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Dedication to

The late Dr. Adronico Aduogo Adede and the late Prof. Hastings W.O. Okoth-Ogendo both of whom have left an indelible mark on the legal landscape both in Kenya and internationally.

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Executive Summary

For decades, Konrad Adenauer Stiftung has endeavoured to promote and protect the rule of law around the world out of the recognition that this is essential for the enjoyment of human and political rights, and that it forms a fundamental pillar for achieving fair, sustainable and broad-based socioeconomic growth and prosperity.

In these hard and trying times for the world economy, the need for rule of law reforms that encourage entrepreneurship and business development cannot be gainsaid. Respect for the rule of law not only creates favourable conditions that foster business development, but also provides essential assurance and confidence for investors.

Whereas, the concept of the rule of law encompasses a very wide scope in the field of economy, this publication confines itself to the protection of intellectual property rights in the Kenyan context.

It is undoubted that if Kenya's Vision 2030 is to be realized, the protection and promotion of intellectual property rights which includes patents, trademarks and copyrights must be granted due attention. This will offer inventors and artists the much needed confidence and trust, in addition to offering them the legal incentive to create and explore further, since they are assured of exclusive rights for a finite period of time. These guarantees will not only allow innovators to recoup the costs put into creating products but are also essential for creating and sustaining modern, knowledge and technology-based economies necessary to develop in today's global market.

Consumers and traders too, stand to benefit from the enforcement of intellectual property rights because this will help in ensuring product safety and increase the likelihood of access to cutting-edge and innovative products and services.

We hope that this publication will offer valuable information to its users on the general aspects of the intellectual property rights in Kenya, but more importantly, that it will contribute towards the improvement and strengthening of intellectual property rights regime in Kenya as the country positions itself to compete with other nations in this highly dynamic and sophisticated world market.

Abbreviations

AAK: Agrochemical Association of Kenya

AARC: Alliance of Artists and Recording Companies **AATF:** African Agricultural Technology Foundation

