science has highlighted the great social usefulness of these resources and of the products resulting from their industrial transformation, above all in the medical and pharmaceutical fields, but also in other areas of biochemistry. This potential has in recent decades brought about a more and more intensive search for new genetic resources and genetic material, motivated more often than not by the aim of developing derivatives which may offer a favourable cost benefit ratio.

As shown in different case studies examined during the last decade of work by the Intergovernmental Committee on Intellectual Property, Genetic Resources, Traditional Knowledge and Folklore (IGC) at WIPO, many of the genetic resources that possess great economic and social utility are located in territory inhabited since time immemorial by native communities within the jurisdiction of countries different from those in which the industrial development of the genetic material takes place and the patents are obtained.

Let us explore what is at stake. According to the most recent estimates, three-quarters of the world's population depends on natural traditional medicines and approximately half of synthetic drugs have a natural origin.¹ Correspondingly, private companies have a strong incentive to pursue existing genetic resources and traditional knowledge. Evidence shows that genetic resources linked to traditional knowledge can in many cases reduce research and development costs and prove to be essential inputs in product development. Some figures may help demonstrate the magnitude of the market:

• In 1999, 918 patents on staples such as rice, maize, wheat, soybean and

¶ Why the issue of genetic resources is being addressed by WIPO sorghum had been granted mostly to six agrochemical corporations.²

- In 2000, an investigation showed that patents were pending or had been granted on more than 500,000 genes and partial gene sequences in living organisms.³
- A 2005 study revealed that nearly 20 per cent of all human genes had been patented in the United States, in other words 4,000 of the nearly 24,000 human genes.⁴
- A study noted that patent publications relating to animal cells and tissues multiplied about six times between 2000 and 2003 (three years) as compared to 1990-2000 (ten years).⁵ Another study in 2010 found that 660 patents had been granted on animals.⁶
- In 2008, a report revealed that about 532 patent documents had been filed by agrochemical corporations on 'climate ready' genes in plants that will be able to withstand environmental stresses such as drought, heat, cold, floods, etc.⁷ Between 2008 and 2010, 1,663 additional patents had been granted on genes and plant characteristics tolerant to climate changes and extreme climate conditions.⁸

The issue of genetic material and genetic resources came to the forefront of diplomatic activity at the behest of two opposite sets of interests. Firstly, developing countries, rich in biodiversity and natural resources, are reacting to biotechnology firms patenting those countries' resources ('biopiracy'). Secondly, industrialised countries are seeking to enhance the cogency, coherence and effectiveness of the overall system of intellectual property rights on genetic resources. Accordingly, the relationship of genetic resources and traditional knowledge to intellectual property protection has been one of the most complex, controversial yet dynamic issues on the agenda of multilateral deliberations during the past decade.

One of the important challenges it raises stems precisely from the fact that discussions have taken place simultaneously in a number of international forums such as the Convention on Biological Diversity (CBD), the World Trade Organization (WTO) and the World Intellectual Property Organization (WIPO), creating significant obstacles to ensuring 'coherence' and 'mutual supportiveness' between processes responding to different mandates. While the WTO stalemate in the Doha round of negotiations has yielded little progress, the CBD adoption in 2010 of the Nagoya Protocol on Access and Benefit Sharing (ABS) is an important milestone in the debate that has a bearing on deliberations in other forums.

¶ The origin of the process at WIPO: the creation of the IGC t WIPO, the Intergovernmental Committee on Intellectual Property, Genetic Resources, Traditional Knowledge and Folklore (IGC) has been, since its creation in 2000, the main focus of deliberations with the active participation of a variety of stakeholders, in particular in-

¶ The need for a multilateral agreement on intellectual property rights on genetic resources digenous groups. Throughout its existence, it has witnessed a rich policy dialogue and contributed to a better understanding of the issues at hand. The origin of the IGC goes back to the negotiations and diplomatic conference that led to the adoption of the Patent Law Treaty in 2000.

