# Intellectual Property, Community Rights and Human Rights

The biological and genetic resources of developing countries

Marcelin Tonye Mahop



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First published 2010 by Routledge

2 Park Square, Milton Park, Abingdon OX14 4RN

Simultaneously published in the USA and Canada by Routledge 270 Madison Avenue, New York, NY 10016

Routledge is an imprint of the Taylor & Francis Group, an informa business

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Typeset in Baskerville by Taylor & Francis Books

Printed and bound in Great Britain by

CPI Antony Rowe, Chippenham, Wiltshire

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British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

Library of Congress Cataloging in Publication Data

Mahop, Marcelin Tonye. Intellectual property, community rights, and human rights: the biological and genetic resources of developing countries / Marcelin Tonye Mahop.

Includes bibliographical references and index.

ISBN-13: 978-0-415-47942-4 (hbk)

ISBN-10: 0-415-47942-8 (hbk)

ISBN-13: 978-0-203-85298-9 (ebk) ISBN-10: 0-203-85298-2 (ebk)

1. Biopiracy. 2. Biotechnology - Law and legislation. 3. Traditional ecological

knowledge - Law and legislation - Developing countries. I. Title. K1519.B54M34 2010

343.' 0786606 - dc22

2009043116

ISBN13: 978-0-415-47942-4 (hbk)

ISBN13: 978-0-203-85298-9 (ebk)

### **Foreword**

In the past four decades, phenomenal developments in biotechnology and information technology have combined to push to the fore the great potentials and benefits of PGRs. It is now widely accepted that plants contain an immense store of chemical resources that could be used for a variety of purposes. The astonishing aspect of this unfolding phenomenon is the emerging realization by researchers and scientists that much of the knowledge of the diverse uses of plant resources are possessed by various persons and stakeholders in traditional communities where most of the plant resources have been grown and used for millennia. Thus, PGRs and traditional knowledge must of necessity be construed and understood as community assets. These assets are essential for maintaining the livelihoods of rural communities, and for sustaining myriad cultural and societal functions. However, the increasing scientific and commercial interests engendered by the huge potentials of bio-cultural plant resources has opened up fissures at various levels on the fair and equitable use of plant bio-cultural resources.

The emerging debate underscores the important point that in addition to scientific and commercial interests in the exploitation of these elements of bio-cultural diversity, other institutions and stakeholders, in particular, local communities, have relevant interests in PGRs and traditional knowledge. For several generations now, community assets from developing countries have been exploited by scientifically and technologically capacitated actors, sometimes legally but also illegally and generally unethically. Such exploitation activities are a cause of concern to local and indigenous communities ranging from overutilization and depletion of the resources, 'bio-piracy', lack of respect of communities' prior rights over their assets and failure to ensure community participation in decision-making processes and to provide them with fair benefits and compensation. Sadly, in the power structure which imbues each stakeholder with voice and capacity in deciding who gets what 'rights' in the debate regarding the exploitation of resources, local communities are often given the short shrift.

While myriad national, regional, and international regulatory instruments and regimes on plant resources have focused on the intellectual property rights dimensions of plant resources, the underlying issue of fairness and justice to local communities has not gained equal prominence. Local communities lack voice because their contributions to PGRs are not respected and considered worthy of

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bearing legal rights. This stems largely from an elitist conception of what constitutes knowledge and which knowledge is worthy of respect and legal protection. This condescending attitude towards local communities diminishes the millennia of scientific contributions of local communities while ignoring the palpable human-rights dimensions of the regulation of access to and use of community assets for scientific and commercial purposes and the management of and control over access to these assets by local and indigenous communities.

This book fills a significant gap in contemporary scholarship on the human-rights aspects and justice-based formulation of the rights of local communities to plant resources. In pulling together an analysis of a cross-section of case studies of exploitation of community assets and trespass upon their human rights and of national, regional and international intellectual property-related biodiversity instruments and human-rights instruments drawn from the Americas, Asia Pacific and Africa, the author has crafted an elegant, readable, and penetrating analysis of the human-rights dimensions of the lingering neglect and denial of the human-rights issues raised by the scientific and commercial exploitation of community assets. Unless and until we understand the neglect of local communities and exploitation of traditional knowledge of the uses of plants as human-rights issues, the quest for sustainable development will be a mirage. Those lessons still need to be learned and this excellent book is a good place to start.

