

## IP and Sustainable Development: Development Agendas in a Changing World

## **ICTSD Programme on IPRs and Sustainable Development**

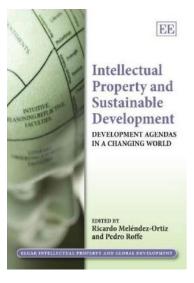
This information note - drawnfrom the introduction by the editors - summarizes the main fundings of the ICTSD book, INTELLECTUAL PROPERTY AND SUSTAINABLE DEVELOPMENT: DEVELOPMENT AGENDAS IN A CHANGING WORLD, edited by Ricardo Meléndez-Ortiz and Pedro Roffe, published by Elgar Publishing Limited, UK.

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### The New International Intellectual Property Architecture

Whether in discussions on technological progress and innovation, public health, food security, education, trade, industrial policy, traditional knowledge, biodiversity, biotechnology, the Internet or the entertainment and media industries, intellectual property (IP) has become a particularly economically and politically contentious issue. Throughout its chapters, this book explores an array of perspectives on the current state and future of IP. For many, however, IP is an entirely new subject. Indeed, historically, it was the exclusive domain of legal specialists and the owners and producers of goods and services with intellectual property content.

Not many developing countries have had much direct experience with IP policy, even in cases where such legal systems have existed for many years. Paradoxically, particularly over the past few years, IP has become an area in which developing countries have come under pressure to reform and to become more vigilant regarding the protection and enforcement of intellectual property rights (IPRs).



The substantive obligations and rules set forth in the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) of 1994 are now widely accepted as the centrepiece of the new international IP architecture. The incorporation of IPR issues into the international trading system has presented an attractive opportunity to ensure that international obligations are not only an integral part of national regimes but that the failure to implement and enforce the minimum standards required by TRIPS constitutes a

risk for action under the WTO Dispute Settlement Understanding. In addition, by placing IP issues within the scope of the WTO, Members are obliged to



International Centre for Trade and Sustainable Development

implement IP laws consistent with the most-favourednation and national treatment principles, meaning that IP protection and enforcement must be non-discriminatory as to the nationality of rights holders and that Members must also extend any advantage they grant to nationals of one country to the nationals of all other WTO Members.

The emergence of bilateral free trade agreements (FTAs) with comprehensive and robust IP chapters, however, has added new complexities and challenges for developing countries in their process of IP reform. The IP obligations in these agreements are notable for expanding the minimum standards of protection and enforcement beyond that which is laid out in the TRIPS Agreement. The main driving force behind this has been the US, together with Member States of the EU and the European Free Trade Association (EFTA).

Such trends are reinforced by the determination of these countries to move forward their strategies to strengthen the monitoring of the ways and means used by other countries, particularly developing ones, to implement their commitments and enforce IPRs at the domestic level. They have also expressed their intent to bring these matters to the attention of the WTO Council for TRIPS, while persisting in their unilateral measures to identify and expose countries that, in their view, are not fully compliant with international obligations.

An important feature of the TRIPS Agreement and the FTAs is that they provide for an expanded description of the exclusive rights conferred by IPRs. For example, in the case of patents, they include the right to prevent third parties who do not have the right holder's consent from acts of: making, using, offering for sale, selling, or importing, for these purposes, the product (in the case

of a product patent), or the product obtained directly by that process (in the case of a process patent). The Agreement adds that the term of protection shall not end before the expiration of a period of 20 years after the filing date. In FTAs, the 20-year term may be further extended to take into account delays in the administrative grant of a patent or delays resulting from the marketing approval process of a pharmaceutical or agrochemical product.

As regards copyright, its term of duration has seen a major expansion. If one takes the situation of the US - having begun with a renewable 14-year term in its first copyright statute - it now provides protection, in the case of natural persons, for the life of the author plus 70 years. This has become the typical duration of protection demanded in recent FTAs.

These developments have marked a clear expansion of the IP system to new frontiers, covering fresh subject matter and expanded rights, as seen, for example, in the case of duration. This will have implications on the public domain, constituted by knowledge not covered by IPRs or the protection of which has expired and is therefore available to interested parties, thus making access and dissemination of knowledge more difficult. The public domain is an important reservoir for innovators and creators, and for society at large.