As part of the negotiation process, Colombia presented a submission, later supported by various members of the Group of Latin American and Caribbean Countries (GRULAC), at the WIPO Standing Committee on Patents (SCP) in September 1999. Its aims were to seek to ensure that industrial property protection guaranteed the protection of the country's biological and genetic heritage. Colombia's proposals called for the following:

"All industrial property protection shall guarantee the protection of the country's biological and genetic heritage. Consequently, the grant of patents or registrations that relate to elements of that heritage shall be subject to their having been acquired legally. . . . Every document shall specify the registration number of the contract affording access to genetic resources and a copy thereof where the goods or services for which protection is sought have been manufactured or developed from genetic resources, or products thereof, of which one of the member countries is the country of origin."⁹

The proposal highlighted for the first time in WIPO that the granting and registration of relevant patents should be subject to the legal acquisition of genetic resources (GRs) and that patent applications should mention the registration number of the contract affording access to GRs by the country of origin.

The SCP did not reach a consensus on this proposal,¹⁰ and WIPO Member States subsequently revisited the issue no less than five times. In November 1999, the WIPO Working Group on Biotechnology held informal discussions on Colombia's proposal and issued a questionnaire aimed at identifying the intention of WIPO Member States as to the eventual adoption of the requirement at the national or regional level.¹¹ The WIPO Meeting on Intellectual Property and Genetic Resources, held in Geneva on 17 and 18 April 2000, discussed the responses to that questionnaire in preparation for the Diplomatic Conference for the adoption of the PLT. At the 2000 WIPO General Assembly the mandate of the newly created IGC was adopted and extended so as to encompass also the protection of traditional knowledge (TK) and traditional cultural expressions (TCEs).

Since its inception the IGC has proven to be an open forum for discussion on the concerns expressed by biodiversity-rich countries and TK holders in relation to the IP system. It has generated a much higher level of awareness of key concerns and solutions proposed. The IGC also generated a significant amount of research and analysis in the form of fact-finding missions. It has further allowed for the introduction of techni-

¶ The work of the IGC

cal reforms, such as the inclusion of some traditional knowledge journals within the Patent Cooperation Treaty (PCT) minimum documentation, and the integration of traditional knowledge classification tools and technical standards for traditional knowledge documentation in order to contribute to the defensive protection of GRs and TK. The IGC has also provided guidance on IP-related clauses in access and benefit-sharing (ABS) agreements.

In 2009, an important step was taken when the WIPO General Assembly instructed the IGC to accelerate its work towards developing an *international legal instrument or instruments to protect genetic resources, traditional knowledge and traditional cultural expressions.* Three years ago, the WIPO General Assembly adopted a new mandate for the IGC that pointed towards more solid and specific international outcomes. The 2009 mandate states: "Without prejudice to the work pursued in other forums, the IGC will continue its work and undertake text-based negotiations with the objective of reaching agreement on a text of an international legal instrument (or instruments), which will ensure the effective protection of GRs, TK and TCEs."

The sentence "to ensure the effective protection of GRs, TK and TCEs" is of great importance. 'Protection' in an IP system usually implies granting economic/market rights, which range from protection against unfair competition to exclusive rights. In some cases moral rights can also be recognized. '*Protection*' needs to be differentiated from '*preservation*' which in the case of GRs and TK would imply the conservation of ecosystems and the traditional context. The term '*effective*' means that the system actually fulfils its purpose (in this case protecting GRs, TK and TCEs) and that there are available means to ensure this protection (usually enforcement measures). The text also mentions an "*agreement on a text of an international instrument(s)*". International treaties but also different sorts of soft law such as understandings, recommendations, guidelines, declarations, and resolutions.

One outstanding question that remains open is whether or not such an instrument should be legally binding. Properly answering this question requires looking at the content of the main proposals and their potential to address key concerns. It would not be fruitful to generate a binding instrument which would fail to change the current reality by substantially improving low-quality patent examinations, strengthening compliance with ABS requirements, and ensuring greater transparency and legal certainty. If solutions on the table have the capacity to tackle these problems in practice, then and only then could a binding instrument be of assistance.

¶ The main issue at stake: mandatory disclosure of origin he major division between countries is whether or not the recommendations of the CBD, as developed by the Bonn Guidelines,
 should become a precondition of patentability; that is, if the dis-

closure of origin of the genetic resource, prior informed consent, and/or evidence of fair and equitable benefit sharing under a relevant material regime should be mandatory preconditions to the legal acquisition of GRs.¹² Making this a formal requirement of disclosure for a valid patent has been and continues to be an objective of the developing countries rich in biological resources and traditional knowledge and most concerned about biopiracy.