Ikechi Mgbeoji Professor of Law Osgoode Hall Law School, Toronto, Canada

### **Preface**

PGRs and traditional knowledge, defined in this book as 'community assets', are very important elements of bio-cultural diversity, attracting scientific and commercial interests nationally and internationally. However, these elements of biocultural diversity are also essential for maintaining the livelihoods of rural communities in the developing countries rich in these assets. Apart from and in addition to scientific and commercial interests in the exploitation of community assets, other entities or institutions hold genuine interests in respect of their relationships with PGRs and traditional knowledge. Indeed, access to and potential exploitation of community assets are regulated through national, regional and international biodiversity regulatory schemes which are administered by specific institutions. Such regulatory schemes are generally developed to reflect well known legally and non-legally binding international and regional environmental laws, treaties and protocols such as the 1992 Rio Convention on Biological Diversity (CBD), the 2002 Bonn Guidelines on Access to Genetic Resources, the Andean Community Common Regime on Access and Benefit Sharing, and the 2001 International Treaty on Plant Genetic Resources for Food and Agriculture (IT-PGRFA) of the Food and Agriculture Organization (FAO) of the United Nations (UN). Other international treaties impacting on PGRs and traditional knowledge more oriented towards the commercial exploitation of these elements are the intellectual property treaties such as the 1994 Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) of the World Trade Organization (WTO) and the conventions of the International Union for the Protection of New Plants Varieties (UPOV) especially the UPOV 1991 Convention. Additionally, there are indigenous peoples and professional bodies' declarations developed as soft instruments which attempt to streamline access to genetic resources and traditional knowledge and to balance the interests of all stakeholders involved in access processes such as local communities, researchers, industries and politically motivated decision-makers. The institutions administering all of these treaties and the peoples working for them all have interests in one or more aspects pertaining to the regulation of access to, use of and sustainable management of community assets. Above all, there is a human-rights dimension in the regulation of access to and use for scientific and commercial purposes and the management and control over access to community assets. This human-rights dimension is indeed grounded on the community way of life and cultural association with their assets and is recognized in the regional and international human-rights instruments.

It is widely known that from the colonial era till date, community assets from developing countries have been exploited by scientifically and technologically capacitated actors, sometimes legally but also illegally and generally unethically. Such exploitation activities are a cause of concern to local and indigenous communities ranging from overexploitation and depletion of their assets, 'bio-piracy', lack of respect of communities' prior rights over their assets and failure to ensure community participation in decision-making processes and to provide them with fair benefits and compensation. All these concerns are human-rights related, and understanding that and addressing them as 'human rights' elements can go a long way to mitigating community concerns and establishing trust between local and indigenous communities and other actors and entities including scientific and commercial users, institutions administering key regulatory instruments and decision-makers working for these institutions in national, regional and international settings.

It is against this background that the idea to write this piece emerged and the product emerged. It is my strong and profound belief that a practical consideration and construction of human-rights principles in the regulatory instruments of access to and utilization of community assets is the way forward to making biodiversity-related regulatory approaches aligned with the interests of all actors. This belief stems from two pillars. On the one hand, despite the fundamental differences and technical and legal complexities inherent to the application of patents and plant breeder's rights systems, it is important to enable local and indigenous communities to understand how these two IP tools operate, the rational for scientific and commercial operators' pursuit and acquisition of them and the potential benefits that may ever acrue to local communities. All these will gradually help them to accept and value the intellectual property rights such as patents and plant breeders' rights of others as legitimate rights. On the other hand, it is critical that all aspects of access processes and scientific and commercial utilization of community assets reflect the human rights of local and indigenous communities. The approach of this book is to bring about this balance through the development and suggestion of ways to implement intellectual property based and human-rights oriented biodiversity regulatory measures at the national level. The book has focused its analysis on four countries - Brazil, India, Peru and South Africa – used as case study countries. However, it is at the core of these analyses the understanding that the regulatory approaches discussed be replicable and adaptable to various national contexts according to every country's peculiar circumstances.

