



**INNOVATION &
INTELLECTUAL
PROPERTY**

COLLABORATIVE DYNAMICS IN AFRICA

**Editors: Jeremy de Beer, Chris Armstrong,
Chidi Oguamanam & Tobias Schonwetter**

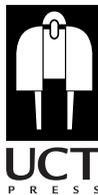
Innovation & Intellectual Property

Collaborative Dynamics in Africa

EDITORS:

JEREMY DE BEER, CHRIS ARMSTRONG,
CHIDI OGUAMANAM AND TOBIAS SCHONWETTER

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Preface

This book is among the key outputs of the Open African Innovation Research and Training (Open A.I.R.) Project. Based on case study research in nine African countries, the book examines the recent history and current on-the-ground realities of innovation and intellectual property (IP) in African settings. In doing so, the book reveals complex collaborative dynamics across a range of different countries, sectors and socio-economic contexts, and generates recommendations for how innovation and IP can be married with social and economic development objectives in African settings. This book's sister report, *Knowledge and Innovation in Africa: Scenarios for the Future*, situates the current realities covered in this book within a much longer historical trajectory and multiple potential futures.

Conceived in 2009, established in 2010 and launched in 2011, Open A.I.R. is a pan-African and globally interconnected research and training network, which was established to:

- raise IP awareness in African settings and facilitate critical policy engagement;
- empower a networked, epistemic IP community in Africa;
- identify IP-related innovation bottlenecks and modes of open collaboration; and
- interrogate IP-related innovation metrics, capital and power structures.

Open A.I.R. is financially supported by Canada's International Development Research Centre (IDRC) and Germany's Federal Ministry for Economic Cooperation and Development (BMZ), and collaborates with numerous other organisations and individuals – all of whom are recognised in the Acknowledgements' pages of this book. In addition to the aforementioned case study and foresight research, the Open A.I.R. network engages in a wide range of training, capacity building, outreach and policy engagement activities – both on the African continent and in settings outside the continent where matters of African innovation and IP are engaged. These engagements target external stakeholders capable of changing policies and practices, including:

- innovators, creators and entrepreneurs – individuals and companies;
- business groups such as chambers of commerce and industry associations;
- national, regional and international law-makers and policy-makers;
- issue leaders, such as politicians, judges, professors and practitioners;
- scientific and cultural research and development funding bodies;

- university researchers, administrators and technology transfer officials;
- rights-holders and collective rights management organisations; and
- representatives of indigenous and local communities.

Open A.I.R. is motivated by a vision in which innovation and creativity in Africa are sustainable, properly valued, collaborative, widely accessible and result in benefits that are distributed throughout society. Based on this vision, the network's mission is to better understand how innovation and IP processes work in African settings, how knowledge and technology currently protected by IP can be mobilised, and how IP systems can be harnessed or adapted in a manner that fosters openness-oriented collaborative innovation resulting in just distribution of new knowledge and technology.

This book and the *Scenarios* volume are two parts of a much broader attempt, by Open A.I.R. and other initiatives, to facilitate, in the medium to long term, the emergence of new, pragmatic means of valuing and facilitating innovation and creativity in Africa. Contextually appropriate metrics sensitive to the monitoring of meaningful changes in behaviour around innovation and creativity could be instrumental for promoting African grassroots entrepreneurship, broad-based business development, and a vibrant private sector built on small and medium-sized enterprises (SMEs) with a sustained ability to innovate. And the opportunities for innovation-driven SMEs could also benefit from policy-maker adoption of appropriate metrics when designing the policy and regulatory frameworks necessary to ensure predictable innovation environments for stakeholders.

Open A.I.R.'s core funders, IDRC and BMZ, have provided a framework for Open A.I.R.'s objectives. Open A.I.R. fits within the IDRC's Science and Innovation programme, which supports research and policy engagement in relation to how science, technology and innovation (STI) can be engines of socio-economic development. Within this programme, the Information and Networks (I&N) initiative, which funds the Open A.I.R. Project, aims to better understand the linkages among innovation, creativity, networked collaborations (often enabled via information and communication technologies [ICTs]), and determinants of openness – including IP rights. The IDRC also supported the precursor network to Open A.I.R., the African Copyright and Access to Knowledge (ACA2K) Project, which ran from 2007 to 2011 and generated the nucleus of the expert network now driving Open A.I.R.

BMZ supports Open A.I.R. via Germany's Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), under the GIZ commons@ip – Harnessing the Knowledge Commons for Open Innovation initiative. The commons@ip initiative focuses on how IP rights interact with open innovation, the knowledge commons, open licences and collaborative innovation. It is part of the BMZ-

mandated Train for Trade programme, which aims at strengthening the private sector and its constituent bodies in the Southern African Development Community (SADC) region through training and capacity building in export promotion, quality control and promotion of open innovation – as well as through promotion of local and regional economic development and trade.

Open A.I.R.'s training and capacity building components include:

- building the network's capacity – through online platforms, network-wide workshops, research methodology support, scenario-building meetings and thematic seminars;
- awarding Open A.I.R. Fellowships to emerging IP scholars and potential leaders – from Tanzania, Kenya, Uganda, Ethiopia, Cameroon, Nigeria and Egypt;
- exchanging knowledge through Africa-wide and South–South knowledge networking at seminars, workshops and conferences;
- growing awareness among African creators, innovators, entrepreneurs and policy-makers of openness-oriented approaches to innovation and IP matters in Africa; and
- teaching at African tertiary educational institutions, including development of a replicable, open course curriculum on IP law and development.

Because of the immense geographic size of the African continent, and unique logistical challenges of African intra-continental travel, ICTs have been instrumental in empowering the research network's "community of practice". Open A.I.R. has an offline presence in 14 African countries and in multiple countries outside the continent. Online, the network includes hundreds of individuals and institutions throughout Africa and from all corners of the globe, linked via a suite of online networking and social-media tools. The Open A.I.R. community of practice advances a culture of multidirectional exchange among African innovative and creative communities and external actors – with a view to sustainably empowering local communities and SMEs. Network members promote cross-fertilisation of ideas via original thinking and partnerships with national and international institutions, scholars, funding agencies, civil society organisations and other willing partners. Those wishing to join the community can visit <http://www.openair.org.za/join>.

Acknowledgements

True to its emphasis on “collaborative dynamics”, this book is the product of the collective energy of dozens of people and institutions in many countries, all of whom work within the Open African Innovation Research and Training (Open A.I.R.) network. Open A.I.R. currently has core network members and institutions in 14 African countries, spanning North Africa (Egypt, Tunisia), West Africa (Senegal, Ghana, Nigeria, Cameroon), East Africa (Ethiopia, Uganda, Kenya, Tanzania) and southern Africa (Malawi, Mozambique, Botswana and South Africa). Other network members and institutions are in Canada, the United States, the United Kingdom, Germany and France. These members are, in turn, linked – via online and offline interactions – to a broader Open A.I.R. network of hundreds of individuals and institutions, including people and entities in Brazil, India, Malaysia, Australia, Switzerland and the Netherlands. The network receives generous financial support from Canada’s International Development Research Centre (IDRC) and Germany’s Federal Ministry for Economic Cooperation and Development (BMZ).

Each of the editors and authors of this volume is part of, and collaboratively exchanges knowledge and expertise with, this large network, and we the editors, and each of the contributors, are profiled in “About the Editors” and “About the Contributors” sections of this book and on the Open A.I.R. website’s Team page, <http://www.openair.org.za/content/open-air-team>. On this Team page, one can also find the names and contact details of Open A.I.R. Fellows and other network members and institutions. The network is also accessible via its social media platforms, featured at <http://www.openair.org.za/join>

Open A.I.R.’s administrative hub is the IP Unit in the University of Cape Town Faculty of Law, where Project Manager Nan Warner and Administrator Phyllis Webb are the key operational drivers. Warner and Webb receive management support from two of the editors of this book (and the co-Principal Investigators of the Open A.I.R. Project), UCT IP Unit Director Tobias Schonwetter and Jeremy de Beer of the University of Ottawa Faculty of Law. Also supporting project management are Julie Nadler-Visser of UCT’s Research Contracts and IP Services (RCIPS) unit, members of the UCT Finance Department and Faculty of Law Finance Department, and another editor of this book: Chris Armstrong of the LINK Centre at the University of the Witwatersrand (Wits) in Johannesburg.

Network strategic guidance is provided by a Steering Committee composed of De Beer, Schonwetter, Warner, Chidi Oguamanam (another of this book’s

editors) of the University of Ottawa Faculty of Law, Nagla Rizk of The American University in Cairo (AUC), Sisule Musungu of IQsensato in Nairobi, Khaled Fourati of the IDRC office in Cairo, and Balthas Seibold of Germany's Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in Bonn. Further strategic support from the IDRC is, or has been, provided by Naser Faruqui, Simon Carter, Laurent Elder, Fernando Perini, Matthew Smith, Heloise Emdon and Phet Sayo; Karim Badran and Rose-Marie Ndiaye Pereira on financial matters; and Michelle Hibler and Nola Haddadian on publications. GIZ's involvement is focused on the capacity-building components of the network, which are carried out in collaboration with the GIZ's commons@ip – Harnessing the Knowledge Commons for Open Innovation initiative. At GIZ, in addition to support from the aforementioned Steering Committee member Balthas Seibold, who advises on matters of international knowledge cooperation and networking, support has also come from Petra Hagemann, Christine de Barros Said, Ursula van Look, Marina Neuendorff, Margrit Brockhaus and the Working Group of German Development Organisations on Promoting Innovation Systems. At UCT, as well as those already mentioned, key supporters and collaborators have been the Dean of Law, PJ Schwikkard, Lee-Ann Tong in the Faculty of Law, and, in the IP Unit, the Unit's founder Julian Kinderlerer, its Deputy Director Caroline Ncube and its Senior Research Fellow Bernard Maister. At the University of Ottawa, in addition to those already mentioned, support has been provided by the Dean of the Faculty of Law, Common Law Section, Nathalie Des Rosiers, and Former Dean Bruce Feldthusen.