ACHPR: African Charter on Human Rights

ACP: African, Caribbean and Pacific

AFC: American Folklife Centre

AIDS: Acquired immunodeficiency syndrome

AIS: Australian Information Service

ANG: Australian National Gallery

ARIPO: African Regional Intellectual Property Rights

ARVs: Anti-retroviral drugs

AU: African Union

BMS: Bristol-Myers Squibb
CAD: Computer-Aided Design

CAF: Confederation Africaine de Football

CAFTA: Central American Free Trade Area

CAM: Computer-Aided Manufacturing

CBD: Convention on Biological Diversity

CGIAR: Consultative Group on International Agricultural

Research

CIMMYT: International Maize and Wheat Improvement Centre

CIPR: Commission on Intellectual Property Rights

CMO: Collective Management Committees
CNRs: Copyright and neighbouring rights

COMESA: Common Market for Eastern and Southern Africa

DNA: Deoxy ribonucleic acid **DNS:** Domain Name System

DRMs: Digital rights management systems

DSL: Digital Subscriber Line

EC: European Community

EDI: Electronic Data Interchange

EFT: Electronic Funds Transfer **EoF:** Expressions of Folklore

EPA: Economic Partnership Agreement

ESAF: Enhance structural adjustment facility

EU: European Union

FAO: Food and Agriculture Organisation

FIFA: Federation Internationale de Football Associations

FKL: Football Kenya Limited

FTA: Free Trade Area

FTO: Freedom to operate

GATT: General Agreement on Trade and Tariffs

GDP: Gross Domestic Product

GEF: Global Environment Facility

GI: Geographical Indications

GM: Genetically modified

GMO: Genetically modified organisms

GSK: GlaxoSmithKline

HAI: Health Action International

HIV: Human immune deficiency virus

http: Hyper Text Transfer Protocol

ICANN: Internet Corporation for Assigned Numbers

ICC: Indigenous cultural communities

ICESCR: International Covenant on Economic, Social, and

Cultural Rights

ICT: Information Communication Technology

ID: Industrial Design

IFPI: International Federation of Phonographic Industry

ILAM: International Library of African Music

IMF: International Monetary Fund

IP: Indigenous peoplesIP: Intellectual Property

IPA: Intellectual Property Act

IPPC: International Plant Protection Convention

IPRS: Intellectual Property Rights

IRMA: Insect resistant maize for Africa

ISP: Internet Service Provider

ITPGR: International Treaty on Plant Genetic Resources

KAM: Kenya Association of Manufacturers

KANU: Kenya African National Union

KARI: Kenya Agricultural Research Institute

KBC: Kenya Broadcasting Corporation

KCAEM: Kenya Coalition of Institutions and Individuals

KEFRI: Kenya Forestry Research Institute

KEPHIS: Kenya Plant Health Inspectorate Services

KES/KSHS: Kenya Shillings

KETAM: Kenya Access to Treatment Movement

KIPI: Kenya Industrial Property Institute

KIPO: Kenya Industrial Property Organisation

KOKISA: Koriema, Kimalel and Sabor Locations (of Baringo in

Kenya)

KPA: Kenya Publishers Association

LDC: Least Developed Countries

LDC: Least Developed Countries

MCSK: Music Copyright Society of Kenya

M-Pesa: An electronic money transaction system associated

with mobile banking in Kenya

MSP: Morning Star Pole

MTA: Material Transfer Agreements

NCC: Nigerian Copyright Commission

NCIP: National Commission on Indigenous peoples

NGOs: Non-Governmental Organisations
NIEO: New International Economic Order

NTB: Non-Tariff Barrier

OAPI: African Organisation for Intellectual Property

OAU: Organisation of African Unity
OCR: Optical character recognition

OECD: Organisation for Economic Cooperation and

Development

PBR: Plant Breeders Rights

PBS: Programme for Biosafety Systems

PGRs: Plant genetic resources

PHOSITA: Person having ordinary skill in the art

PIC: Prior informed consent

PIIPA: Public Interest Intellectual Property Advisors

PIPRA: Public Intellectual Property Resource for Agriculture

PVP: Plant Variety Protection
OIP: Quick Install Process

R & D: Research and Development

RIAA: Recording Industry Association of America
SADC: Southern African Development Community

SAPS: Structural adjustment programme

SGS: Smithsonian Global System

TB: Tuberculosis

TCE: Traditional cultural expressions

TK & F: Traditional knowledge and Folklore

TK: Traditional knowledge

TM: Trade mark

TM: Traditional Medicine

TNCs: Transnational corporations

TRAMA: Sudanese Traditional Music Archive

TRIPS: Trade Related Intellectual Property Rights

TS: Trade Secrets

TUA: Technology Use Agreements

UC: Unfair competition

UCC: Universal Copyright Corporation

UDHR: Universal Declaration of Human Rights

UM: Utility Model

UNCITRAL: United Nations Centre for International Trade Law

UNDP: United Nations Development ProgrammeUNEP: United Nations Environment Programme

UNESCO: United Nations Educational Scientific and Cultural

Organisation

UPOV: International Convention for the Protection of Plant

Varieties

USPTO: US Patent and Trademark Office

USTR: US Trade RepresentativeWCT: World Copyright TreatyWFP: World Food ProgrammeWHO: World Health Organisation

WIPO: World Intellectual Property organization

WPPT: WIPO Performances and Phonograms Treaty
WPPT: World Performances and Phonograms Treaty

WTO: World Trade Organisation

WWW: World wide web

Introduction

The twin issues of rule of law and trade find expression in intellectual property rights (IPRs). This book takes a sectoral approach to IPRs, clearly illustrating the relationship between IPRs, trade and the rule of law. Seen from a human rights perspective, IPRs are meant to protect rights of innovators, traders and consumers. This book is divided into nine chapters. **Chapter One** gives an overview of the IPRs regime in Kenya. It is observed that Kenya has complied with her international obligations with respect to IPRs. This has been done through domestication of international conventions. Most critically Kenya is TRIPS compliant. The only shortcoming is that Kenya has focused on international instruments at the expense of her traditional knowledge.