## Acknowledgements

In the course of writing this book I received support from many senior colleagues and intellectual property and biodiversity policy and conservation professionals to whom I am heavily indebted. First of all, I want to express my profound appreciations and gratitude to Dr Graham Dutfield who is a professor of international governance at the University of Leeds for his very early courage-boosting words once my proposal for the publication of this book was accepted by Routledge. Despite his hectic schedule. Prof. Dutfield was kept informed on the progress on this book and maintained his support to my ambition to complete the manuscript. I want to stress that Prof. Dutfield, who supervised my Ph.D. while he was in post at the Centre for Commercial Law Studies, Queen Mary, University of London, always said to me that it would be good to have my Ph.D. materials transformed into a book, but that this would require expanding the scope of enquiries, thus meaning a great deal of further research. This product reflects exactly his suggestions, as it has added a significant human rights and PBRs dimension to the narrow scope of community rights in relation to patents and biodiversity regulations discussed in the Ph.D. dissertation. In addition, I received invaluable support from Prof. Ikechi Mgbeoji of Osgoode Hall Law School of York University, Toronto, for his technical and moral supports throughout the development of this book, all of which were crystallized by his acceptance to write the foreword. I will also be recognizant of the moral and technical supports received from some colleagues at the Centre for Commercial Law Studies (CCLS) at Queen Mary, University of London, who were informed of my plans to publish this book and of the acceptance of my proposal by Routledge and who were consulted as the writing-up process evolved. In particular, I want to express my sincere gratitude to Malcolm Langley, the Librarian of the Intellectual Property archive of the Centre for Commercial Law Studies, Queen Mary, University of London for allowing me to use the intellectual property archive.

Within the realm of biodiversity policy and conservation professionals, I here want to mention the support from colleagues of the African Conservation and Development Foundation, especially Dr Daniel Pouakouyou; colleagues from the African Centre for Biosafety with whom every now and again I am involved in research on bio-piracy in Africa; colleagues from the ABS (Access and Benefit Sharing) Capacity Development Initiative for Africa (www.abs-africa.info), in

#### xii Acknowledgments

which I contribute as an African professional on biodiversity and intellectual property policy issues and especially on ABS issues.

These acknowledgements will be incomplete if I do not stress the moral support and joy provided to me by my family. All the way through, my wife Arlette Roseline Noutang Bassa Tonye, my two sons Ian Dimitri Mahop and Wilfred Mongo Tonye, and my mother Ngo Biya Anne, have provided me with those invaluable moments of relaxation, during the hectic periods of research and writing up.

Last but not least, I have very special thoughts to my late father, sister and godfather who made me the man and professional I am today but did not live to see these achievements.

### **Abbreviations**

ABS access and benefit sharing
ACB African Centre for Biosafety

A(B)CHPR African (Banjul) Charter on Human and Peoples' Rights
ACHPR African Commission on Human and Peoples' Rights

AU African Union

BIO biotechnology industry organization
BIS balanced information sharing
BMA British Medical Association

CBD Convention on Biological Diversity

CBD-COP Convention on Biological Diversity Conference of the

**Parties** 

CBIPRs Community Based Intellectual Property Rights

CBO community based organization
CBPR community based property right

CCM cultural consensus model CCP code of civil procedure

Cefic European Chemistry Industry Council

CICPR community intellectual and cultural property rights
CIEL Center for International and Environmental Law

CIG common initiative group

CIMMYT International Maize and Wheat Improvement Center

CIP International Potato Center

CITES Convention on International Trade in Endangered Species
CONAGEBIO National Commission for the Management of Biodiversity

(Costa Rica)

CPG common policy guidelines

CSIR Council for Scientific and Industrial Research
DEAT Department of Environmental Affairs and Tourism

(South Africa)

DSM Dispute Settlement Mechanism

DTI South African Department for Trade and Industry

EDV essentially derived varieties
EIA environmental impact assessment

xiv Abbreviations

EPC European Patent Convention
EPO European Patent Office

FAO Food and Agriculture Organization (of the United

Nations)

FAO-IU International Undertaking of the Food and Agriculture

Organization

FDA Food and Drug Administration (United States)

GBS global bio-collecting society

GREEN Foundation Genetic Resource, Energy, Ecology and Nutrition Foun-

dation (India)

HRC Human Rights Committee of the ICCPR ICC International Chamber of Commerce

ICCPR International Covenant on Civil and Political Rights
ICESCR International Covenant on Economic, Social and Cultural

Rights

IDCID Institute of International Trade Law and Development

(University of São Paolo, Brazil)