For this book, key network participants were the team of JD candidates in the University of Ottawa Faculty of Law – Lukas Frey, Will Sapp, Phil Holdsworth, Maya Boorah, Kristen Holman and Saara Punjani – who provided long hours of diligent editorial assistance. In addition, because the research case studies presented in this book all required collection of data from human subjects – via interviews and/or focus group discussions and/or written surveys – this book would not have been possible without the cooperation of dozens of respondents across the countries of study. For reasons of confidentiality, most survey and interview respondents are not named in this book, but we are sincerely grateful for their contributions. Also contributing to the research outlined in this book was Donna Podems of OtherWISE in Cape Town, who advised on research methodologies and supported a methodology workshop for several of the authors featured in this volume, in addition to her support of Open A.I.R.'s monitoring and evaluation (M&E) framework. At this book's publisher, UCT Press, the key drivers have been Publisher Sandy Shepherd and Project Manager Glenda Younge. The cover design for this volume is by Elsabe Gelderblom of Farm Design in Cape Town, who does all of Open A.I.R.'s design work for its website, social media tools, PR materials,

Briefing Notes and the network's other substantial publication output, the Open A.I.R. *Scenarios* compendium – which is available in hard-copy, and on the Open A.I.R. website, as a separate published output and companion to this book.

Network headquarters at the UCT IP Unit serves as Open A.I.R.'s Southern Africa Hub, coordinated by Project Manager Warner. There are also four other Hubs: the North Africa Hub at the Access to Knowledge for Development Center (A2K4D) of the School of Business at The American University in Cairo (AUC), coordinated by Nagham El Houssamy under the direction of Nagla Rizk; the West Africa Hub at the Nigerian Institute of Advanced Legal Studies (NIALS) in Lagos, coordinated by Helen Chuma-Okoro under the direction of Adebambo Adewopo; the East Africa Hub at the Centre for IP and IT Law (CIPIT) of Strathmore University, Nairobi, coordinated by CIPIT Director Isaac Rutenberg; and the Canada Hub at the University of Ottawa Faculty of Law, coordinated by De Beer and Oguamanam. Contact can be made with these Hubs and Hub Coordinators via the aforementioned Open A.I.R. website Team page.

Also integral to the success of the network are its nine Fellows, each of whom has spent time at the UCT IP Unit in Cape Town. The Fellows have contributed to Open A.I.R.'s case study and foresight research, to outreach and training work, and to building the network. The nine Fellows are: Esther Ngom of the Ngo Nyemeck law firm in Yaoundé; Seble Baraki of the Justice and Legal System Research Institute (JLSRI) in Addis Ababa; Moses Mulumba of the Centre for Health, Human Rights and Development (CEHURD) in Kampala; Douglas Gichuki of CIPIT in Nairobi; Milton Lore of Bridgeworks Africa in Nairobi; Eliamani Laltaika of the Tanzania Intellectual Property Rights Network (TIP-Net) in Dar es Salaam; Alexandra Mogyoros, a student in the Faculty of Law at the University of Ottawa; West Africa Hub Coordinator Helen Chuma-Okoro of NIALS in Lagos; and North Africa Hub Coordinator Nagham El Houssamy of A2K4D in Cairo.

Other collaborating institutions are the Program on Information Justice and Intellectual Property (PIJIP) at the Washington College of Law at American University in Washington, DC; the Centre for Technology and Society (CTS) in Brazil; the Centre for Internet and Society (CIS) in India; and the Open Society Foundations, where Open A.I.R.'s key partner is Vera Franz. The Open A.I.R. network has also benefited from interaction with staff at the World Intellectual Property Organisation (WIPO) headquarters in Geneva. In London, Shirin Elahi of Scenarios Architecture is the driver of Open A.I.R. foresight research work, as featured in the aforementioned *Scenarios* compendium that provides an important forward-looking complement to the current picture offered by this volume. Jo Higgs of Go Trolley Films in Cape Town did post-production on the videos available on the Open A.I.R. YouTube channel – videos which show how the network came into being and how the research was conceptualised.

All the people and institutions mentioned here have in one way or another played a role, by collaborating within the Open A.I.R. network, in the conceptualisation, planning, data collection, data analysis, writing, editing, design and production processes that resulted in successful research and the completion of this book. It is hoped that this volume's free availability online, under a Creative Commons (CC) licence, will ensure that the book's collaborative dynamics do not end here at the moment of publication, and continue long into the future in the work of the still-growing Open A.I.R. community.

*Jeremy de Beer, Chris Armstrong, Chidi Oguamanam, Tobias Schonwetter
September 2013*

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Acronyms and Abbreviations

A2K	access to knowledge
A2K4D	Access to Knowledge for Development Center (The American University in Cairo, Egypt)
AAU	Addis Ababa University
ABS	access and benefit-sharing
ACA2K	African Copyright and Access to Knowledge Project
ACP	African, Caribbean and Pacific Group of States
ACTS	African Centre for Technology Studies (Kenya)
ADPP	Ajuda de Desenvolvimento de Povo para Povo (Mozambique)
AERC	African Economic Research Consortium
AFTE	Association for the Freedom of Thought and Expression (Egypt)
AGOA	African Growth and Opportunity Act
AIM	Agência de Informação de Moçambique
AmCham	American Chamber of Commerce (Egypt)
ARC	Aquaculture Research Centre (Egypt)
ARIPO	African Regional Intellectual Property Organisation
ASSAf	Academy of Sciences of South Africa
ASTII	African Science, Technology and Innovation Indicators
ATO	alternative trading organisation
ATPC	African Trade Policy Centre
ATPS	African Technology Policy Studies Network
AU	African Union
AUC	The American University in Cairo
B-BBEE Act	Broad-Based Black Economic Empowerment Act 53 of 2003 (South Africa)
BCP	bio-cultural community protocol
BIH	Botswana Innovation Hub
BMZ	Federal Ministry for Economic Cooperation and Development (Germany)
BoI	Bank of Industry (Nigeria)
BOTEC	Botswana Technology Centre
BPR	business process re-engineering
CAA	Cocoa Abrabopa Association (Ghana)
CARICOM	Caribbean Community
CBD	Convention on Biological Diversity
CBN	Central Bank of Nigeria

CC	Creative Commons
CCIA	Computer and Communications Industry Association
CEDAT	College of Engineering, Design, Art and Technology (Makerere University, Uganda)
CEHURD	Centre for Health, Human Rights and Development (Uganda)
CEPIL	Centre for Public Interest Law (Ghana)
CIGI	Centre for International Governance Innovation
CIPC	Companies and Intellectual Property Commission (South Africa)
CIPIT	Centre for IP and IT Law (Strathmore University, Kenya)
CIPO	Canadian Intellectual Property Office
CIPR	Commission on Intellectual Property Rights (UK)
CMO	collective management organisation
COCOBOD	Ghana Cocoa Board
CPD	Centre for Policy Dialogue (Nigeria)
CRTT	Centre for Research in Transportation Technologies (Makerere University, Uganda)
CSIR	Council of Scientific and Industrial Research (India)
CTEA	Copyright Term Extension Act (US)
CVCP	Committee of Vice-Chancellors and Principals (UK)
DACST	Department of Arts, Culture, Science and Technology (South Africa)
DEST	Department of Education, Science and Training (Australia)
DFID	Department for International Development (UK)
DHET	Department of Higher Education and Training (South Africa)
DNS	domain name system
DRC	Democratic Republic of Congo
DRM	digital rights management
DRST	Department of Research, Science and Technology (Botswana)
DST	Department of Science and Technology (South Africa)
DTI	Department of Trade and Industry (South Africa)
EAEP	East African Educational Publishers (Kenya)
EC	European Commission
ECBP	Engineering Capacity Building Program (Ethiopia)
ECOWAS	Economic Community of West African States
ECX	Ethiopia Commodity Exchange
EEAA	Egyptian Environmental Affairs Agency
EIPO	Ethiopian Intellectual Property Office
EIPRL	Egyptian Intellectual Property Rights Law
EPA	Environmental Protection Authority (Ethiopia)
EPO	European Patent Office
EST	environmentally sound technology

EU	European Union
EUEI	EU Energy Initiative
Eurostat	Statistical Office of the European Communities
FAO	UN Food and Agriculture Organisation
FCN	Friendship, Commerce and Navigation (Kenya)
FDI	foreign direct investment
FDRE	Federal Democratic Republic of Ethiopia
FDSE	Free Day Secondary Education (Kenya)
FES	Friedrich Ebert Stiftung (Germany)
FLO	Fairtrade Labelling Organisations International
FOSS	free and open source software
FPE	Free Primary Education (Kenya)
FTA	free trade agreement
GDP	gross domestic product
GEM	Global Entrepreneurship Monitor
GERD	gross expenditure on research and development
GI	geographical indication
GIPC	Global Intellectual Property Center
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (Germany)
GM	genetically modified
GOAN	Ghana Organic Agriculture Network
GOK	Government of Kenya
GR	genetic resources
GTZ	German Technical Cooperation
HSRC	Human Sciences Research Council (South Africa)
ICANN	Internet Corporation for Assigned Names and Numbers
ICIDSS	International Creativity and Innovation Development Support Services (Ethiopia)
ICJ	International Commission of Jurists
ICLS	International Conference of Labour Statisticians
ICPSK	Institute of Chartered Public Secretaries of Kenya
ICT	information and communication technology
ICT4D	ICT for development
ICTSD	International Centre for Trade and Sustainable Development
IDC	Industrial Development Corporation (South Africa)
IDLO	International Development Law Organisation
IDRC	International Development Research Centre (Canada)
IDS	Institute of Development Studies (Kenya)
IE	informal economy

IFC	International Finance Corporation
IICA	Inter-American Institute for Cooperation on Agriculture
IIDMM	Institute of Infectious Disease and Molecular Medicine (South Africa)
IIED	International Institute for Environment and Development
IIPA	International Intellectual Property Alliance
IISD	International Institute for Sustainable Development
ILC	indigenous and local community
ILO	International Labour Organisation
INAO	Institut national des appellations d'origine (France)
IP	intellectual property
IPA	Industrial Property Act (Botswana)
IPC	International Patent Classification
IPI	Industrial Property Institute (Mozambique)
IPR-PFRD Act	Intellectual Property Rights from Publicly Financed Research and Development Act (South Africa)
IRB	Institutional Review Board (Botswana)
IRENA	International Renewable Energy Agency
ISAS	integrated seawater agriculture system
ISCTEM	Instituto Superior de Ciências e Tecnologia de Moçambique
ISI	Institute for Scientific Information
ISO	International Organisation for Standardisation
ISP	Information Society Project (Yale University, US)
ITC	International Trade Centre
JBEDC	Japan Bio-Energy Development Corporation
JITAP	Joint Integrated Technical Assistance Programme
JLSRI	Justice and Legal System Research Institute (Ethiopia)
K2C Biosphere	Kruger to Canyons Biosphere (South Africa)
KE	knowledge economy
KECOBO	Kenya Copyright Board
KENFAA	Kenya Nonfiction and Academic Authors' Association
KES	Kenyan Shilling
KHA	Kenya Historical Association
KICD	Kenya Institute of Curriculum Development
KIPI	Kenya Industrial Property Institute
KIPRA	Kenya Institute for Public Policy Research and Analysis
KNAS	Kenya National Academy of Sciences
KOLA	Kenya Oral Literature Association
KTO	knowledge transfer office
LBC	Licensed Buying Company (Ghana)
LDC	least developed country