Linked to these questions is the issue of the space left to national authorities in the implementation of IP regimes. The starting point here is that TRIPS - and especially the new generation of FTAs - has limited countries' ability to exercise such flexibilities. Flexibilities are mainly expressed in the form of exceptions or limitations that can be formulated in national laws.



### The "One-Size-Fits-All" Approach

A number of recent reports have raised fundamental concerns on the one-sided nature of the new international architecture for failing to contribute to the very objectives that the TRIPS Agreement was intended to achieve. Namely, these objectives include the promotion of technological innovation and 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 a balance of rights and obligations." Prominent among these commentaries was the influential 2002 report on Intellectual Property Rights and Development of the UK-appointed Commission (CIPR).

Overall, the Commission made an overwhelming case that a "one-size-fits-all" approach to IPR protection simply does not work, especially when the required levels of protection are as high as they are today, or are likely to become in the near future. At certain stages of development, weak levels of IPR protection are more likely to stimulate economic development and poverty alleviation than strong levels. The CIPR presented well-documented historical evidence to support this view. Available empirical data is, as the Commission reveals, somewhat lacking at present, but what does exist points to the same conclusion. The Commissioners presented strong evidence for their critical stance.

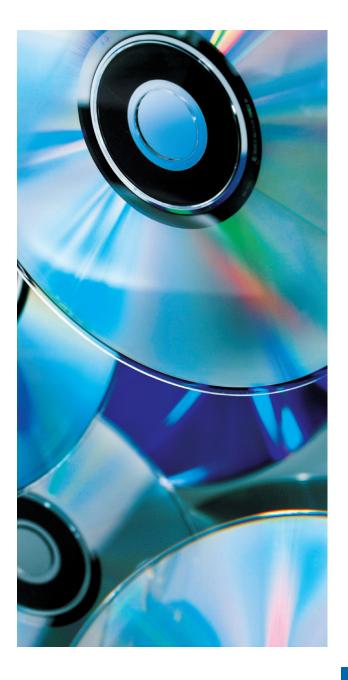
## ICTSD, Development-Oriented Agendas and the Book

Over the last couple years, the International Centre for Trade and Sustainable Development (ICTSD) has been a hub for debate and ideas on the IP and development nexus. In this respect, it has covered the various facets of the TRIPS debate and its relationship with development, regularly reporting, through its publications, on ongoing activities in the major IP forums. This work has contributed to identifying many of the concerns regarding the implementation and review of new international commitments in the field of IP - which are now under discussion at the WTO and WIPO - and have served as a catalyst for the work of several other organisations now actively involved in TRIPS and TRIPS-Plus debates.

One important facet of this work has involved organizing dialogues in Geneva (and in many parts of the developing world) as well as in Bellagio, Italy, under the aegis of the Rockefeller Foundation. These dialogues have engaged ministries of trade, environment, health, agriculture and foreign affairs, as well as IP offices, think tanks, academics and civil society from around the world.

The first Bellagio Dialogue was convened in 2002, at which an agenda was set for development-oriented IP policy. On this occasion, participants highlighted that:

 IP policy could contribute to development if properly formulated to respond to national needs and stages of development, and should promote innovation and creativity, as well as contribute to the integration of developing countries in the multilateral trading system.



- The problem is that the opportunities for tailoring national IP systems to promote sustainable development are being rapidly foreclosed.
- The need exists to rebalance IP policies, at all levels, by taking into account the interests of producers, creators, local communities, consumers and society at large.
- One single IP model does not respond to the development concerns of low- and middle-income countries.
- Mastering technology is key to fair integration and participation in multilateral trading systems. In this respect, all developing countries face a major challenge that requires the urgent attention of the international community.
- The TRIPS Agreement, its evolution and jurisprudence should continue to recognize existing flexibilities and the need for their adaptation to national conditions.
- The trend towards harmonization of IP policies is driven by industrialized countries concerns.