Since 2010 the WIPO secretariat has compiled, produced and updated a series of documents that reflect members' responses to the mandate given by the General Assembly. The most important documents in relation to GRs protection issued so far are the draft objectives and principles on IP and GRs and the options for future work for GRs protection. These documents represent the basis of what could be a future instrument(s) on GRs protection. The following points of this document relate to this ongoing process of negotiation.

A Catholic perspective

he Church considers genetic material as being fundamentally public. It is part of the common good of mankind and should be recognised as such by the international community. Genetic material makes up a *common heritage* from which no one should be excluded. Genetic resources are "any material of plant, animal, microbial containing *functional units of heredity* and presenting an actual or potential value."¹³ As genetic material is fundamentally public, so also are genetic resources.

Genetic resources (GRs) are the result of a long evolutionary process.¹⁴ These functional units of heredity are accumulative: new functions deriving or evolving from previous ones or being otherwise built upon them. Therefore no specific biological function may be completely isolated from others. They both relate to and require other biological functions in order to exist. It is an illusion that genetic resources may exist separate from their required environment. Their functionalities refer and operate within a wider biosphere upon which they depend for existence.

Moreover, these are functional units of heredity. They carry and transmit heredity and can evolve. Indeed, GRs maintain substantial elements of past genetic material, a treasure trove of seemingly unused and still mostly unknown functionalities. The fact that this 'junk' material has been carried along the evolutionary process bears witness that we cannot presume it to be useless and unworthy of transmission. Moreover, the capability of GRs to self-replicate and eventually spur new mutations shows that the evolutionary process is not yet closed, but that the present state is part of a chain that may offshoot new future functionalities.

Our common survival depends on this capacity for evolution. Genetic material and hence genetic resources are a common heritage, not only of human beings but any living species. To limit, cap, interfere or altogether

¶ Genetic material is fundamentally public

destroy this heredity and capacity for evolution is a grave breach to the common heritage. It should never be undertaken light-heartedly and without due caution. Furthermore, GRs should be recognised as being part of the common genetic heritage of humanity. They represent one of our most precious common goods. As such they deserve special protection.

The legitimacy of patents on GRs is linked to the recognition and effective protection of their status as common goods. In other words, the patent law system cannot apply to GRs without appreciating their distinctiveness and adapting accordingly.

The *raison d'être* of intellectual property protection systems is the promotion of literary, scientific, or artistic production and inventive activity for the sake of the common good. That protection officially attests the right of the author or inventor to recognition of the ownership of his work and to a degree of economic reward, at the same time as it serves the cultural and material progress of society as a whole. The ultimate cause that intellectual property protection works for is the recognition of the dignity of man and his work, in its double dimension, namely as a medium of expression and growth of the individual personality and as a contribution to the common good.¹⁵

The Church stands for property rights, albeit ones which recognize the claims of justice. Christian tradition has never recognized the right to private property as absolute and unassailable: "On the contrary, it has always understood this right within the broader context of the right common to all to use the goods of the whole of creation: the right to private property is subordinated to the right to common use, to the fact that goods are meant for everyone."¹⁶ Tangible and intangible forms of property alike are subject to these ethical limitations.

Thus this applies to patent rights on GRs. Because GRs represent a common good; because knowledge and science are essentially free and public; because inventions are but tiny developments added to knowledge and science accumulated by previous generations and passed on freely to this one; patent rights systems have always recognised that the exclusivity granted by patent rights is limited in time. A patent falls back into the public domain after a given period. Thus the social utility a patent right system serves is to facilitate the disclosure of a new invention, so that it may become part of the priceless common knowledge of mankind. The attention given to the protection of patent right holders should not therefore overshadow the overall social utility of the patent rights system.

In the Schumpeterian view of patent rights this social utility is essentially met by the disclosure of the invention. Without patents, invention would remain secret and there would be no incentive for private companies to invest in research and development. However, this is largely a fiction, for inventions efficiently become public with or without patent right system.¹⁷

¶ Intellectual property rights and genetic resources The legitimation of the public use of patent rights systems must therefore be enhanced by granting more attention to the social utility they are supposed to serve.