LE	Egyptian Pound
LINK Centre	Learning Information Networking Knowledge Centre (Wits University, South Africa)
LSK	Law Society of Kenya
MAN	Manufacturers Association of Nigeria
MANCAP	Mandatory Conformity Assessment Programme (Nigeria)
MCH	Maasai Cultural Heritage Organisation (Kenya)
MCST	Ministry of Communications, Science and Technology (Botswana)
MCT	Ministério da Ciência e Tecnologia (Mozambique)
MDCA	Malindi District Cultural Association (Kenya)
MDG	Millennium Development Goal
MEA	Multilateral Environmental Agreement
MIST	Ministry of Infrastructure, Science and Technology (Botswana)
MIT	Massachusetts Institute of Technology
MOA	Ministry of Agriculture (Ethiopia)
MOE	Ministry of Education (Ethiopia)
MOFA	Ministry of Food and Agriculture (Ghana)
MoFED	Ministry of Finance and Economic Development (Ethiopia)
MOST	Ministry of Science and Technology (Ethiopia)
MoU	memorandum of understanding
MRC	Medical Research Council (South Africa)
Natoil	Natural Oil Company (Egypt)
NACI	National Advisory Council on Innovation (South Africa)
NCC	Nigerian Copyright Commission
NDA	non-disclosure agreement
NEP	National Enquiry Point (Botswana)
NEPAD	New Partnership for Africa's Development
NESC	National Economic and Social Council (Kenya)
NESTI	National Experts on Science and Technology Indicators
NIALS	Nigerian Institute of Advanced Legal Studies
NRF	National Research Foundation (South Africa)
NGO	non-governmental organisation
NIALS	Nigerian Institute of Advanced Legal Studies
NIPMO	National Intellectual Property Management Office (South Africa)
NIS	national innovation system
NMIMS	Narsee Monjee Institute of Management Studies (India)
NPR	National Public Radio (US)
NPSB	National Policy and Strategy on Biofuels (Mozambique)
NRC	National Research Centre (Egypt)

NREA	New and Renewable Energy Authority (Egypt)
NWLR	Nigerian Weekly Law Report
OA	open access
OAPI	Organisation africaine de la propriété intellectuelle
OCEES	Oxford Centre for the Environment, Ethics and Society
OCFCU	Oromia Coffee Farmers Cooperative Union (Ethiopia)
ODEL	open, distance and electronic learning
ODI	Overseas Development Institute (UK)
OECD	Organisation for Economic Co-operation and Development
OER	open educational resource
Open A.I.R.	Open African Innovation Research and Training Project
ORD	Office of Research and Development (Botswana)
PBIP	place-based intellectual property
PCT	Patent Cooperation Treaty
Petromoc	Petróleos de Mozambique
PIIPA	Public Interest Intellectual Property Advisors (US)
PIJIP	Program on Information Justice and Intellectual Property (American University, US)
PPS	probability proportional to size
PRO	public research organisation
ProBEC	Programme for Basic Energy and Conservation in Southern Africa
R&D	research and development
RCIPS	Research Contracts and IP Services unit (UCT, South Africa)
RIPCO (B)	Rural Industrial Promotion Company (Botswana)
RMI	rights management information
SADC	Southern African Development Community
SARUA	Southern African Regional Universities Association
SCE	Society for Critical Exchange (Kenya)
SID	Society for International Development (Kenya)
SINER-GI	Strengthening International Research on Geographical Indications
SME	small and medium enterprise
SMIEIS	Small and Medium Industries Equity Investments Scheme (Nigeria)
SMME	small, micro and medium enterprise
SNA	social network analysis
SON	Standards Organisation of Nigeria
SPS	sanitary and phytosanitary measures
STCI	Science and Technology Capacity Index
STEP	Science Technology and Economic Policy (US)
STI	science, technology and innovation
STS	Society for Technology Studies (Ethiopia)

SVKM	Shri Vile Parle Kalamani Mandal (India)
TBT	technical barriers to trade
TCE	traditional cultural expression
TGE	Transitional Government of Ethiopia
THE	Times Higher Education (UK)
THRIP	Technology and Human Resources Programme (South Africa)
TIA	Technology Innovation Agency (South Africa)
TIP-Net	Tanzania Intellectual Property Rights Network
TISC	Technology and Innovation Support Center
TK	traditional knowledge
TKDL	Traditional Knowledge Digital Library (India)
TPMs	technological protection measures
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
TTO	technology transfer office
TVET	Technical and Vocational Education and Training (Ethiopia)
UB	University of Botswana
UCC	Universal Copyright Convention
UCITA	Uniform Computer Information Transactions Act (US)
UCT	University of Cape Town (South Africa)
UEM	Eduardo Mondlane University (Mozambique)
UGT	Uganda Gatsby Trust
UK	United Kingdom
UM	utility model
UNCST	Uganda National Council for Science and Technology
UNCTAD	UN Commission on Trade and Development
UNDESA	UN Department of Economic and Social Affairs
UNDP	UN Development Programme
UNECA	UN Economic Commission for Africa
UNEP	UN Environment Programme
UNESCAP	UN Economic and Social Commission for Asia and the Pacific
UNESCO	UN Educational, Scientific and Cultural Organisation
UNFCCC	UN Framework Convention on Climate Change
UNICAMP	University of Campinas (Brazil)
UNIDO	UN Industrial Development Organisation
Unilag	University of Lagos
US	United States
USAID	US Agency for International Development
USPTO	US Patent and Trademark Office
WAK	Writers Association of Kenya
WATH	West Africa Trade Hub

WBCSD	World Business Council for Sustainable Development
WCT	WIPO Copyright Treaty
WEF	World Economic Forum
WEP	World Employment Programme
WHO	World Health Organisation
WIPO	World Intellectual Property Organisation
Wits	University of the Witwatersrand (South Africa)
WPIS	WIPO Patent Information Service
WPPT	WIPO Performances and Phonograms Treaty
WTO	World Trade Organisation
ZAR	South African Rand

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Chapter 4

Geographical Indication (GI) Options for Ethiopian Coffee and Ghanaian Cocoa

Chidi Oguamanam and Teshager Dagne

Abstract

This chapter outlines research into the Ethiopian coffee and Ghanaian cocoa industries that sought to determine the potential for the local communities and diverse stakeholders participating in the two industries to benefit from sui generis geographical indications (GIs). The research was premised on the notion that GIs have the potential to serve as instruments for practical adaptation of intellectual property (IP) to open development. It was found that the degree to which GIs could be successfully and sustainably used as tools of place-based intellectual property (PBIP) – i.e. instruments of origin-designation – for Ethiopian coffee and Ghanaian cocoa would likely depend on the economic implications of the establishment of GI modalities. The implementation of GIs involves a range of tasks, including establishment of legal and institutional structures; maintaining the “quality, reputation or characteristics” of the products; enforcing and defending rights; and developing product awareness in international markets (TRIPS, 1994). These tasks involve significant cost and effort that would need to be measured and weighed against the expected benefits.

1. Introduction

Geographical indications (GIs), a form of place-based intellectual property (PBIP)¹ protection, emphasise an agricultural product’s particular qualities linked to an identified geographical area. Through the use of PBIP strategies, products originating from a certain geographical location are differentiated from other

1 We recognise the complex and overlapping applications that exist, both within and outside IP analysis, of the notions of place, origin and geographical delineation, and later in this chapter we briefly interrogate the distinction between place and origin.

products in markets (Higgins *et al.*, 2008), with the aim of opening up “alternative markets for higher-value products” (World Bank, 2008). GIs and other PBIP strategies potentially offer local, traditional agricultural producers a means to capitalise more effectively on any unique, authentic and positive images linked directly to the places of origin of their products.

For traditional European agricultural producers in civil law countries, *sui generis* (i.e. unique) systems of GIs have proved to be the most popular PBIP strategy. In the common law jurisdictions of the UK and former British colonies, GI protection is typically pursued via the conventional trademark system through the use of speciality trademarks such as collective trademarks, certification marks and, rarely, ordinary trademarks. A third type of PBIP strategy consists of non-trademarked certification schemes such as certain types of fair trade labelling, environmental certifications and organic labelling. Any of the three categories of PBIP differentiation – a *sui generis* GI protection, GI-based trademarks, non-trademark certifications – can be adapted, to varying degrees, to advance development objectives. Labelling and various certification schemes may or may not serve geographical or origin-identification objectives. As well, they may not have direct IP ramifications. However, IP, especially trademarks, is crucial for translation of such schemes into practical positive impact for those who deploy them. (See Chapter 5 in this volume for the Adewopo *et al.* case study of the potential sustainability of communal trademarks in selected Nigerian leather and textile sectors.)

The research outlined in this chapter examined the potential applicability of PBIP strategies to the production and marketing of Ethiopian coffee and Ghanaian cocoa. The next section (Section 2) outlines the conceptual framework for the research, and Section 3 outlines the research study itself. Section 4 examines the value chains in the Ethiopian coffee and Ghanaian cocoa sectors (as determined through the research) and the existing differentiation strategies in each sector. Section 5 interrogates the feasibility of GI use for the two sectors, and Section 6 provides conclusions.

2. Conceptual framework

It is often argued that we live in a global knowledge economy in which knowledge and intellectual capabilities play a significant role in value creation, productivity and economic growth (Florida and Kenney, 1993). In this knowledge economy, intangible IP-based valuations of products sometimes exceed the tangible physical value of products as the main source of income (Layton and Wiseman, 2008). The knowledge economy is also characterised by large multinational actors

producing and selling the most lucrative IP-based products. Meanwhile, even in the knowledge economy context, the income of agricultural producers in developing countries continues to a great extent to depend on production and sale of products often categorised as raw or as having minimal value-add.