In addition, participants affirmed that this process should accommodate a diversity of approaches, i.e. developing countries should not be forced to forgo stages of development by adopting inappropriately high standards of protection not commensurate with their level of development.

In response to these developments - and in many respects influenced by the first Bellagio Dialogue - a "Development Agenda" was recently proposed in the context of WIPO aimed at making development a crucial element of

negotiations on IP and policy-making in general. According to the proponents, WIPO, as a UN agency, should be "fully guided by the broad development goals that the UN has set for itself, in particular the Millennium Development Goals", and take due account of all the pro-development provisions in the TRIPS Agreement and subsequent decisions such as the Doha Declaration on the TRIPS Agreement and Public Health.

Argentina and Brazil led the initiative to launch the Development Agenda in 2004 and their proposal was co-sponsored by 13 developing countries. According to the original proposal, although significant scientific and technological progress has been made over the last century, a knowledge gap - as well as a digital divide continues to separate the wealthy nations from the poor. The proposal argued that it was important not only to see intellectual property protection as an end in itself, nor to treat all countries alike in the harmonization of intellectual property laws, but to also take due account of different levels of socio-economic development. The proposal identified several ways to achieve this objective. For instance, it proposed the drafting of a treaty on access to knowledge and technology, amending the WIPO Convention, to incorporate the development dimension and reforming WIPO norms and practices, including the development of principles and guidelines for normsetting activities. It also encouraged wider civil society participation in the WIPO negotiation process.

In October 2007, the WIPO General Assembly adopted 45 recommendations to achieve the objectives of a Development Agenda.

The book, drawing on all these developments, is organized in three parts, with development, sustainable development and diversity as central themes.



### Part One of the Book: The New IP Landscape

The first Part looks at the IP landscape in general. For example, Peter Jaszi outlines the cross-cutting developments that have taken place in the contemporary law of intellectual property rights, in which their scope and application are continually expanding. As the author notes, these developments may ultimately frustrate the cause they were originally intended to promote - innovation to benefit the public at large. Powerful economic and political pressures towards the increasing commodification of information are at work nationally and internationally. Among the many potential adverse consequences is the enclosure of basic information essential to continued cultural production. As basic inputs to the innovation process are privatized, it becomes increasingly likely that legal rights will be misused in efforts to intentionally impede competition. It is just as likely, however, that commercial rationing of existing stores of information will chill the generation of new knowledge.

Essays on the reform process in general in developing countries further complement the content of Part One.

Carolyn Deere's contribution analyses the approaches taken by developing countries on IP decision-making. As the author points out, the approaches taken raise a number of questions. How do politics at the national level impact the prospects for development-oriented IP reforms? What kind of institutional frameworks would best ensure that public policy goals are integrated and advanced in IP policy and decision-making? One conclusion reached is that the achievement of development-oriented IP reforms demands systematic political attention and co-ordination in national capitals. This highlights the urgent need for all governments to build IP policy-making processes that engage the full range of relevant national ministries and key non-government stakeholders from industry, civil society and the research community.

Peter Yu's contribution takes the view that the upgrading of protection alone is a necessary but not sufficient condition for the purpose of maximizing the competitive gains from additional innovation and technology acquisition over time, with particular emphasis on raising innovative activity by domestic entrepreneurs and enterprises. Rather, the system needs to be strengthened within a comprehensive and coherent set of policy initiatives that optimize the effectiveness of IPRs. In focusing on the reform process in China, the author cites that such initiatives include the further

structural reform of enterprises, trade and investment liberalization, promotion of financial and innovation systems to commercialize new technologies, expansion of educational opportunities to build human capital for absorbing and developing technology, and specification of rules for maintaining effective competition in Chinese markets.

Included in Part One is a novel contribution by Ahmed Abdel Latif regarding the Arab world. The author notes that developments relating to the protection of IP in Arab countries have generally received less attention compared to that in other developing countries. The dominant discourse on IP in the Arab world has mainly focused on the importance of compliance with international IP obligations and enforcement of intellectual property rights. In response, this chapter stresses the need for Arab countries to adopt a more development-oriented perspective on IP protection that views this protection in the wider context of its relation to other public policy objectives and overall development efforts.

