

Intellectual Property Rights: Implications for Development

Published by

International Centre for Trade and Sustainable Development (ICTSD)

International Environment House
13 chemin des Anémones, 1219 Geneva, Switzerland
Tel: +41 22 917 8492 Fax: +41 22 917 8093
E-mail: ictsd@ictsd.ch Internet: www.ictsd.org

United Nations Conference on Trade and Development (UNCTAD)

Palais des Nations
8-14, Av. de la Paix, 1211 Geneva 10, Switzerland
Tel: +41 22 907 1234 Fax: +41 22 907 0043
E-mail: info@unctad.org Internet: www.unctad.org

Funding for the UNCTAD-ICTSD Project on Intellectual Property Rights and Sustainable Development has been received from the Department of International Development (DFID, UK), the Swedish International Development Agency (SIDA, Sweden) and the Rockefeller Foundation.

The Project is being implemented by the International Centre for Trade and Sustainable Development (ICTSD) and the secretariat of the United Nations Conference on Trade and Development (UNCTAD) (Project Number INT/OT/1BH). The broad aim is to improve the understanding of intellectual property rights-related issues among developing countries and to assist them in building their capacity for ongoing as well as future negotiations on intellectual property rights (IPRs).

For details on the activities of the Project and all available material, see <http://www.ictsd.org/iprsonline>

Copyright © ICTSD and UNCTAD, 2003. This document has been produced under the UNCTAD-ICTSD Project on IPRs and Sustainable Development. Readers are encouraged to quote and reproduce this material for educational, non-profit purposes, provided the source is acknowledged.

The views expressed in this publication are those of the author and do not necessarily reflect the views of ICTSD, UNCTAD or the funding institutions.

Printed on CyclusPrint 100% recycled paper by Imprimerie Gerafer, 7rte de Nanfray, 74960 Crans-Gevrier, France. August 2003

ISSN 1681-8954

FOREWORD

This policy discussion paper is one of the products of the joint UNCTAD-ICTSD Project on Intellectual Property Rights and Sustainable Development. It is intended to contribute to a better understanding of the key policy issues raised by intellectual property rights (IPRs) and their impact on economic development, poverty alleviation and sustainable human development.

Part One provides a general explanation of the rationale behind IPRs and their evolution, as well as an overview of the multilateral system for their protection. These international rules have important socio-economic implications that are dealt with in Parts Two and Three. Part Two addresses some broad cross-cutting issues that constitute the basic premises behind the adoption of stronger IPR regimes in developing countries, such as the fostering of innovation and creativity as well as access to and use of new technologies. Finally, Part Three discusses the impact of new IPR standards on specific areas of concern for developing countries, namely: health; food, agriculture and biodiversity; traditional knowledge and folklore; and access to knowledge and educational, technical and scientific information. Parts Two and Three therefore analyse in more depth some of the issues addressed in Part One.

Intellectual property rights have never been more economically and politically important or controversial than they are today. Patents, copyrights, trademarks, industrial designs, integrated circuits and geographical indications are frequently mentioned in discussions and debates on such diverse topics as public health, food security, education, trade, industrial policy, traditional knowledge, biodiversity, biotechnology, the Internet, and the entertainment and media industries. In a knowledge-based economy, there is no doubt that an understanding of IPRs is indispensable to informed policy making in all areas of human development.

Intellectual property (IP) was, until recently, the domain of specialists and producers of intellectual property rights. However, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) concluded after the Uruguay Round negotiations signalled a major shift in this regard. The incorporation of intellectual property rights into the multilateral trading system and their relationship with several key public policy issues has elicited considerable concern over their pervasive role in people's lives and in society in general. Developing country members of the World Trade Organization (WTO) no longer have the policy options and flexibilities developed countries had in using IPRs to support their national development. But TRIPS is not the end of the story. Significant new developments are taking place at the international, regional and bilateral levels that build on and strengthen the minimum TRIPS standards through the progressive harmonization of policies towards the standards of the technologically advanced countries. This implies that there are

considerable challenges ahead in designing and implementing IP policy at the national and international levels.