The World Bank found that the richest countries in the final three decades of the 20th century were those that exported mostly IP-based products (Boehlje *et al.*, 1999). Meanwhile, economists have estimated that from the beginning to the end of the 20th century, global trade in physical commodities shrank from approximately 70% of world trade to about 20%, mainly because commodities would earn much lower economic returns than IP-based manufactured goods (Boehlje *et al.*, 1999). The dominant actors in the 21st century agricultural market (i.e. multinational corporations) utilise IP as a mechanism of “valorising [i.e. adding value] to GRs [genetic resources]” at the final stage of the value chain (Prentice and Andersen, 2007). These IP-based products receive premium prices in international trade, while distinctive agricultural products from Africa, which are often at the initial stage of the global supply chain, with perceived lower levels of value-add, receive relatively low prices. Even in the face of clear evidence of the ever-shrinking physical value of low-value-add agricultural products, rural development strategies have continued to respond to the ascendance of high-yield, technology-based agriculture by seeking to boost low-tech agricultural production (Dedeurwaerdere *et al.*, 2007). Such rural economic development policies in many developing countries have proven to be ecologically unsustainable (McManis, 2003).

We contend in this chapter that one way producers of distinctive agricultural products can potentially improve their position in international trade is to use IP-based strategies. However, conventional IP rights tend to be amenable primarily to the needs of owners of technological and biotechnological knowledge and skills (Dutfield, 1999) – because IP rights operate in a market system where the norms of privatisation, enclosure and transferability guide resource allocation. Most traditional agricultural producers in African countries operate under informal frameworks of social organisation, supervised by local customary rules and ethics – systems which are conditioned to relatively open access to knowledge and skills (Hansen and Van Fleet, 2003). In these informal frameworks, community members freely share substantial amounts of information and resources. Introducing the Western model of IP rights into such open and traditional agriculture settings could potentially threaten existing practices of relatively free exchange and mutual communal support (Cottier and Panizzon, 2004), i.e. IP could become a barrier to the openness necessary for modes of development whereby individuals exploit resources left in a public domain. However, at the same time absolute rejection of IP protection – under the pretext of preserving

the public domain – could undermine efforts to create a proprietary system for recognising traditional knowledge (TK) as a valuable asset of indigenous and local communities (ILCs) (Sunder, 2007). The conceptual question thus arises: to what extent can IP play a positive role in development in contexts where high levels of collaboration and openness are integral to knowledge production? The emerging concept of “open development” (Smith *et al.*, 2011) is helpful in tackling this question. Open development is a conception which holds that a key engine of contemporary socio-economic development is often a strong element of networked, relatively open collaboration among numerous stakeholders, often enabled to some extent by information and communication technologies (ICTs). At the core of the research study outlined in this chapter was our desire to determine the degree to which GIs could be a form of IP amenable to protection and preservation of certain rights to locally specific TK-based agricultural production while at the same time allowing for continuation of networked openness and collaboration (i.e. the “open development” dynamic).

GIs are forms of IP that seek to harness the value of the geographical origin of a product where the origin contributes to a “given quality, reputation or other characteristic of the good” (TRIPS, Art. 22.1). Worldwide, as mentioned above, the legal means for protecting GIs predominantly take one of two forms: protection through *sui generis* systems, or protection through conventional IP rights, typically a form of trademark. It can be argued, as we do, that GIs, particularly when protected via *sui generis* regimes, offer greater potential than other forms of IP protection (when deployed as part of a diversified set of strategies) to promote the economic competitiveness of TK-based agricultural products. *Sui generis* GI systems typically accommodate, at their core, distinctive attributes of localised TK. In contrast, the more typical and internationally standardised forms of IP – copyrights, patents, trademarks – tend to have poor credentials in relation to TK protection because the dominant notions of these IP rights delineate them as individual-focused private property rights.

Contrary to the individualistic orientation of conventional IP, TK is typically defined in terms of the collective and communal identity of its holders. For example, the agricultural systems of most ILCs regard the efforts of traditional breeding and selection of plant varieties as collective, rather than individual, exercises (Salazar *et al.*, 2007). As such, protecting TK typically involves the recognition of the collective rights of a community that holds and identifies with it (Taubman, 2006). GI systems, whether *sui generis* or trademark-based, have the advantage, in relation to TK, of according exclusive rights to an indefinite number of producers in a specific geographic area, represented by a name or sign which typically defines the producers’ particular product (Cottier and Panizzon, 2004). GIs protect goodwill and reputation developed through the participation of a group

of producers in an area, thus allowing for collective ownership of the proprietary value (WIPO, 2010a). In addition, GIs are not transferable from one owner to another, thus emphasising the relationships between human cultures and their lands and environments in collective societies (Prakash, 2000). This description applies to most GI-relevant agricultural products.

Collective entities – such as cooperative bodies made up of producers or members of a group or community – participate in the use and protection of GIs based on their adherence to traditional methods of production in a defined geographical area. Unlike other forms of IP where a specific owner acquires exclusive rights during the term of protection, with a GI, whosoever adheres to the sanctioned methods of production qualifies for GI protection. GI systems foster preservation of recognised traditional production methods linked to a territory, and can accommodate trans-generational territorial TK, an important factor given that TK often reflects the relationship between agricultural communities and their lands and territories that go far back into history (Rangnekar, 2004). GIs also afford protection in perpetuity, another feature that makes them potentially suitable instruments for protecting TK-based resources. Most forms of IP accord their owners a limited term of protection, based on the “contractarian or contract-based” rationale for IP which regulates the relationship between the creator and society (Oguamanam, 2009). GI rights, in contrast, potentially remain valid in perpetuity, i.e. as long as the rights-holders maintain the collective tradition (as represented by the GI) in a specified geographical area. With a GI, producers lose the right to use the GI only if their practices fall below the specified standards of production or fall outside the geographical area of production (Lorvellec, 1996). Thus a GI does not provide monopoly control over the knowledge represented by the indication; rather, it conditions access to the economic use of products based on adherence to TK-based production methods. In this sense, a GI promotes a dual dynamic of *open* access to knowledge and culture among a *closed* group of communities who comply with the communities’ requirement for a culturally acceptable method of production in a restricted geographical boundary. Beyond their economic significance, GIs can also prevent cultural appropriation by ensuring that a product is associated with a defined geographical place where communities have established bonds between culture, ancestral lands, resources and the environment (Ray, 1998).

Most IP models tend to operate as barriers to openness by putting essential public goods into private hands, outside the reach of collective entities. The amenability of GIs to the traditions of collective production and collective decision-making allows ILCs to exercise power over their knowledge and resources, making GIs tools which are potentially relevant to the aforementioned concept of open development. GIs are functionally suited to facilitate collaborative knowledge

production and advance open development outcomes, because they increase the competitiveness and overall empowerment of traditional agricultural communities. However, they do not have as broad recognition as other differentiation strategies typically adopted in developing countries.

3. The research

The overarching research question for this case study was: *how do stakeholders in the value chains of Ethiopian coffee and Ghanaian cocoa participate in international trade, and what roles do/could GIs and other types of PBIP have in empowering participants and facilitating open development?* From the central research question, sub-questions arose: (1) To what extent do/could GI and other PBIP strategies offer potential for local agricultural producers to collaboratively control their knowledge-based agricultural products in order to effectively participate in the global economy? (2) Which initiatives are under way to support GI and other PBIP initiatives in Ethiopia and Ghana? (3) How do different forms of GIs compare with existing initiatives? (4) Which legislative and regulatory approaches are needed to support GI models?

The study deployed two research methods, both qualitative. A desk-based analysis of primary and secondary sources was conducted, which focused on mapping the existing legal framework for PBIP in the two jurisdictions. The second method was an empirical value chain analysis of Ghanaian cocoa and Ethiopian coffee. A value chain is defined as the

[...] full range of activities which are required to bring a product [...] from conception, through the different phases of production [...], delivery to final customers, and final disposal after use. (Hellin and Meijer, 2006)

Actors identified as being in the value chain of the two products included individual producers (farmers) and their producer groups (farmer associations, farmer cooperatives and cooperative unions); local collectors (buyers), wholesalers and exporters; importers, processors, roasters and retailers; sector-specific regulatory agencies in production and marketing; and farmer support groups and experts related to production and marketing. Due to time and logistics constraints, the research concentrated on the roles of producer groups in each value chain. The study covered, to a lesser extent, the roles and activities of regulatory bodies, support institutions, traders and other relevant actors, i.e. all the other categories of actors in the chain of activities and linkages to the products (as is customary in value chain analysis). This primary focus on producer groups was recognised as a potential research limitation. However, an advantage of this somewhat narrow

focus was that it generated reasonably deep qualitative data. The tools employed for the value chain analysis were questionnaires, semi-structured interviews, informal focus group discussions and personal observations.

Three different questionnaires were prepared, one each for (1) individual producers and representatives of producer cooperatives and associations; (2) local buyers, exporters, processors and other intermediaries; and (3) qualified experts and other informants in the two sectors, such as members of fair trade, organic and other special interest-based product-certifying organisations. For the semi-structured interviews, guides were prepared based on the areas covered in the questionnaires. Stakeholders interviewed included representatives of: the Ethiopian Intellectual Property Office (EIPO), the Ethiopian Ministry of Agriculture (MOA), Ghana's Registrar General's Department, Ghana's Ministry of Trade, and the Ghana Standards Authority. The informal focus group discussions were conducted with key informants: producers, regulators and miscellaneous collections of stakeholders. Some of the focus group participants had already been interviewed through semi-structured interviews, while others only participated in the focus groups. In the focus group meetings, participants discussed the research themes in an open-ended manner and shared their experiences with one another.

In addition, we generated our own personal observations during site visits in Ethiopia, to a coffee processing and storage facility owned by a producer cooperative, and to the country's Coffee Quality Control and Inspection Centre. Moreover, we personally engaged in the administration of the research instruments in the two study countries, allowing for observation of the social and physical contexts associated with the information gathered. The next three sections of this chapter (Sections 4, 5 and 6) provide the research findings, analyse the findings, and draw conclusions.