Part One concludes with an examination of one of the most controversial issues of recent trends in the IP landscape: the consequences of the TRIPS Agreement on access to medicines. The issue of pharmaceuticals and the IP system reverberates often in subsequent chapters. Keith Maskus makes the point that, as a consequence of the TRIPS Agreement, many developing countries have implemented or strengthened product patents in pharmaceuticals in recent years. The FTAs have demanded intellectual property protection in pharmaceuticals that goes beyond that stipulated in TRIPS (so-called "TRIPS-Plus" standards). In the author's view, these provisions are designed to considerably curtail the entry of generic competitors in patented pharmaceutical markets once patents have been registered in the recipient country. The focus here is on a review of economic literature on drug pricing under generic competition in answering the question: What have studies in the professional economics literature discovered about the impact of generic competition on prices of patented drugs?



### Part Two: Policy Challenges in the South

Part Two includes several country case studies in Africa, Asia and Latin America on topical issues in the current IP discourse, including questions relating to the impact of IP on the pharmaceutical sector, the protection of life forms and traditional knowledge, geographical indications, access to knowledge and public research institutes, and the role of competition policy. Here, the authors offer a wide variety of development perspectives and alternative solutions on the role of IP in these controversial issues.

Biswajit Dhar's contribution traces the interesting case of India with respect to patent protection on medicines. One of the first laws that the country took up for review after it became a sovereign state in 1947 was patent law. The culmination of this process was the Patents Act of 1970. The development of an indigenous pharmaceutical industry in India following the adoption of the 1970 Act resulted in a downward movement in the prices of drugs in the country. The TRIPS Agreement has changed the conditions that saw the Indian pharmaceutical industry take root. The critical issue for the industry was the introduction of the product patent regime and the limitations that this change had imposed on its ability to produce technologies through reverse engineering. The chapter delves on the likely impact the change in the country's patent regime could have on the Indian generic pharmaceutical industry.

Jakkrit Kuanpoth's chapter deals with the bilateral trade and investment agreements that are increasingly used strategically by powerful countries to incorporate

"TRIPS-Plus" commitments that, according to the author, have been difficult to achieve in multilateral settings (notably at the WTO). These TRIPS-Plus obligations may deny developing countries benefits and flexibilities within trade agreements aimed at enhancing pro-innovation activities and technology transfer. The chapter focuses on issues related to pharmaceutical patenting. By looking at the situation in Thailand, It examines whether or not TRIPS-Plus rules on pharmaceutical patents generate benefits to developing countries.

The contribution by Kameri-Mbote and Otieno-Odek examines how eastern and southern African (ESA) countries have had to revisit their intellectual property rights regimes in response to the TRIPS Agreement. As noted by the authors, this has coincided with the development of new technologies that necessitate changes in domestic laws for the protection of new inventions. The dearth of human and resource capacity in both IP and emerging technologies has constrained the ability of these countries to consider and respond to the arising needs of their national development agendas. The ESA countries have therefore engaged in legislative changes at the domestic level purely as a legal requirement without analysing the impacts of the changes on the countries and the region as a whole. The chapter looks at the interface between the protection of genetic use restriction technologies (GURTs) and IPRs on sustainable use of agrobiodiversity and food security. The chapter examines the role of IPRs in the region and the place of GURTs in that schema. The role of IPRs in development and



the arguments for and against GURTs are discussed, including proposals for possible responses that ESA countries could consider to mitigate the potential adverse impacts of IPRs and GURTs on agriculture in the region.