IGC Intergovernmental Committee

IIFB International Indigenous Forum on Biodiversity IKS indigenous knowledge systems (South Africa)

ILO International Labour Organization

INDECOPI Office of Inventions and New Technologies (Peru)

IP intellectual property
IPR intellectual property right
IR international regime

IRABS International Regime on Access and Benefit Sharing ITPGR International Treaty on Plant Genetic Resources

IT-PGRFA International Treaty on Plant Genetic Resources for Food

and Agriculture

IU International Undertaking

IUCN International Union for Conservation of Nature (or the

World Conservation Union)

JPO Japan Patent Office MAS marker assisted selection

MEC Member of Executive Council (for environmental affairs

at the provincial level in South Africa)

MoU Memorandum of Understanding NBA National Biodiversity Authority

NCE new chemical entities

NTFP non-timber forests product

OAS Organization of American States

OAU Organization of African Unity

PBR plant breeders' right PGRs plant genetic resources

PGRFA Plant Genetic Resources for Food and Agriculture

prior informed consent PIC plant variety protection PVP **Ouality Protein Maize** QPM resources interests group RIG

South African National Botanical Institute SANBI South African National Biodiversity Institute SANBI

scheduled tribes (India) ST

Scientific, Technical and Research Commission STRC

Scientific, Technical and Research Commission of the STRC-OAU

Organization of African Unity

traditional knowledge TK

Agreement on Trade Related Aspects of Intellectual TRIPS

Property Rights

traditional resources rights **TRRs** 

Universal Declaration on Human Rights **UDHR** 

United Nations Declaration on the Rights of Indigenous **UN-DRIP** 

Peoples

United Nations Permanent Forum on Indigenous Issues UNPFIL International Union for the Protection of New Varieties **UPOV** 

of Plants

United States Patent and Trademark Office USPTO

World Intellectual Property Organization Intergovernmental WIPO IGC

Committee on Genetic Resources, Traditional Knowledge

and Folklore

World Intellectual Property Organization Patent Cooperation WIPO PCT

Treaty

World Intellectual Property Organization WIPO

World Trade Organization WTO

World Trade Organization Dispute Settlement Mechanism WTO-DSM

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## 1 Setting the scene

#### Focus, main themes and broader objectives

As indigenous peoples, the protection (legal or otherwise, such as through voluntary instruments and professional bodies' declarations) of 'community rights' at the national level in countries rich in biological and cultural diversity, needs to follow the path of a human-rights approach.<sup>2</sup> This suggestion is based on the recognition that community rights are crafted in many human rights instruments, international and regional, legally and non-legally binding (such as declarations), which should be taken into account in national policy-making. Unfortunately, in respect of national policy-making processes aimed at protecting community rights and addressing their concerns about access to and use of biological and genetic resources, and traditional knowledge (TK) in scientific and commercially motivated activities, there is often a lack of integration of human-rights considerations in the process. Furthermore, law and policy-making aimed at addressing the concerns of local communities are usually pursued in a very fragmented and piecemeal fashion at the national level, with no practical cooperation among the various actors and government institutions involved in the various aspects of management and regulation of community assets. As a consequence of this unpractical approach, there is no comprehensive and workable regulatory framework in force anywhere in the countries endowed with significant richness in bio-cultural diversity which can be viewed as providing protection to community rights from a human-rights perspective and addressing the various concerns of traditional and local communities - one of which being the issue of bio-piracy - over access to and use of their assets3 by technologically advanced and capacitated users.

Ironically, to address their interests, technologically capacitated users of the assets of traditional communities use other weapons in their possession, such as the application of modern intellectual property rights (IPRs) such as patents or PBR systems over the outputs of their research endeavours based on the raw assets taken from local communities or their traditional lands. Analyses contained in the following sections and chapters are based on the realization and acknowledgement that IPRs and community rights are, in a way, all linked to each other within the framework of existing human-rights instruments. Indeed, even though human rights and IPRs are fundamentally dissimilar regimes because they pursue different