4. The value chains

Ethiopian coffee

Ethiopia is believed to be the birthplace of arabica coffee, which has traditionally served as a social drink throughout the country. It has also attained a pre-eminent place in both the country's economy and its national identity. Coffee is Ethiopia's number one source of foreign exchange earnings (International Trade Centre, 2011). According to the Ethiopian Ministry of Agriculture (MOA), coffee accounts for more than 25% of the country's GNP, 40% of total export earnings and 25% of all employment opportunities across both rural and urban inhabitants (MOA, 2009). The country's coffee production system is customarily classified

into four categories: forest coffee (8–10%), semi-forest coffee (23–35%), garden coffee (50–55%) and plantation coffee (5–6%) (MOA, 2009).

The key production actors were found to be small-scale coffee producers (farmers), coffee producer cooperatives, private investors and three state-run coffee producing enterprises. Small-scale coffee producers grow “shade-grown” coffee without chemical inputs, and hold the lion’s share of overall coffee production (Stanculescu *et al.*, 2011). Ethiopian coffee producers often collect only about 10% of the profits from their coffee; the rest goes to coffee industry players: buyers, exporters, international importers, distributors and roasters (Oxfam, 2002).

Ethiopia has a multitude of coffee varieties with distinctive features linked to the culture and tradition of production in particular coffee-growing regions. It is believed that there are 6,000 Ethiopian coffee varieties with different flavors (Sereke-Berhan, 2010). The most popular coffee varieties grow in the regions of Sidama, Yirgacheffe and Harrar. For quality-grading purposes, the coffee varieties are classified based on three processing methods: sun-dried, washed and semi-washed. Each in this range of coffee varieties has a unique flavour, and the country’s long and deep cultural appreciation of good-quality coffee has generated these varieties’ strong reputations in the speciality coffee market.

Ethiopian coffee marketing is largely conducted through a centralised trading system at the Ethiopia Commodity Exchange (ECX). Established in 2008, the ECX aspires to create a marketplace that “serves all market actors, from farmers to traders to processors to exporters to consumers” (ECX, n.d.). The ECX conducts quality control at local markets and facilitates trade between local collectors, wholesalers, exporters and foreign importers through a competitive bidding system (on its trading floor in Addis Ababa, which conducts trading sessions according to different classes and types of coffee) (ECX, 2011b). All coffee produced by small-scale growers in the country is sold and purchased through the ECX. However, farmer cooperatives and large-scale growers do not use the ECX. Rather, they have direct linkages to the international market, and are able to bypass the ECX. At the time of our field visit to Ethiopia in mid-2012, the prices for coffee traded through the ECX ranged between US\$2.01 and US\$2.04 per pound, while coffee sold outside the ECX process (by cooperatives and large-scale growers through fair trade and other certification schemes) was receiving a US\$0.20 certification premium and, usually, an improved base price (ECX, 2011a).

Producer cooperatives are coalitions of farmers who live or work within a given area. In mid-2012, there were roughly 265 primary coffee cooperatives in Ethiopia. Most of these cooperatives were integrated into nine Farmers Cooperative Unions in an attempt to directly access the international market through fair trade, environmental and organic certification/labelling. Coffee trading activities via these differentiation strategies constitute an alternative value chain intended to

shorten supply chains in the commodity market. The goal of shortening the supply chain is to bring traditional agricultural producers into closer contact with consumers and, in the process, to cut out middlemen who take their own cut of profits. Given the existence of this alternative value chain via certifications, it is our view that the use of GI instruments could provide an additional differentiation strategy, enabling participants in this alternative value chain to gain even greater control of the market for their premium coffee varieties and other gourmet products.

Ghanaian cocoa

Ghana ranks second in world cocoa production, and Ghanaian cocoa is known worldwide for its high quality. Cocoa production accounts for nearly 8% of Ghana's gross domestic product (GDP), 25% of its agricultural GDP, 28% of its foreign exchange earnings and 5% of government revenue (ODI, 2007). Ghana's cocoa grows in thickly forested parts of six main regions: Ashanti, Brong Ahafo, Eastern, Volta, Central and Western. Ghanaian cocoa farmers predominantly harvest three varieties of cocoa: Tetequarshie, Amazonian and Hybrid. Tetequarshie and Amazonian have a gestation period of seven and five years, respectively. The Hybrid variety becomes ready for harvesting after between three and four years.

The Ghanaian government plays a significant role in cocoa production and marketing through the Ghana Cocoa Board (COCOBOD). In addition to performing various pre-harvest and post-harvest activities, the COCOBOD has a monopoly over both the export and marketing of Ghanaian cocoa. The COCOBOD retains 30% of the price it receives from the export of cocoa and is expected to spend a portion of this amount on farmer support activities such as pesticide control, providing agricultural inputs and research and development. The COCOBOD also controls the internal marketing of cocoa through a network of Licensed Buying Companies (LBCs), which purchase cocoa from farmers for delivery to the COCOBOD on a commission basis. A number of farmer groups and cooperatives are licensed as LBCs. These LBCs participate in certification schemes and distribute the benefits of the certification premium earned to their members. In 2012 there were 29 LBCs, of which about half a dozen were farmers' groups.

Differentiation strategies

Within the Ethiopian coffee and Ghanaian cocoa sectors, there is widespread use of strategies to differentiate products with a specific quality or characteristic on account of their geographical origin.

Fair trade certification

Fair trade certification schemes provide support to small-scale producers who could otherwise be marginalised by the global trading system. These schemes emerged in direct response to the poor income profile of small-scale producers. They serve as alternative trading channels that enable traditional farmers to reach “socially conscious consumers” through direct access to markets in industrialised countries (Barrientos, 2012). There are two main ways in which fair trade schemes are being implemented internationally: via alternative trading organisations (ATOs), and via Fairtrade Labelling Organizations International (FLO). ATOs are charity humanitarian organisations, mostly located in Europe and North America, that work to boost the incomes of small-scale producers in developing countries. These organisations include, for example, Oxfam, Fairtrade Federation, the Association for Promoting Fairtrade in Finland, Economic Development Imports and Fair World Designs.² Meanwhile FLO, established in 1997, grants Fairtrade certification (via the Fairtrade Foundation) and licenses the “FAIRTRADE™” mark to organisations that comply with standards of minimum social and economic requirements — with only “small producer organizations” being eligible for Fairtrade certification (Fairtrade, n.d.).

The Fairtrade scheme includes a set of requirements related to the production, trade and dealings in a product according to generic trading and product-specific standards. In general, the generic and product-specific standards focus on labour, social, economic, and environmental concerns. FLO-Cert, a company separate from FLO, certifies compliance with these fair trade standards and ensures that producers receive an improved price. With respect to Ethiopian coffee, FLO conducts Fairtrade certification for groups of smallholder producers organised as farmer cooperatives. In 2012, FLO was certifying 50 coffee-producing cooperatives organised under the umbrella of four major Farmers’ Cooperative Unions: Oromia Coffee Farmers Cooperative Union, Yirgacheffe Coffee Farmers Cooperative Union, Sidama Coffee Farmers Cooperative Union and Kafa Forest Coffee Farmers Cooperative Union. Members of these cooperative societies were receiving two kinds of payments for their coffees: a Fairtrade minimum price and a premium for compliance with specified standards.

In Ghana, the Kuapa Kokoo Farmers Union is the main Fairtrade-certified cocoa-producing cooperative. The cocoa produced is sold in the UK and US markets via Divine Chocolate Inc., a chocolate manufacturing company based in the UK and partly owned by the Kuapa Kokoo Farmers Union in cooperation with

2 For a comprehensive list of ATOs and their websites, go to <http://faircompanies.com/news/view/caalternative-trading-organization-ato/> (accessed 25 April 2013).

the Fairtrade Foundation in the UK (Divine Chocolate, n.d.). At the time of the research, the Cocoa Abrabopa Association (CAA), the largest association of cocoa farmers in Ghana, was in the process of seeking Fairtrade certification (Mustapha interview, 2012).

Environmental certification

Whereas fair trade certification deals with the social conditions of production, environmental certification is largely concerned with the ecological and sustainability conditions surrounding production. As with fair trade strategies, environmental certification is typically used as a tool to address inequalities in the global economy by offering opportunities for traditional agricultural producers to target niche markets. Environmental certification can generally be understood as certification

[...] which conveys information about the environmental impact of *producing, processing, transporting, or using a food product* [...] in one or more of several dimensions: soil, water, and land-use practices; pest control practices. (Barham, 2002, italics in original)

Thus environmental certification involves the standardisation of principles and prescriptive criteria in terms of environment, health, safety and sustainability. Most often, independent third parties set the labelling standards. In Ethiopia, key environmental certification organisations include UTZ KAPEH, the Forest Stewardship Council, the Rainforest Alliance and a number of other organisations that have their own standards of certification (Volkman, 2008). There are currently approximately 19 entities in Ethiopia involved in one way or another with environmental certification, including coffee-producing cooperatives, commercial actors and a public enterprise. In Ghana, the Rainforest Alliance and UTZ KAPEH are the dominant certifying organisations overseeing environmental standards for cocoa production (FAO, 2007). The Cocoa Abrabopa Association and a number of small-scale producer associations operate under various environmental certification schemes.³

3 For example, the Agro Eco-Louis Bolk Institute runs environmentally certified cocoa production projects in various regions of Ghana: Fine Flavor, the Nyinahin Sustainability Cocoa Production and Community Empowerment Project and the Ntobroso Rainforest Alliance Cocoa Farmers Union projects in the Ashanti region; the Mars Partnership for African Cocoa-Communities of Tomorrow; the Asankrangwa project in the Western and Central regions; and the Aponoapono Biakoye Organic Cocoa Farmers Association and Cocoa Organic Farmers Association projects in the Eastern region.

Organic certification

Organic certification schemes arose from consumer-driven organic movements across Europe and the US that opposed the perceived unsustainable character of agricultural biotechnology and also had reservations about the safety of genetically modified (GM) foods (Mansfield, 2004). Organic production schemes are those in which farmers' management of agriculture is based on natural methods of enhancing soil fertility – a conscious intermingling between human-based farming systems and natural systems. It can be argued that most informal farming in Africa is already *de facto* organic (Osei-Asare, 2007).