Daniel Robinson analyses the protection of plant varieties and biotechnological innovations that raises a set of issues which are critical to the sustainable development and economic growth of developing countries. The chapter focuses on the Asian region. Intellectual property also raises concerns for traditional local groups and farmers' networks within these countries, relating to their local economies, control over agricultural inputs and debt, farmers' rights, promotion and protection of their knowledge and innovations. The author suggests a range of components and elements for potential sui generis systems of plant variety protection and the legal handling of traditional knowledge, while emphasizing the fact that countries have considerable space for the development of unique laws, subject to the obligations imposed by international agreements. Clearly, patent protection of plant varieties and their components may be at odds with the interests of developing countries throughout Asia. This is due to a range of concerns, including the consolidation of global seed and agricultural industries, the potential economic and environmental impact of genetically modified plants, the protection of TK, food security, seed prices, R&D and technology transfer. Furthermore, new plant variety protection in accord with the International Union for the Protection of New Varieties of Plants (UPOV) may provide a limited scope of protection recognizing only value-addition in new varieties and is oriented towards advanced breeders. According to Robinson, there is therefore clear scope for countries in Asia to adapt or innovate towards laws that are more suitable for their own state, farmer and community needs.

Dwijen Rangnekar takes up the issue of geographical indications (GIs) and how they are increasingly being seen as useful intellectual property rights for developing countries, particularly in the Asian region. According to the author, this is because of their potential to localize economic control, promote rural socio-economic development and enable economic returns to holders of traditional knowledge. Some of these factors lie at the heart of the demand for stronger protection for products other than wines and spirits

in the TRIPS Council. Actualizing this latent potential within GIs, however, requires the development of complementary institutions and co-operation of all interested parties throughout the product's supply chain; although there appears to be no singular and common pattern among successful GI products. This chapter maps the legal options available for the protection of GIs; in other words, laws focusing on business practice, trademarks and special means. It then discusses two legal issues: the preferred legal means and the way in which the hierarchy in the level of protection can be implemented in domestic law. These issues are examined through an analysis of GI implementation in a number of Asian countries. Against this background, a number of issues for further consideration are identified and examined: a) how to secure stronger protection, and b) what steps need to be taken to actualize the latent potential in GI protection. The discussion is presented with empirical evidence from case studies of GI products, including the recent experience with respect to the protection of Darjeeling tea.

The contribution by Andrew Rens, Achal Prabhala and Dick Kawooya looks at the issues of knowledge in the context of eastern and southern Africa, and the way in which the copyright regimes have provided responses to the needs of sustainable development. It analyses the different components required for effective access to knowledge in the region. In the authors' view, access to learning materials is one key aspect of access to knowledge, and is a major focus of the chapter. The study of access to knowledge as a development goal, in the context of the state, closely relates to the challenges of literacy and education in the global south. The authors examine the barriers to access to learning materials faced in the Southern African Customs Union (SACU) and look at the informal economy in knowledge goods through a case study in Uganda. The chapter further surveys intellectual property law in SACU member countries and audits the limitations or exceptions available within the law. One conclusion reached is that, currently, copyright legislation in SACU Member States makes neither significant positive provision for access to learning materials nor takes full advantage of the flexibilities provided by TRIPS. Ironically, it is precisely in this disabling legal environment that the SACU countries are being asked - by domestic and international publishing industry lobbies - to strengthen the enforcement of criminal sanctions for certain copyright violations,



even as they constitute an access mechanism in a context that offers few alternatives.

Jorge Cabrera discusses intellectual property rights instruments and alternative mechanisms for innovation stimulus in public research centres and universities in the Central American region. The chapter includes a number of recommendations designed to encourage innovation at three levels: a) institutionally (such as research centres, universities and the private sector); b) in national policies and legal frameworks to encourage public and private research and innovation in accordance with national development objectives; and c) internationally, primarily dealing with active and effective country participation in international instruments and at different forums where IPRs, innovation and related topics are discussed. The author is of the view that in the case of the Central American region, and in particular for small and medium-sized enterprises, innovation and competitiveness have become key concerns due to the conclusion of FTAs. It is essential, according to the author, that governments and other national actors understand the importance of innovation and technological change for the promotion of sustainable growth and development. Additionally, in a biologically rich region, innovation could be increasingly linked to the intelligent use of biodiversity,

not only for economic growth and job creation but also for the conservation of natural resources. Innovation represents an important challenge for the region for both competition in international markets and advancement of the standard of living, in particular in the farming sector. Cabrera considers that while important efforts have been made to improve the enforcement capacities of IPR standards in developing countries, much less effort has been made to attend to the use of IPRs to assist with the development of local innovating potentials in these countries.