The so called 'classical' legal system is not well suited to the protection of any moral or economic right that may be derived from innovative or creative activities developed and refined throughout history, which are like the social manifestation of the work of several generations and a genius peculiar to communities, peoples, or families. The intellectual manifestations of tradition or folklore nevertheless deserve recognition, because they correspond in all respects to the substantive concepts that afford entitlement to 'classical' protection of intellectual property, as on the one hand they constitute a means of constructing and projecting the identity of the members of the community, which have grown with small, anonymous contributions over a great many generations.

That is why the Church is in favour of an intellectual property rights system which recognises not only the legitimate claims of justice from inventors or private companies but also from the public stakeholders the State is meant to represent. Patent offices should grant rights that recognise the fair claims of the wider community. Hence, patent rights should be granted only if they do not harm or impede the common good.

B y its mission, the Church stands for the poorest and most vulnerable among our societies. It does so not out of political motivation, but rather out of its faith in Jesus. As Christ identified with the poor, his Church also does.

But patent laws have historically evolved with the needs of private companies. The development of the system emphasizes the protection of their investments in research and development and the granting of exclusive rights to reap benefits from their research. Beside the disclosure of the invention, it usually leaves open how this disclosure will indeed turn out to work for the public good.

The system of patent law as it exists is not well balanced. It has a bias toward the needs of private companies, creating an asymmetry between them and the public interest in terms of rights, access to justice and economic capabilities.¹⁸ It is difficult and costly for a community, let alone an individual, to challenge a patent on GRs.

The work undertaken at WIPO on GRs and TK must have as its objective to rebalance this asymmetry. It may do so by:

a. Making the disclosure of origin of GRs compulsory and mandatory.¹⁹ Patent (and perhaps also other forms of IP) applicants should disclose several categories of information concerning GRs, such as the source or origin of GRs and evidence of prior informed consent and benefitsharing, when these GRs are used in developing the innovation claimed ¶ How shall we view the just claims of the poor regarding the present negotiations at WIPO on the patentability of genetic resources? in a patent application.

- b. Granting the countries of origin or the traditional communities of origin the possibility to refuse patent being granted without their consent on GRs they have nurtured over generations.
- c. Sharing with countries of origin or traditional communities of origin part of the profit generated by the industrial application of GRs.
- d. Creating an international database and information system of GRs for preventing the granting of patents over inventions based on or developed using GRs (and associated traditional knowledge) which do not fulfil the existing requirements of novelty and inventiveness. In this sense we consider extremely relevant the activity of WIPO, which has improved its own search tools²⁰ and patent classification systems,²¹ to help patent examiners find relevant 'prior art' and avoid the granting of erroneous patents.
- e. Establishing an international mechanism that may revise granted patent rights and order their suspension if found in breach of international standards. This may arise when the applicant has misled the patent office, especially in making assertions as to the eligibility of the patent application or in failing to inform the office or judicial authorities of known material relevant to the patentability of the invention.²²
- f. Patent offices, within their due diligence for prior art, must make a mandatory check of the GR database of WIPO.
- g. Registration on the WIPO database of new GR is completed only by government under a protocol that should be designed so that each country may register what it claims as its own GR (as the country of origin or one of the countries of origin).
- h. If registered in the WIPO database, the patent office should inform the country of origin's own patent office and seek a negotiated solution (through a mechanism akin to the provisions of the Paris Convention for the Protection of Industrial Property, 6ter(4)).

Conclusion

According to that vision, the value of justice in any set of enactments has to be measured by the possibility of perpetuating it and reconciling it with such human rights. According to that conception, the correct determination of the scope of ownership rights has to be made in relation to another higher principle of justice, which is the common good. All men and women of all nations are entitled to have whatever they need for the subsistence and personal advancement, taking it from all the resources available at any given time in history. The provisions protecting private property cannot therefore ever lose sight of the common destiny of all goods, so much so that it has to be said that all private property is subject to a social encumbrance. Consequently, should there be an institutional conflict between acquired private rights and overriding community demands, it is for the public authorities to set about resolving it with active involvement on the part of individuals and social groups.