Unlike environmental certification, organic certification standards are usually institutionalised through national legislation. Under these systems, certification is generally overseen by governmental bodies. Producers cannot use the term “organic” without proper certification. Internationally, the International Federation of Organic Agriculture Movements has prompted multilateral efforts to harmonise standards for organic certification. In Ethiopia, the government enacted the Organic Agriculture System Proclamation of 2006 with two main objectives, namely, (1) to protect consumers of Ethiopian organic products against fraudulent acts such as use of misleading labels, and (2) to facilitate international recognition and acceptance of the Ethiopian organic products system in the international market. The MOA has the power to issue implementing directives and establish an “organic agricultural product council” to inspect and certify products bearing the label “organic” (Organic Agriculture System Proclamation of 2006). Despite our finding that there is a perceived absence of the strong MOA supervision envisaged by the Proclamation, there were, in mid-2012, an estimated 79 Ethiopian coffee cooperatives and 28 private coffee growers certified “organic” by foreign certifiers, often supported by capacity-building NGOs.

In Ghana, the Ghana Standards Board issues Codes of Practice for Organic Farming and oversees producers' compliance for certification, but there is no comprehensive legislation on organic certification akin to what is present in Ethiopia. A recent study revealed that farmers had little awareness of the Standards Board's Codes of Practice (Osei-Asare, 2007). Similar to the situation in Ethiopia, a number of NGOs in Ghana support capacity building for organic certification for farmer groups in collaboration with foreign certifiers. For example, some of the projects run by the Agro Eco-Louis Bolk Institute (see footnote 3) specialise in organic certification.

Assessing certification schemes

Most of the leaders of cooperative unions and farmers' associations interviewed for this research lauded the impact of existing certification schemes in terms of the financial and material support they offered in the form of premiums for

small-scale producers.⁴ However, even though the differentiation schemes have proved to be largely successful instruments for improving market access for agricultural producers in the international market, the lack of domestic certification capacity – and hence, reliance on foreign standards and certifying bodies – was cited by interviewees as raising a number of concerns.

One such concern cited is the fact that the system of certification in fair trade and eco-labelling incorporates expensive procedures of rigorous inspection and certification that some producers claim are too burdensome (G/Kidan interview, 2012). Interviewee Asinakech Thomas, Ethiopia's only female miller-exporter of Amaro Gayo Coffee, and who works closely with farming communities in the Amaro Gayo district, said she does not see the need for such an expensive process of organic certification through foreign-based certifiers (Thomas interview, 2012). Thomas argued that the farmers in her coffee-producing region already strive for the finest quality of coffee through traditional production methods that preserve the natural ecosystem and the human culture connected to that ecosystem. As noted earlier in this chapter, agricultural production in Africa is largely *de facto* organic. Given this context, the use of GIs could provide an opportunity to implement the standards of organic certification by incorporating requirements (such as preferences for environmentally sensitive methods of production, GM-free production, and maintenance of production conditions free of chemical pesticides and contaminants) in GI regulations as recognised methods of production. With effective implementation of GIs, small-scale farmers could be empowered to participate in international trade on their own terms.

A second concern arising from dependence on certification schemes relates to the fact that most of the schemes focus on a homogeneous set of certification practices that sometimes deviate from local realities (Mutersbaugh, 2002). Interviewee Tsegaye Anemo, General Manager of the Sidama Coffee Farmers Cooperative Union, stated that production standards in certification schemes do not take the unique circumstances and existing methods of production into account (Anemo interview, 2012). This opinion is commonly held among critics of certification schemes who often point out that the formalisation and standardisation of certification practices do not accommodate “varied and complex ecological, economic, and socio-cultural contexts” (Getz and Shreck, 2006). In contrast, GI protection is fundamentally premised on a desire to preserve local, national and regional distinctness in agricultural production (FAO, 2008).

A third concern expressed by interviewees was that the existing certification schemes prescribe different sets of standards and criteria that often overlap. Fair trade certification prescribes environmental standards that are also required in

4 Focus group discussion with Ato Tadesse Meskela (OCFCU) and Isa Mustapha (Executive, CAA).

organic certification and *vice versa*. However, producer groups that qualify for organic certification also have to undergo an independent certification process for fair trade and environmental certification. In addition to the cost producers incur in the form of application fees, the subjectivity and lack of uniformity in criteria-setting and conformity-assessment procedures across the schemes make attaining certification challenging. A number of respondents suggested the need for a harmonisation of standards in certification schemes in order to achieve more coherent and effective agricultural development.

5. Feasibility of GIs

Certification schemes appeal primarily to consumers willing to pay a higher price out of consideration for the socio-economic conditions of agricultural producers or out of consideration for the minimal environmental impact of the producers' methods of production. GIs, in contrast, make an appeal to consumers based on perceived quality, reputation or other distinctive characteristics of the product itself. GIs and certification schemes also significantly differ in the degree of control each offers to the communities who embrace them. GIs are unique types of IP, and as such they grant their owners all the attributes of property ownership, including: the power to control the resource; the right to determine what use is made of it and under what conditions; and, most importantly, the right to exclude others from use of it (Strahilevitz, 2006). GIs provide their owners with better leverage (than that afforded by certification schemes) to bargain for improved prices for their products through collective proprietary control.

Because of the fundamental distinction between the two, GIs and certification schemes tend to fall into distinct regimes. GIs mostly fall under IP legal regimes; fair trade labelling schemes and environmental or organic labelling schemes are generally voluntary initiatives and do not fall into a particular legal regime, even though they can be enhanced by trademarks. For example, some labelling organisations, such as Fairtrade, have registered their labels as trademarks in order to achieve a higher level of protection. In such cases, labelling schemes often overlap and are conflated with trademarks. Organic certification schemes are, in some ways, exceptions, to the extent that they are typically institutionalised through national legislation such that producers cannot use the term "organic" without certification by government or a government-mandated agency.

The price in the alternative value chain (through certification schemes) for Ethiopian coffee and Ghanaian cocoa largely reflects the conventional international price for the two products. According to the latest data available, certification schemes were connected to only 5% of Ghanaian cocoa and about 28% of

Ethiopian coffee (Fairtrade, n.d.; McCarthy, 2007). Therefore, the alternative value chains for Ethiopian coffee and Ghanaian cocoa were not found to be broad in scope. However, given consumers' increased interest in certification schemes – due to the work of advocacy networks – there is reason to believe that the bolstering of certification initiatives via GI initiatives could improve the market share for GI-protected goods.

Challenges of introducing GIs: structural

Introducing a functional system of GIs requires the establishment of institutional, legislative and organisational frameworks. As in many other developing countries, Ethiopia and Ghana do not have a developed system of GIs. At the time of writing, Ethiopia had draft legislation on GIs: the Proclamation for the Registration and Protection of Designation of Origin, and the Draft GIs Proclamation. These two pieces of draft legislation were under the auspices of the Ethiopian Environmental Protection Authority (EPA) and the EIPO, respectively. The EIPO had taken responsibility for integrating the legislation and preparing laws that would drive the application of GIs for a wide variety of agricultural products (Adelo interview, 2012). Meanwhile, Ghana was in the process of revising its Geographical Indications Act of 2003 to make it applicable to cocoa, pineapple, *kente*, *adinkra* and other export-based Ghanaian products.

In addition to a legal framework, GI protection requires institutional and administrative mechanisms for the identification and registration of eligible products. Also required are infrastructure and expertise to establish, monitor and control production methods to ensure that products are GI-compliant. Active coordination and cooperation between national, regional and local administrative authorities and producer groups are also necessary in order to adopt and administer compliance mechanisms for agricultural production (Rangnekar, 2007). Once GI protection is extended to the product, these mechanisms are necessary to ensure that the GI product does not become generic through unregulated production processes.

At least four government branches in Ethiopia claim to have a mandate relevant to the implementation of GIs: the MOA, the EIPO, the EPA and the Ministry of Trade. The MOA provides farmer support programmes that extend to the lowest administrative levels through its Agricultural Extension Directorate. A task force of nine people, composed of farmers, farmer association representatives and MOA employees, oversees the maintenance of quality in coffee production and processing (MOA interviewee, 2012). The MOA official interviewed for this research expressed concern that the cost of monitoring production, demarcating areas of production and ensuring quality in the

event of GI protection could be challenging. However, given the potential for improved income, interviewees seemed optimistic that the benefits of GI protection would outweigh the costs.

Ethiopia's Coffee Quality Control and Marketing Proclamation of 2008 provides for a quality control system at the local production level. Pursuant to the objectives of the Proclamation, the MOA issued a Coffee Quality and Marketing Implementation Manual that details the methods of coffee production and precautions necessary for producing quality coffee beans (MOA, 2009). The Manual provides detailed guidelines on coffee production, beginning with the selection of beans and moving on to the planting of beans, care of seedlings and overall harvesting. The Proclamation also provides for the establishment of "coffee quality liquoring and inspection centres" to inspect and grade coffee supplied from production areas (Art. 2(20)). We found that a coffee quality liquoring and inspection centre established within the MOA was issuing certificates of grades based on representative samples of all coffee destined for the export market. Similarly, the ECX had quality inspection centres at primary markets in localities where the exchange was being performed between farmers and coffee supplier merchants. All producers who directly exported coffee from their own farm via alternative value chains, or those who exported via the ECX, were required to submit a representative sample of their product to the MOA's central coffee quality liquoring and inspection centre for grading before and after processing for export.

In Ghana, we found that the development of a legal framework for protection of GIs was part of a wider reform of the country's IP law (Ishaaque interview, 2012). According to interviewee Grace Ishaaque, then Principal State Attorney at the Registrar General's Department, Ghana's Ministry of Agriculture was to be entrusted with drafting detailed regulations and directives dealing with practical implementation once the Parliament of Ghana had approved amendments to the 2003 GIs law (Ishaaque interview, 2012). Ishaaque stated that the task of implementing GIs would be challenging, and emphasised the need for capacity building through training and experience-sharing with countries that have well-developed systems of GIs, particularly countries in the EU (Ishaaque interview, 2012). Similarly, interviewee Safoa Osei, a Senior Standards Officer at the GSA, noted that the GSA was currently maintaining quality at the farm level by the issuing of good agricultural practice guidelines (Osei interview, 2012). Osei stated that there was a need for a policy that would provide incentives based on quality of production and a form of regulation that would focus on training farmers, quality inspectors and others in the cocoa value chain (Osei interview, 2012).

Another economic consideration relevant to introducing GIs is the cost and burden for producer communities who seek to register GIs. GI legislation typically requires producers to perform specific tasks in order to tap into opportunities.