Tenu Avafia, Jonathan Berger and Trudi Hartzenberg examine the implementation of the 30 August 2003 Decision of the Council for TRIPS by select eastern and southern African countries at various levels of development. For this, South Africa, Kenya and Zambia are examined. The chapter also considers the use of competition legislation and policy as a tool by developing countries in the region focusing on those countries that have both competition legislation and dedicated authorities, and the role that can be played by a regional competition policy. Existing regional competition policies are examined, focusing on the Common Market for Eastern and Southern Africa (COMESA) as an alternative regulatory tool with which to regulate anticompetitive practices on essential medicines in the ESA region. The conclusion reached by the authors is that there are clearly different levels of implementation of TRIPS flexibilities, the Doha Declaration on TRIPS and Public Health, and the 30 August Decision in various eastern and southern African countries. While some have gone as far as to issue compulsory licences and government use orders, none have to date made use of the notification mechanism available in the 30 August Decision for the importation of generic essential medicines. According to the authors, for countries to make complete use of that Decision, a number of fairly complicated industrial property legislative provisions will have to be modified in each country in the region.

## Part Three: Responses to the TRIPS-Plus World

Part Three examines a number of the facets of the chal-lenges developing countries face in the TRIPS-Plus world.

Carsten Fink argues that the context in which developing countries adopt new IPRs policies differs from how these policies have evolved in developed countries.

Even though the interests of IPRs owners have always played a key role in norm setting in developed nations, IPRs policies have been embedded in a broader institutional framework providing certain checks and balances to the exclusive rights of IPRs holders. These checks and balances are not well developed in many developing countries. The author points to selected

instruments and asks, specifically, how the adoption of competition laws can be promoted in developing countries.

Carlos Correa analyses the FTA signed by the Central American countries and the Dominican Republic with the United States of America (CAFTA-DR) in the context of it requiring introduction of a sui generis regime for the protection of test data submitted for the registration of pharmaceutical and agrochemical products. This modality of protection - which is not mandated by TRIPS - subjects test data to standards of protection significantly higher than those required in TRIPS. According to the author, the essential difference is that while the latter protects the test data under the framework of unfair competition, CAFTA-DR requires the grant of exclusive rights for a period of at least five years. The "TRIPS-Plus" protection of test data has become a common element in recent FTAs concluded by the US with developed and developing countries, as well as in the protocols of accession subscribed by new Members of the World Trade Organization. As a result of a Dialogue organized by ICTSD in Costa Rica in 2006, participants suggested that the preparation of a Model Law on the modalities for giving effect to the CAFTA-DR would be a useful contribution to the implementation of the provisions on data exclusivity which would have access to health as a major consideration. Correa

formulates here a sui generis Model Law that provides pro-competitive guidelines for the implementation of the obligations regarding test data contained in CAFTADR, in a way compatible with the treaty.

Sisule Musungu observes that one important aspect of the strategy behind the introduction of IP into the Uruguay Round of Multilateral Trade Negotiations that resulted in the TRIPS Agreement was to ratchetup enforcement of IPRs in developing countries. Consequently, in addition to the application of the WTO dispute settlement system to IP disputes between WTO Members, detailed rules regarding enforcement of IP at the national level were inserted into TRIPS. The minimum enforcement standards under TRIPS provide general obligations on enforcement and very specific rules on evidence, injunctions, damages, remedies and border measures, as well as on application of criminal procedures and penalties. The author examines the "TRIPS-Plus" implications of the enforcement provisions included in the draft negotiating texts of economic partnership agreements (EPAs) between the EU and the Economic Community of West African States (ECOWAS), and raises a number of issues aimed at providing a positive agenda for ECOWAS countries on IP enforcement and in assisting these countries with their response to the EU demands while addressing their local concerns.