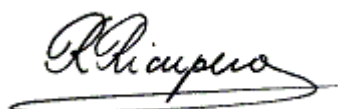
Empirical evidence on the role of IP protection in promoting innovation and growth in general remains limited and inconclusive. Conflicting views also persist on the impact of IPRs on development prospects. Some point out that in a modern economy, the minimum standards laid down in TRIPS will bring benefits to developing countries by creating the incentives structure necessary for knowledge generation and diffusion, technology transfer and private investment flows. Others stress that intellectual property, especially such elements as the patenting regime, will adversely affect the pursuit of sustainable development strategies, for example by: raising the prices of essential drugs to levels that are too high for the poor to afford; limiting the availability of educational materials for developing-country school and university students; legitimising the piracy of traditional knowledge; and undermining the self-reliance of resource-poor farmers.

It is urgent, therefore, to address the following questions: How can developing countries use IP tools to advance their development strategy? What are the key concerns surrounding the issues of IPR for developing countries? What are the specific difficulties they face in intellectual property negotiations? Is intellectual property directly relevant to sustainable development and to the achievement of agreed international development goals? Do they have the capacity, especially the least developed among them, to formulate their negotiating positions and become well-informed negotiating partners? Policy makers need to address these essential questions in order to be able to design IPR laws and policies that best meet the needs of their people and negotiate effectively for future agreements.

The joint UNCTAD-ICTSD Project on Intellectual Property and Sustainable Development was launched in July 2001 precisely to address some of these questions. One of the main objectives has been to facilitate the emergence of a critical mass of well-informed stakeholders in developing countries – including decision-makers, negotiators as well as the private sector and civil society – to enable them to define their own sustainable human development objectives in the field of IPRs, and effectively advance those objectives at the national and international levels.



Ricardo Meléndez-Ortiz
ICTSD Executive Director



Rubens Ricupero
UNCTAD Secretary General

ACKNOWLEDGEMENTS

This Policy Discussion Paper was prepared as part of a joint project on Intellectual Property Rights (IPRs) and Sustainable Development being implemented by the International Centre for Trade and Sustainable Development (ICTSD) and the secretariat of the United Nations Conference on Trade and Development (UNCTAD) (Project Number INT/OT/1BH). The broad aim of the project is to improve understanding of TRIPS-related issues in developing countries and to assist those countries in building their capacity to participate actively in ongoing as well as future negotiations on intellectual property rights. The activities of the Project have benefited from the generous support of the Department for International Development (DFID) of the United Kingdom, the Swedish International Development Agency (SIDA) and the Rockefeller Foundation of the United States.

A team led by Pedro Roffe (Project Director, UNCTAD-ICTSD) and Ricardo Meléndez-Ortiz (Executive Director, ICTSD), and comprising Christophe Bellman, Marie Chamay, Graham Dutfield, Khalil Hamdani, Assad Omer, Christoph Spennemann, Taffere Tesfachew and David Vivas, has been responsible for the preparation of this work.

The lead author of this policy paper is Graham Dutfield, Academic Director of the Project.

In addition, the following experts provided specific contributions to this work: Carlos M. Correa, Carolyn Deere, Ruth G. Okediji, Uma Suthersanen and Geoff Tansey.

We wish to thank all the individuals and institutions that provided useful comments at various stages in the preparation of this report, in particular: Adronico Adede, John Barton, Susan Bragdon, Jorge Cabrera, Bipul Chatterjee, Charles Clift, Sergio Escudero, Atul Kaushik, Nagesh Kumar, Robert Lettington, Keith E. Maskus, Mina Mashayekhi, Christopher May, Sisule F. Musungu, Leo Palma, Dwijen Rangnekar, Jonathan Salvadoray, Susan Sell, Urs P. Thomas, Carl-Gustav Thornström, Hanns Ullrich, Simon Walker, Richard Wilder and Abdulqawi Yusuf.

The final product is the result of the collective efforts of the persons involved. However, the UNCTAD-ICTSD team assumes sole responsibility for its contents.

CONTENTS

<i>Foreword</i>	<i>iv</i>
<i>Acknowledgements</i>	<i>vi</i>
<i>Contents</i>	<i>vii</i>
<i>Tables & Boxes</i>	<i>ix</i>
<i>Acronyms & Abbreviations</i>	<i>xi</i>
OVERVIEW	1
PART I: GLOBAL INSTITUTIONAL ISSUES	25
1. Introduction	27
What are intellectual property rights and what purpose do they serve?	27
Intellectual property rights: past and present	33
Why intellectual property is important to international trade	36
2. The Global Intellectual Property Rights System	43
The global architecture for IPRs	43
The emergence of TRIPS	44
Beyond TRIPS: new developments and harmonization	51
The international law of plant genetic resources and IPRs	52
PART II: CROSS-CUTTING ISSUES: THE OPPORTUNITIES	63
3. Fostering Invention, Innovation and Creativity in Developing Countries	65
Introduction	65
IPRs and local conditions	66
Some sectors of relevance to developing countries	69
4. New Technologies	75
Biotechnology	75
Information and communication technologies (ICT)	79
5. Technology Transfer	85
Developing countries: net importers of technology	85
IPRs and technology transfer	86
Who owns patents?	87
Empirical evidence	87