NOTES

 See UNEP, *The economics of ecosystems and biodiversity*, 2008. Available at http://www. unep.ch/etb/publications/TEEB/TEEB_interim_report.pdf (accessed 9 December 2013).
 Action Aid, Crops and Robbers, October 2001. Available at http://www.actionaid.org. uk/sites/default/files/doc_lib/crops_robbers.pdf (accessed 9 December 2013).

3. The race to buy life, The Guardian, 15 November 2000. Available at http://www. theguardian.com/science/2000/nov/15/genetics.highereducation (accessed 9 December 2013). See also GeneWatch UK, *Privatising Knowledge, Patenting Genes: The Race to Control Genetic Information*, 2000. Available at http://www.genewatch.org/uploads/f03c6d66a9b354535738483c1c3d49e4/brief11.pdf (accessed 9 December 2013).

4. One-Fifth of Human Genes Have Been Patented, Study Reveals, National Geographic, 13 October 2005. Available at http://news.nationalgeographic.com/ news/2005/10/1013_051013_gene_patent.html (accessed 9 December 2013).

5. Carlos M. Correa, *Trends in Intellectual Property Rights Relating to Genetic Resources for Food and Agriculture*, Food and Agriculture Organization, Commission on Genetic Resources for Food and Agriculture, October 2009. Available at http://www.planttreaty. org/sites/default/files/trends.pdf (accessed 9 December 2013).

6. *History of Animal Patents*, Stop Animal Patents, American Anti-Vivisection Society, 2010.

7. ETC Group, Patenting the 'Climate Genes' and Capturing the Climate Agenda, May/ June 2008. Available at http://www.etcgroup.org/content/patenting-climate-genes-andcapturing-climate-agenda (accessed 9 December 2013).

8. ETC, *Gene Giants Stockpile Patents on 'Climate-ready' Crops in Bid to Become 'Biomassters'*, October 2010. Available at http://www.etcgroup.org/content/gene-giants-stockpile-patents-"climate-ready-crops-bid-become-biomassters-0 (accessed 9 December 2013).

9. In the course of the discussions leading to the adoption of the Patent Law Treaty (PLT) under the auspices of the World Intellectual Property Organization (WIPO), Colombia proposed the inclusion of the Requirement in the Treaty.

10. *Report of the Third Session of the SCP*, WIPO Standing Committee on the Law of Patents, §§ 202–209, 6–14 September 1999. SCP/3/11.

11. Information Provided by WIPO Member States Concerning Special Provisions to Ensure the Recording of Some Contributions to Inventions, Meeting on Intellectual Property and Genetic Resources, 14 April 2000. WIPO/IP/GR/00/3 Rev.1.

12. Secretariat of the Convention on Biological Diversity, Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization, 2002. Available at http://www.cbd.int/doc/publications/cbd-bonn-gdls-en. pdf (accessed 9 December 2013).

13. Convention on Biological Diversity, Article 2. Available at http://www.cbd.int/ convention/articles/default.shtml?a=cbd-02 (accessed 9 December 2013).

14. "On the other hand, the earth is ultimately a common heritage, the fruits of which are for the benefit of all. In the words of the Second Vatican Council, 'God destined the

earth and all it contains for the use of every individual and all peoples.'" Pope John Paul II, *Peace With God the Creator. Peace With All of Creation*, 1 January 1990, § 8. Available at http://www.vatican.va/holy_father/john_paul_ii/messages/peace/documents/hf_jp-ii_mes_19891208_xxiii-world-day-for-peace_en.html (accessed 9 December 2013).

15. Universal Declaration of Human Rights, Art. 27, § 2. International Covenant on Economic, Social and Cultural Rights, Art.15.1(c). Cf. John Paul II, *Laborem exercens*, 5, 6, 9, and 15.

16. Pope John Paul II, *Laborem exercens*, 14. "The principle of the universal destination of goods is an affirmation both of God's full and perennial lordship over every reality and of the requirement that the goods of creation remain ever destined to the development of the whole person and of all humanity. This principle is not opposed to the right to private property but indicates the need to regulate it. Private property, in fact, regardless of the concrete forms of the regulations and juridical norms relative to it, is in its essence only an instrument for respecting the principle of the universal destination of goods; in the final analysis, therefore, it is not an end but a means. The Church's social teaching moreover calls for recognition of the social function of any form of private ownership that clearly refers to its necessary relation to the common good. Man 'should regard the external things that he legitimately possesses not only as his own but also as common in the sense that they should be able to benefit not only him but also others' (GS 69). The universal destination of goods entails obligations on how goods are to be used by their legitimate owners." *Compendium of the Social Doctrine of the Church*, Pontifical Council for Justice and Peace, §§ 177–178.