### **A Final Word**

The book is the result of the work and initiatives undertaken by ICTSD in recent years and is very much inspired, in particular, by the findings of the first Bellagio encounter mentioned above. It brings together a selected number of papers produced for these dialogues by recognized experts in the field of IP and development, as well as those written by rising (and promising) scholars and policy-makers. The authors come from different parts of the globe but are united by their shared concern that more-balanced IP regimes responding to sustainable development imperatives are needed.

An important theme in the work sponsored by ICTSD has been the search for an IP system that is responsive to sustainable development considerations. As the title of the compilation suggests, there is, in fact, no one development agenda profile - as there is no one single system of IP - that fits all development needs. Another important aspect of the work of ICTSD has been the

acknowledgment of diversity. The IP system emerged in Europe and was later imported and expanded upon in North America. The spread of the system - and its nearly uncritical adaptation in Latin America, Asia, Africa and the Arab world - followed the model developed in the north. Recent developments as a result of the TRIPS Agreement and FTAs have made developing countries more mindful of the importance of IP regimes and of their implications for development. They have consequently become better-informed actors in the IP conversation.

The book is unique in that it brings together a diversity of voices on the issues that today occupy a central space in international economic debates. The voices heard here are not only from the developing countries but, in particular, are those of experts who have focused their attention on the implications of recent trends, the progress of science and arts, and an equal share of knowledge.

#### **Contributors to the Book**

- Ahmed Abdel Latif is Programme Manager of Intellectual Property and Sustainable Development at ICTSD. He was a delegate of Egypt to the TRIPS Council of the WTO and to the WIPO during 2000-2004.
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- Jonathan Berger is a senior researcher and policy, research and communications manager at the AIDS Law Project, South Africa. In addition, he represents the law and human rights sector on the Programme Implementation Committee of the South African National AIDS Council.
- Jorge Cabrera is a Legal Adviser to the National Biodiversity Institute and Professor of Environmental Law at the University of Costa Rica. He has worked as an international consultant on access and benefit sharing, intellectual property rights and biodiversity, biotechnology and biotrade issues.
- Carlos Correa is Director of the Center for Interdisciplinary Studies on Industrial Property and Economics, and of the Postgraduate Course on Intellectual Property at the Law Faculty, University of Buenos Aires. He has advised several governments on intellectual property and innovation policy and was a member of the UK Commission on Intellectual Property and of the Commission on Intellectual Property, Innovation and Public Health established by the World Health Assembly.
- Carolyn Deere is Director of the Global Trade Governance Project and Senior Researcher at the Global Economic Governance Programme at Oxford University, as well as a Resident Scholar at ICTSD. She is the founder and Chair of the Board of Directors of Intellectual Property Watch and was previously the Assistant Director of the Global Inclusion Programme at the Rockefeller Foundation.
- Biswajit Dhar is currently Director General of Research and Information Systems for Developing Countries (RIS) in New Delhi. At the time of his contribution to this book, he was Professor and Head of Centre for WTO Studies in the Indian Institute of Foreign Trade, New Delhi. He has been working on issues related to intellectual property rights for nearly two decades, both as a researcher and a policy adviser to the Government of India.
- Carsten Fink is currently WIPO Chief Economist. At the time of his contribution to this book, he was a Visiting Professor at the *Fondation Nationale des Sciences Politiques* (Sciences Po). He had been previously a Senior Economist in the International Trade Team of the World Bank Institute at the World Bank's office in Geneva.
- **K. M. Gopakumar** is a Research Officer at the Centre for Trade and Development (Centad) in New Delhi, where his work involves coordinating Centad's work on trade and public health, and intellectual property and development. He previously worked with the Lawyer's Collective (Affordable Medicines and Treatment Campaign).
- **Trudi Hartzenberg** is Executive Director of the Trade Law Centre for Southern Africa (tralac). She is an economist working on trade policy (in particular new generation issues, such as competition policy, investment and government procurement), as well as regional integration in East and Southern Africa.
- Peter Jaszi teaches copyright law at the American University Law School where he assists in directing the Glushko-Samuelson Intellectual Property Law Clinic and the Program on Information Justice and Intellectual Property. He helped to organize the Digital Future Coalition in 1995 and is a Trustee of the Copyright Society of the USA.
- Patricia Kameri-Mbote is an Associate Professor of Law, an Advocate of the High Court of Kenya and Chair of the Department of Private Law, University of Nairobi, as well as the Africa Programme Director for the International Environmental Law Research Centre. She has served as Director of Research and Policy Outreach, African Centre for Technology Studies and as a Policy scholar at the Woodrow Wilson International Center for Scholars.