PART III: INTELLECTUAL PROPERTY AND SOCIAL AND DEVELOPMENT ISSUES: THE CHALLENGES	93
6. Health	95
Introduction	95
Relevance of intellectual property to pharmaceuticals	95
Policy responses	98
The Doha Declaration on the TRIPS Agreement and Public Health	99
7. Food, Agriculture and Biodiversity	105
Food security and IPRs	105
Increasing trade in agricultural produce through geographical indications	110
8. Traditional Knowledge (TK) and Folklore	117
The economic value of TK and folklore	117
Who owns TK and folklore?	117
Protecting TK and folklore through the IPR system	119
International negotiations on protection of TK and folklore	122
9. Access to Knowledge, Educational, Technical and Scientific Information	129
Background	129
Importance of access to foreign works	129
The issue of "fair use"	130
Options for developing countries	131
Collective management	132
Database protection	134
Technological devices and challenges	134
 <i>Annex A: Key Issues and Salient Features of the TRIPS Agreement</i>	 <i>139</i>

TABLES & BOXES

Tables

1.1 Share of high-technology goods in manufacturing value-added and exports in selected high-income economies	37
2.1 Main dates concerning the application of the TRIPS Agreement	48
2.2 Sample of IPR-related projects of the World Bank, with costs	50
2.3 Estimates of IPR reform in selected developing countries	50
5.1 Geographical origin of patent applications filed under the Patent Cooperation Treaty, 1998 and 2000	88

Boxes

1.1 Main categories of IPRs	27
1.2 The Commission on Intellectual Property Rights	29
1.3 Knowledge as a public good	31
2.1 Multilateral treaties	43
2.2 Copying IPR-protected goods and services: fair following or free-riding?	46
2.3 Objectives of the TRIPS Agreement	47
2.4 Eligibility and scope of protection under UPOV	53
4.1 Article 27.3(b), TRIPS: a summary of its relevant provisions	77
4.2 Patenting natural substances	78
6.1 Impact of the TRIPS Agreement on Pharmaceuticals: Studies in Thailand and Brazil	96
6.2 Patents on HIV/AIDS drugs: do they affect access?	97
6.3 "Declaration on the TRIPS Agreement and Public Health"	100
7.1 Plant variety protection: the case of Kenya	106
7.2 The Indian Protection of Plant Varieties and Farmers' Rights Act	108
7.3 The FAO International Treaty	109
7.4 GIs Extension under the TRIPS Agreement: The Pros and Cons	111
7.5 Protection of GIs: the Swiss experience	112
8.1 The "Enola" bean patent	118
9.1 "Fair use" or "fair dealing"	130
9.2 Article 13 of TRIPS	131

ACRONYMS & ABBREVIATIONS

ABS	access and benefit-sharing
CBD	Convention on Biological Diversity
CGRFA	Commission on Genetic Resources for Food and Agriculture (formerly CPGR)
CPGR	Commission on Plant Genetic Resources (of the FAO)
DMCA	Digital Millennium Copyright Act (of the United States)
EMR	exclusive marketing right
EPO	European Patent Office
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FDI	foreign direct investment
GATT	General Agreement on Tariffs and Trade
GI	geographical indication
ICT	information and communication technology
ICTSD	International Centre for Trade and Sustainable Development
IMF	International Monetary Fund
IP	Intellectual property
IPR	Intellectual property right
ISP	Internet service provider
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture (of the FAO)
MTA	material transfer agreement
PBRs	plant breeders' rights
R&D	research and development
TK	traditional knowledge
TNC	transnational corporation
TRIPS	Trade-Related Aspects of Intellectual Property Rights (also a WTO Agreement)
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UPOV	Convention for the Protection of New Varieties of Plants (abbreviation derives from the French title: Union internationale pour la protection des obtentions végétales)
WCT	WIPO Copyright Treaty
WIPO	World Intellectual Property Organization
WPPT	WIPO Performers and Phonograms Treaty
WTO	World Trade Organization