The successful implementation of GIs requires the presence of producer organisations and collectives with a structure that allows collaborative participation in registering, maintaining and protecting GI rights (INRA, 2008). In the cases of both Ethiopian coffee and Ghanaian cocoa, we saw above that a significant number of producer cooperatives and farmer associations operate in the alternative value chains through certification schemes. In Ethiopia, numerous cooperative societies – composed of 10 or more coffee farmers who produce in a defined geographical area – have been established. These societies have then formed larger cooperative unions. The Oromia Coffee Farmers Cooperative Union (OCFCU), for instance, is composed of 217 primary societies that have an annual combined production of more than 300,000 tonnes of five varieties of coffee. The coffee varieties are Sidama, Harar, Jimma, Nekemte, and Limmu (OCFCU, n.d.). According to interviewee Tadesse Meskela, OCFCU’s General Director, the Union strives to guarantee traceability of coffee produced by its members – from harvesting to final market destination (Meskela interview, 2012). During our visit to the Union’s coffee processing and storage facility in Addis Ababa, the Union demonstrated the traceability (through meticulous labelling) of the sources of different varieties of coffee arriving at its warehouses, down to the least of the coffee production areas. These traceability systems are intended to help farmers add value and find new market niches through systems of certification. The Sidama and Yirgacheffe Coffee Farmers Cooperative Unions have similar systems with primary coffee farmer societies operating within a functional system of quality control at grass-roots level.

In Ghana, it was found that a number of cocoa farmers’ associations, such as the Cocoa Abrabopa Association, were playing significant roles in ensuring the maintenance of quality through, for instance, improved farming techniques. The aforementioned state body, COCOBOD, through its Quality Control Division, was also found to be undertaking various activities to maintain quality.

The existence of the aforementioned structures would be of paramount significance in implementing the production-level quality control measures needed to form the basis of any GI system. In fact, we are of the view that the introduction of GI systems could, in the Ethiopian and Ghanaian cases, provide opportunities to empower and encourage greater levels of collective action among producers through their existing producer cooperatives and farmer associations. Existing networks of farming groups with shared commitments to both value-based production and the sanctity of place-based reputation could provide effective channels for enforcing the production standards central to GI protection. However, the existence of primary societies and cooperative unions does not necessarily eliminate the potentially prohibitive costs of implementing GIs. In the event of GI protection, additional activities related to protecting and maintaining GI rights

by farmers would likely require a strengthening of organisational and managerial capacities of farmer associations and their cooperative unions, and would likely require collaboration with public agencies and development partners.

In registering the rights and ensuring the maintenance of standards of production, *sui generis* forms of GI protection typically incorporate both *ex officio* and *ex parte* protections. *Ex officio* protection is when public authorities take the initiative in relation to a product without being asked to, while *ex parte* protection is that which is provided at the request of an interested party, typically a producer grouping (Vassilakis, 2009). The GI systems of the EU, Switzerland, Croatia and Japan allow *ex officio* protection of GIs. The GI legislation of China, Algeria, Tunisia and Mauritius provides both *ex officio* and *ex parte* protections. Under the EU's GI system, states are expected to apply *ex officio* protection of GIs by establishing integrated control plans in sector-specific areas. The tasks that public authorities undertake in the EU are similar to those that producer organisations undertake in countries with less-developed systems of GIs, such as the inspection and monitoring of production. An *ex officio* feature in GI protection could benefit the largely small-scale Ethiopian coffee and Ghanaian cocoa producers because it could allow competent authorities to take the lead, either directly in registering and maintaining GI rights or indirectly in building the capacity of producer groups. As evidenced by the progressive partnership developments on GIs in India, Brazil and Indonesia, it is possible that Ethiopia's MOA and Ghana's COCOBOD could engage development partners, such as the UK Department for International Development (DFID), the UN Commission on Trade and Development (UNCTAD) and others, in supporting GI implementation.

In assessing the potential economic benefits and costs of GI implementation, some argue that requiring farmers to adhere to traditional methods of production as a condition for GI protection could have the effect of denying farmers the benefits of increased productivity via industrialised agriculture methods (Shepherd, 2006). In the course of this research, farmers, producer groups and individuals working with farmers were asked whether they agreed, disagreed or slightly ("somewhat") agreed with the hypothesis that producers' adherence to traditional methods of production would reduce productivity. Out of seven responses, four disagreed with the proposition while two chose "somewhat agree" and one agreed. In response to another suggestion, that sticking to traditional methods of production for GI-compliance could result in additional production costs, four disagreed, three agreed and one chose "somewhat agree". Most of the respondents who disagreed with the above assumptions argued that coffee and cocoa farmers do not use fertilisers anyway, and that farmers have not yet maximised the productivity potential of their products even within the traditional system of production (Meskela interview, 2012). Some respondents argued that

adherence to traditional production methods provides cost savings via shunning of agricultural inputs such as chemical fertilisers and pesticides.⁵ Some argued that the largely small-scale nature of production does not allow for the use of mechanised agriculture (Tessema interview, 2012) (meaning that the adoption of GIs could help to prevent the displacement of small-scale farmers by commercial producers who resort to large-scale agricultural production methods). In any event, we came to the conclusion that, in a successful implementation of GIs for Ethiopian coffee or Ghanaian cocoa, any decrease in yield due to the non-application of mechanised agriculture would likely be offset through improved prices for the products that would remain clearly differentiated from generic products in commodity markets.

Operational challenges

Getting consumers to know the quality, reputation or characteristic of a GI-protected product would be crucial to broad recognition of the product in the market. A significant number of respondents in the study recognised the need for strategies that broaden the market share for their products. One interviewee, a cocoa farmer from the Western region of Ghana, expressed the view that it would be worth the risk to invest in promotional activities in international markets, given the quality of his products (Quam interview, 2012). Meanwhile, all of the respondents in the Ethiopian coffee and Ghanaian cocoa sectors gave the response “agree” or “somehow agree” with the view that because some varieties of their products have existing market reputation, no significant expenses in advertisement and brand management would be expected. The leaders of farmers’ associations and cooperative unions said they recognised that any GI strategy would present the opportunity to further engage in promotional activities.⁶

There is evidence that many distinctive agricultural products from African countries already have broad reputations in their respective markets.⁷ But a problem for most producers of these products is that the premium prices that the products garner tend to benefit outside commercial entities, namely, intermediaries in the value chain of the products. In this context, it can be argued that,

5 Focus group discussion among coffee farmers, 15 June 2012, held at the office of the OCFCU.

6 Personal communications with leaders of the OCFCU, Sidama Coffee Farmers Cooperative Union, Yirgacheffe Coffee Farmers Cooperative Union and the CAA.

7 These products include, for example, Madagascar Bourbon, Ugandan Vanilla, Kenya’s indigenous tea varieties such as Kericho tea, South Africa’s indigenous tea product Rooibos, and the Chili de Mamou from the Republic of Guinea.

given the potential for GIs to balance the power relations between producers and intermediaries, marketing and brand management activities for the GI-protected products could be recoverable expenses.

Another potential challenge with a GI system is the cost of product quality improvement in response to changing consumer preferences (Lewin *et al.*, 2004). There is an argument that, for it to be viable to extend GI protection to distinctive agricultural products in developing countries, besides “tradition and authenticity” a target product must embody attributes that are “constantly subject to change and adaptation” in response to evolving consumer and market demands (Winter, 2003). In turn, it is argued that, because farmers and producers in developing countries are more familiar with subsistence production than with commercial production, small-scale producers may find it too difficult and expensive to engage in activities that respond to the latest consumer interests in the course of GI use (Larson, 2007). However, it is our view that the current global market environment is receptive to traditional agricultural products because of “a voracious appetite for exoticism and romanticism around cultural products from ‘pristine’ communities” (Oguamanam, 2009).

The earlier examination of the economic impacts of certification schemes demonstrated that marketing strategies based on local, territory-based and TK-based attributes of products have presented significant marketing opportunities in the global market for traditional agricultural food products. This increasing interest in traditional agricultural products – a feature of today’s post-modern economy – largely dispels the concern that an absence of experience in adapting to changing consumer preferences would limit the effectiveness of GI protection. Consumer appetite for agricultural products from tradition-based agricultural producers can in fact be expected to rise even further in the future, given the growing consumer scepticism towards the health and safety aspects of many agrobiotechnology products. Thus, the association of most African products with local territory, culture and tradition has the potential to constitute an important feature of the marketing of any African products protected by GIs (Addor and Grazioli, 2002). Unlike corporate strategies that devise market-responsive methods of adding value to agricultural products, the commercial success of GI protection in the Ethiopian coffee and Ghanaian cocoa contexts could be expected to depend largely on defending and using the same traditional techniques that form the basis of “reputation, quality or other characteristics” of these products. This does not, however, mean that producers of these distinctive agricultural products would not need to formulate strategies to widen and control their market share.

During our interviews with producer cooperative members and farmers, one of the identified expectations of GIs was a need to control and protect Ethiopian coffee and Ghanaian cocoa brands from being undermined by counterfeit products

of other countries. Many distinctive agricultural products from developing countries that have already acquired strong market presence and broad recognition have been subjected to different forms of counterfeiting and falsification in international markets. For example, the Tea Board of India reports that the district of Darjeeling produces only 10,000 tonnes of tea a year, while roughly 40,000 tonnes of tea is annually sold worldwide as “Darjeeling” (Kenny, 2004). The region of Antigua in Guatemala produces some 6 million pounds of genuine Antigua coffee per year (Grote, 2009), yet some 50 million pounds of coffee are sold annually under the “Antigua” designation around the world (EC, 2003). Ghana’s *adinkra* and *kente* cloths are globally dispersed through sources traced to China (Boateng, 2011). GI implementation could provide the legal means to control and protect the Ethiopian coffee and Ghanaian cocoa brands (which can, like Ghanaian cloths, be subjected to counterfeiting and falsification), but producers would have to defend and enforce GIs in order to prevent any incidents of falsification of the origin of products and the counterfeiting of the product names. Such activities could require enormous resources for monitoring foreign producers, enforcing GI rights and engaging in proceedings in foreign courts or before quasi-judicial forums.