- Dick Kawooya is a Lecturer at the School of Information Studies (SOIS), University of Wisconsin-Milwaukee. He is co-founder of the African Access to Knowledge Alliance (AAKA) based in Botswana, as well as the Lead Researcher of the African Comparative Copyright Review (ACCR) project funded by the International Development Research Centre (IDRC).
- **Jakkrit Kuanpoth** is currently a Senior Lecturer, Faculty of Law, University of Wollongong and a Barrister-at-Law of the Thai Bar. He previously taught at the School of Law, Sukhothai Thammathirat Open University in Thailand.
- **Keith E. Maskus** is Professor of Economics and Associate Dean for Social Sciences at the University of Colorado, as well as a Research Fellow at the Peterson Institute for International Economics and a Fellow at the Kiel Institute for World Economics. He has been a Lead Economist in the Development Research Group at the World Bank.
- Ricardo Meléndez-Ortiz is the co-founder and, since 1996, Chief Executive of ICTSD. Previously, he co-founded and was general director of *Fundación Futuro Latinoamericano* in Quito and served as Counsellor in the Colombian Mission in Geneva. In 1997, he founded (and is the publisher of) the specialized journal BRIDGES and its sister publications.
- Sisule Musungu is Legal Researcher and Policy Analyst on innovation for development, access to knowledge and intellectual property. Previously, he worked as the Coordinator of the Innovation and Access to Knowledge Programme at the South Centre. He is a director of IQsensato.
- James Otieno-Odek is the Managing Director of the Kenya Industrial Property Institute and is the Registrar of Trade Marks, Patents, Industrial Designs and Utility Models of the Republic of Kenya. He is also currently a Professor of Public Law specializing in Intellectual Property Law, International Economic Law and International Trade Law.
- Achal Prabhala coordinated the Access to Learning Materials Project in Southern Africa between 2004 and 2005 from Johannesburg and currently works as a researcher and writer in Bangalore, collaborating on access to medicines work with the Lawyers' Collective HIV/AIDS Unit and on access to knowledge advocacy with the Alternative Law Forum.
- **Dwijen Rangnekar** is the Research Councils' UK Academic Fellow at Warwick University, with an appointment jointly at the Centre for the Study of Globalisation and Regionalisation and the School of Law. He teaches intellectual property law and his research interests cover technology studies, globalization and intellectual property.
- Andrew Rens is Intellectual Property Fellow at the Shuttleworth Foundation in Cape Town, where he researches Intellectual Property and Access to Knowledge issues. Previously, he was a fellow at the Stanford Centre for Internet and Society before conducting research at the LINK Centre, University of the Witwatersrand.
- Daniel Robinson is currently a lecturer in environment and geography at the Institute of Environmental Studies, the University of New South Wales (UNSW). He has worked for several years on intellectual property, traditional knowledge and biodiversity issues, particularly in Asia.
- Pedro Roffe is Senior Fellow with the ICTSD Programme on Intellectual Property and Development. He previously held a variety of positions at UNCTAD. His work has primarily focused on the international aspects of transfer of technology, intellectual property and foreign direct investment.
- Peter K. Yu holds the Kern Family Chair in Intellectual Property Law and is the founding director of the Intellectual Property Law Center at Drake University Law School. He is also a research fellow of the Center for Studies of Intellectual Property Rights at Zhongnan University of Economics and Law in Wuhan, China, and serves as a visiting professor at the University of Hong Kong Faculty of Law.

# IP and Sustainable Development: Development Agendas in a Changing World

Edited by Ricardo Meléndez-Ortiz and Pedro Roffe, International Centre for Trade and Sustainable Development (ICTSD)

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Professor of International Affairs, The New School, New York

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