17. Some of the problems posed by this dominant model of innovation include: (i) restrictions on access to information at different stages of innovation, thus obstructing the free flow of scientific information and impeding scientific progress; (ii) reduced or delayed information sharing among the scientific community as a result of patent requirements (e.g. that information must not be in the public domain at the time of filing); (iii) licensing practices (e.g. narrow or exclusive license terms) that have restrictive effects on innovation; (iv) multiple licenses may be required to access single technology or research tool, thus making access complicated, time-consuming and costly; (v) uncertainty over the ability to obtain necessary licenses on fair terms and also conditions that discourage investment in research and development; (vi) tendency to reward creative efforts that may lead to commercial gains and as a result hindering innovation of products that have vast societal benefit but a limited market; (vii) patent specifications, which are meant to disclose the invention, are drafted by patent attorneys in a species of "legalese" reducing the quality of the patents-this is central to the monopoly protection based on disclosure central to the legitimacy of the patent system as well as mocking the commitment to innovation and the values of open science and communication.

18. This historical trend explains the bias of the existing patent system toward the interest of private companies. Currently the public interest of patent rights is essentially said to be the existence of patent rights itself and the publication of innovation. Only in developed countries—where legal and political checks effectively counter the asymmetry of power between companies and civil society—may patent law be considered just. In most developing countries, however, this is not the case. Where government is weak, where the rule of law is costly and difficult to enforce, where civil society can easily be controlled by private interests, the rights granted through the patent system cannot really be challenged. The exclusivity of rights turns out all too often to be also an exclusivity of power: a right to do whatever they want.

19. Analysis of Options for Implementing Disclosure of Origin Requirements in Intellectual Property Applications, Convention on Biological Diversity Ad Hoc Open-Ended Working Group on Access and Benefit-Sharing, 22 December 2005. UNEP/CBD/WG-ABS/4/INF/2. Available at http://www.cbd.int/doc/meetings/abs/abswg-04/information/abswg-04-inf-02-en.pdf (accessed 9 December 2013); also Valentina Tejera, *Tripping over Property*

Rights: Is it Possible to Reconcile the Convention on Biological Diversity with Article 27 of the TRIPS Agreement? (1999), 33 New Eng L Rev 967.

20. See PCT Minimum Documentation: Traditional Knowledge, Meeting of International Authorities Under the Patent Cooperation Treaty, 11th Session, 21 February 2005. PCT/MIA/11/5. Available at http://www.wipo.int/edocs/mdocs/pct/en/pct_mia_11/pct_mia_11_5.pdf (accessed 9 December 2013).

21. See http://patentscope.wipo.int/search/en/search.jsf.

22. Such cases have arisen, for instance, when a patent was enforced even though the patent owner was aware it had been based on false declarations concerning the circumstances and timing of the invention, (*Precision Instrument Mfg. Co. v. Automotive Maintenance Machinery Co.*, 324 U.S. 806, 65 S.Ct. 993) or when the patent holder had suppressed evidence of prior use that would render the patent invalid (*Keystone Driller Co. v. General Excavator*, 290 U.S. 240, 54 S.Ct. 146).

For decades companies in the developed countries have mined the rich biological resources and traditional knowledge of the poorest communities of the world from developing or least developed countries without any equitable benefit sharing. The 1992 international Convention on Biological Diversity sought to address this problem but with limited success, part of this being due to the lack of an effective international enforcement mechanism. Today at the World Intellectual Property Organisation negotiations are being held that could, if there was the political will, establish a new international intellectual property legal instrument requiring that patents that start life from the contributions of poor indigenous traditional communities be only awarded if procedures designed to benefit these communities have been complied with.

This study argues the case from the perspective of the Catholic Church that developed countries should join developing countries in a spirit of solidarity to embrace the changes being proposed by the latter to the international patent system, seeing these changes as advancing the ultimate purpose of an international intellectual property regime, namely serving the universal common good and not just private or national interests.

www.fciv.org