However, while absolute enforcement of GIs in foreign jurisdictions might be burdensome, the economic implications of protecting GIs could be minimised if there were increased protection for GIs at the international level via collaborative GI implementation. Increased international protection for GIs could be achieved by the World Trade Organisation (WTO) if it were to extend the WTO’s highest level of GI protection – currently restricted to wines and spirits only – to other agricultural products. Under the minimum level of GI protection in the WTO TRIPS Agreement, GIs for agricultural products other than wines and spirits are protected against “the use of any means [...] that indicates or suggests that the good in question originates in a geographical area other than the true place of origin” (Art. 22.2(a)). However, such protection is qualified by the TRIPS provision that the use of GIs by other parties is prohibited only if the other parties use the indication either “in a manner that may mislead the public” or in a way which may “constitute an act of unfair competition” (Art. 22.2(a)–(b)). In terms of this TRIPS provision, the use of a designation for another product that is identical or similar to a GI-protected product may be possible under a number of scenarios, the validity of which can be determined only through legal contest. In terms of this provision, protection against unfair and misleading use of GIs means that aggrieved parties – holders of GI rights over a product – need to prove not only that the use of an indication is not correct, but also that such a use may mislead the public or may constitute unfair competition. Such a task would involve arduous and costly legal proceedings in cases where the indication was used outside jurisdiction.

The degree of GI protection for wines and spirits under Article 23 of TRIPS is such that only producers whose products actually originate from a geographical area are identified as having rights to use the indication. Competitors in international markets are prohibited from using the indication – even where they clearly indicate the true geographical origin of the good in question or use the GI sign or terms “accompanied by expressions such as ‘kind’, ‘type’, ‘style’, ‘imitation’ or the like” (Art. 23). Under this enhanced level of GI protection for wines and spirits, therefore, producers are shielded from expensive legal proceedings that may be required (under the lower level of GI protection) to prove unfair competition and public deception in the use of an indication (Correa, 2002). Thus, higher WTO protection of *all* GIs at the international level would result in lower economic burdens for producers of Ethiopian coffee and Ghanaian cocoa were their products to be GI-protected.

In the absence of strong international protection for non-wine/spirit GIs, collaborative efforts, through state-led initiatives, would likely be needed to support small-scale agricultural producers. GIs are essentially agricultural instruments that historically have not been considered part of private property, unlike other regimes of IP such as trademarks (Aubard, 2010). The advantage of *sui generis* forms of protection is that GIs can be conceptualised as “publicly oriented” rights, rather than as the private business assets of individuals (FAO and Siner-GI, 2009). *Sui generis* systems of GIs allow state agencies to take an active role in enforcing GI rights in foreign jurisdictions, as evidenced by the actions of France’s Institut national des appellations d’origine (INAO). The involvement of the state in GI protection is justified based on the public objectives of preventing consumer confusion, preserving cultural heritage and conserving agricultural systems for multiple benefits (Lukose, 2007).

The Ethiopian coffee trademark and licensing initiative

Before seeking to arrive at conclusions regarding the applicability of *sui generis* versus conventional trademark approaches to GI protection for Ghanaian cocoa and Ethiopian coffee, it is necessary to give consideration to the existing Ethiopian coffee trademark and licensing initiative, launched by the EIPO in 2004. The initiative involved the trademark registration of three of the country’s coffee designations – Yirgacheffe, Sidama and Harrar – in major foreign markets. An in-depth analysis of the pros and cons of this initiative is beyond the scope of this study. However, a few observations can be made in order to understand whether the chosen strategy of trademark registration and licensing is an optimal strategy as compared to a GI system. One of the reasons why the EIPO embarked on trademark-based protection is that the *sui generis* option for GIs, as practised in

Europe and most notably in France, was not considered feasible, given the enormous efforts required to implement it (Adelo interview, 2012; Mengistie interview, 2012). This decision is understandable because of the need to build institutional infrastructures and expertise that ensure the establishment, monitoring and controlling of production and marketing of the GI product. However, as this research study has found, there is evidence to suggest that the establishment of the structures necessary for GI protection in Ethiopia would *not* need to start from nothing as far as coffee production in the alternative value chain is concerned. Some of the structures – and motivations from producers – with regard to GIs already exist in the Ethiopian coffee sector. If a *sui generis* system of GIs were found to be suitable – and perhaps more suitable than a trademark-based IP strategy – the tasks involved in introducing and implementing GIs do not appear to be out of reach.

6. Conclusions

There is demonstrable evidence of a networked collaborative tradition of knowledge generation among local communities and diverse stakeholders involved in the production of premium Ethiopian coffee and Ghanaian cocoa. These entities' suitability to adapt GIs as *sui generis* IP models for open development outcomes in the two countries is a very plausible potential of their traditional orientation and operational module. It is clear, however, that the practical implementation of GIs in the two countries could involve significant burdens, given that the system of GIs is relatively foreign to them. What is required is a strategic approach to using GIs in ways that alleviate, not increase, cost burdens for producer groups.

The research findings suggest that the burdens of implementing GIs are not insurmountable, for three reasons. First, the experience of differentiation through certification marks (for fair trade and organic certification) has meant that the preconditions for success of GI strategies already exist in the alternative value chains of each country. GI strategies for the two products could thus be based on the experience and strength of existing differentiation strategies, in cooperation with farmer cooperatives and associations. Second, cost implications could be contained by exploiting the flexibility offered by the choice between *sui generis* and trademark-based systems of GI protection. Third, the potential of GI implementation in harmony with the practice and institutional settings of cooperative unions and farmers' associations, as well as the involvement of the state in the process, are important considerations. Together these factors help mitigate the cost concerns usually presented in arguments against the adoption of GIs in developing countries. Developing countries such as Ethiopia and Ghana must weigh these considerations in determining whether to introduce GIs in their jurisdictions.

Trademark GIs v. sui generis GIs

The method by which GIs are protected – *sui generis* or trademark-based – determines how far they can be harnessed to enhance collaborative innovation and creativity in agricultural production. In this respect, it is necessary to draw attention to Ethiopia's initiative of registering trademarks over its coffee GI names in major international markets such as the US, Japan, Australia and European countries.

Two observations deserve attention in considering whether trademark-based registration of GIs or a *sui generis* method is suited to the goal of participatory agricultural development in the Ethiopian coffee and Ghanaian cocoa sectors. The first relates to the amenability of each instrument to certain policy contexts and objectives in agricultural development, such as ecological, cultural and biodiversity goals. The second relates to the degree of control that each instrument allows rights-holders in guaranteeing authenticity of the products and in preventing unauthorised and falsified use of the products by third parties.

First, unlike trademark protection, GI protection can be acquired in other countries only if there is strong protection at the local level in the country of origin. The very nature of a GI system is dependent on the link between a product and a geographical location that forms the basis of the product's distinctive attributes. The task of maintaining a territorial link between a product and its area of production should be considered an opportunity for African producers to establish collective rights over traditional resources in a defined geographical area without the need to designate individual rights-holders. Given the territorial nature of most agricultural practice in Africa, a geographical link as a condition for GI protection adds significant value to GIs as tools to contextualise policy objectives in the protection of biodiversity, the preservation of cultural identity and the prevention of biopiracy. Adoption of a *sui generis* GI system could make it possible for local cultural systems to govern, *inter alia*, an agricultural product's methods of production, allocation of different production roles, and classification of a specific knowledge of production and the procedures of its transfer and the modes of its utilisation. Thus, a *sui generis* method of GI protection could serve to formalise production methods developed and generated through local consensus. The basis of GI protection in a *sui generis* model could, *inter alia*, be crafted in such a way as to comply with the requirements ingrained in local protocols and traditional rules regarding the management and conservation of biodiversity in the particular territory from which the product originates. The requirement for the establishment of GI systems within the domestic legal framework could also serve to prevent or reduce the likelihood of internal fraud (within the country of origin) that could compromise the quality of a product and the validity of GI

protection for the product in other jurisdictions. This would advance the authenticity of the product in order to claim continued protection of the GI in other jurisdictions.

Regarding the second observation, a *sui generis* form of GIs could potentially offer a greater degree of control to the IP-holders than trademark protection. In a trademark-based GI, third parties are only prohibited from using a GI in foreign markets either “in a manner that may mislead the public” or in a way that may “constitute an act of unfair competition” (TRIPS, Art. 22.2(a)–(b)).⁸ In the trademark context, protection against unfair and misleading use of a GI means that the aggrieved party – i.e. coffee producers in the case of Ethiopian coffee – needs to prove not only that the use of an indication is not correct, but also that such a use may mislead the public or may constitute unfair competition. As previously noted, such a task involves arduous and costly legal proceedings in cases where the indication is used in another jurisdiction. For example, third-party retailers may sell Ethiopian coffee under their own brand, using such phrases as “Sidama-style coffee”, so long as they clearly indicate that it is actually blended with coffee imported from a country or location distinct from the Sidama region of Ethiopia. In such a case, it could persuasively be argued that the use of the indication “Sidama” does not mislead the public and thus is not a trademark violation. However, with a *sui generis* form of GI protection, it is theoretically only producers whose products actually originate from the respective region who have exclusive rights to use the indication in any GI form, even with the addition of a descriptive word or phrase.

In trademark-based GI protection, proprietary value attaches to a geographical sign or term only if, through continuous use in relation to a product, the sign or term has become distinctive in the minds of consumers as an indicator of the source of the product (Farley, 2000). In their *sui generis* form, GIs convey proprietary rights in and of themselves, even before they are invested with a meaning that results from use in the market. The recognition of GIs on a proprietary basis allows producers to exercise a bundle of ownership rights irrespective of the existence of market reputation for the brands. The proprietary nature of rights in *sui generis* forms of GIs grants producers better leverage for dealing with intermediaries such as wholesalers, importers, distributors, manufacturers and retailers of their products. Producers can potentially stipulate conditions under which their products are supplied to the market (Marette *et al.*, 2007). These conditions can cover, *inter alia*, requirements for the product’s distribution. As GI rights-holders, producers have exclusive rights to control the GI-relevant product, determine what use is made of it and under what conditions, and, most important, to

8 The two phrases, laid out under Article 22.2(a) and (b) of TRIPS, are reflective of countries’ legal standards in the protection of trademarks.

exclude others from the use of an indication that reproduces, imitates or falsifies the indication in any form. Producers could, as a condition of trading over their products, prohibit downstream operators in the market, such as distributors, manufacturers and retailers, from blending the product with cheap coffee or cocoa supplies that do not originate from the area signified by the indication. In the long term, this would allow coffee and cocoa farmers to differentiate their distinctive products from commodity chains and to negotiate the price of their product independently.

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