aims, it is nevertheless the case that IPRs and community rights are all encapsulated in a number of international and regional human-rights treaties and recognized by international bodies such as the UN (more on this in Chapter 4). Despite this obvious linkage between human rights and IPRs, current regulatory avenues such as the ABS legislations (or biodiversity regulations) being established at the international and national levels and the voluntary mechanisms in the form of, for example, some declarations of professional bodies aiming to address the concerns and expectations of rural communities, fail to incorporate human-rights considerations from their development through to their implementation. Perhaps this situation is due to the lack of involvement of human-rights experts in these lawand policy-making processes. One of the consequences of this failure is that the weight and consideration given to IPRs in the end products from these law-making processes generally outweigh community rights and interests, perhaps due to the significant influence of corporate actors in these processes, who after all are not ready to lose, see themselves weakened, or have undermined all the benefits that they currently enjoy from strong consideration of IPRs. There seems to be profound and arguably obvious resentment on the part of traditional communities and actors sympathetic to their concerns that, indeed, in respect of policy development targeting issues of access to community assets and use of them in scientific and technology-intensive processes, IPRs of corporate and technologically capacitated actors have more influence than the community rights of local and indigenous peoples who are also traditional holders and custodians of biological resources and associated TK. For example, while corporate and research operators enjoy all the benefits arising from protecting their plants and TK-based research and development outputs by patents or PBRs including the associated financial benefits and the bargaining leverage, indigenous and local communities are being prevented from enjoying their own social and cultural benefits arising from their traditional rights over the very assets that formed the bedrock of technologically based research and development endeavours. Some of these rights that communities are arguably prevented from enjoying by PBRs are the rights to save and reuse planting materials for the next farming season and the rights to participate in decision-making processes pertaining to access to and the use of their assets at all stages of modern research and development processes.

How then should human rights come into play in an attempt to balance the interests of technology holders and modern users of the assets of traditional communities, the concerns of local and traditional communities over access and use of their assets, modern intellectual property (IP) over the application of the relevant outputs? This question is at the centre of the discussions and arguments running through the following sections and chapters of this book. Our point of departure is that in every instance involving access to community assets and use of them in profit-making technology-intensive processes with the application of patents and PBRs, we argue that stakeholders need to address the expectations of local communities from a human-rights perspective. This approach does not necessarily mean that the financial and other beneficial expectations of technology-holders would be affected negatively if they adopted a human perspective in

the course of their actions. Rather, such an approach will more likely have no effect on such beneficial expectations of technology holders, but will instil and strengthen communities' trusts in the activities of technology holders, setting the stage for sustainable and more mutually beneficial relationships between local communities and the users of their assets. The human-rights considerations will be crafted in workable policy measures that will comprehensively integrate community rights and interests as well as the goals and objectives of the IPRs.

Using four carefully selected jurisdictions, namely Brazil, India, Peru and South Africa, this book focuses on suggesting some workable, comprehensive and enforceable policy measures embedded in regulations aimed at protecting the rights and addressing the concerns and expectations of traditional communities without undermining the goals and objectives of IPRs (patents and PBRs) in the context of access to community assets, use of them in scientific and commercially oriented activities. The book does so by decrypting how modern exploitation of community assets in research and development processes and the application of patents and PBRs, in line with the concept of bio-piracy, typically bring disrespect to community rights, which are recognized in regional and international human-rights law and processes. There is no intention here to blindly blame corporate and research institutions practices for bio-piracy. The subsequent bio-piracy-related accounts are objectively analytical in nature. They refute the bio-piracy concept when a specific case is not grounded on convincing evidence and, therefore, aim to oppose any nonevidenced or blatantly anecdotal negative impact of patents and PBRs on the rights, interests and expectations of indigenous and local communities. It must however be stressed that analyses carried out in this book are not strictly limited to the four selected countries. Where deemed necessary, the book will refer to cases and examples from other countries and areas rich in bio-cultural diversity, to the extent that such examples are relevant to the main themes discussed herein.

As it transpires from the above, the main themes discussed in the book are:

- Community rights. The rights of local and indigenous communities will be defined and discussed within the frames of the various laws and policies covered in this book.
- Human-rights instruments to the extent that they address community rights and concerns.
- Biodiversity-related regulations with special emphasis on the extent to which they address community rights, interests and expectations.
- IPRs, in particular, patents and plant variety protection (PVP) systems.
- Scientific and commercially oriented exploitation of community assets with the application of patents and PBRs in the protection of the relevant outputs – with an eye on the concept of bio-piracy.

The objectives of the book are among others:

• To examine cases of access to PGRs in Brazil, India, Peru and South Africa and their utilizations in scientific and commercially oriented activities pursued