Chapter Two examines the interplay between patents and health in Kenya. On the one hand it is appreciated that patents contribute to new products on the market such as new drugs. On the other hand, the monopolistic nature of patents threatens to make these new products inaccessible to the majority of Kenyans. The chapter discusses mechanisms available within the IPR regime for balancing the need to make drugs accessible on the one hand and with the need to offer protection to investors on the other.

Chapter Three considers the question of IPRs and food security. Kenya like most other African countries is vulnerable to food insecurity. Biotechnology, especially the form that involves genetically modified organisms (GMOs), has been touted as a panacea for food insecurity. This chapter discusses the impact of biotechnology on food security, biodiversity and R & D in agriculture. It is noted that GMO technology is like a two-edged sword. It can be both a solution to food insecurity (through increasing yields and bringing about plants that are resistant to pests and drought), and also present new challenges such as impinging on the rights of farmers to save and reuse seeds. However, the greatest challenge is gatekeeping, which has now been made possible through enactment of the Biosafety Act.

Chapter Four takes the reader into the sphere of plant breeders rights (PBRs). Plant breeders have adequate legislation to protect their efforts. It is, however, observed that plant variety protection appears to favour exotic plants such as flowers, and that there is not much activity in breeding of food crops. However, unlike protection through patents, PBRs recognize farmers rights. PBRs is a form of IPRs whose potential has not been fully exploited in Kenya.

The case of *Monsanto v Schmeizer* finds a special place in **Chapter Five** in this book. It is a case whose decision clearly promotes the development of science and the protection of patent holders. The gist of this case is that a patent holder has superior rights in land than a land owner. In a way this decision is likely to cause hardships to innocent farmers, especially in Kenya, through contamination of non-GMO plants by GMO ones.

The question of copyright is an age old issue. **Chapter Six** recasts this topic by focusing on the music industry. The major challenge lies in the use of Internet to sell music. It is stated that the dynamism of the Internet requires constant review of laws to give adequate protection to music.

Chapter Seven looks at IPRs in sports. Kenya is a sporting powerhouse. However, the extent to which IPRs are exploited in sport is not clear. This chapter presents the various forms of IPRs available in sports such as broadcast rights which sports managers can use to generate resources and in the process, rely less on the Exchequer.

Chapter Eight tackles a nagging problem of counterfeiting products. Intellectual property rights (IPRs) are rights that touch on trade and affect different players at different levels. Innovators have their innovations rewarded through IPRs. Manufacturers and traders have their trade "rights" equally protected through IPRs. The consumer who is at the tail end of all trading transactions equally needs protection. The consumer is not a mere beneficiary of the sweat of innovators but he pays for the goods resulting from innovations. To this end, it becomes necessary to protect the consumer from "cheats" who may be out to sell "fake" or "imitations". At the end of the day the consumer needs an assurance that what he is paying for actually is the article he wants.

Chapter nine looks at the need for a sui generis form of IPRs for protecting traditional knowledge (TK) in Kenya. Kenya has a strong cultural base with concomitant traditional knowledge. This knowledge is expressed in the form of traditional medicine and expressions of folklore (EoF). Whereas a lot of trade is going on involving medicinal plants, traditional artefacts, music and other forms of EoF, there is no protection of TK. This is born out of the fact that TK does not neatly fit into the Western model of property ownership. It is concluded that there is need for Kenya to put in place a sui generis form of IPRs to protect TK.

All in all, the authors have endeavoured to give an incisive look at IPRs from a practitioners point of view.

Chapter One

An Overview of the Intellectual Property Rights (IPRs) Regime in Kenya

By Moni Wekesa

1.0 Introduction

his chapter gives a broad overview of the intellectual property rights (IPRs) situation in Kenya. It is divided into four parts. Part one looks at the philosophy of IPRs. It is noted that IPRs are premised on a Western philosophy of property ownership that seeks to reward an individual, who is considered to have worked hard to contribute to the good in society. Part two takess a bird's eye view into the international legal framework tracing the developments around IPRS on a global basis. Part three zeros in onto the TRIPS Agreement locating Kenya's place therein. Part four looks at the international framework for IPRS in Kenya. It's concluded that Kenya has done well to comply with international conventions. However on the local scene, Kenya still has a lot of work to do to protect her traditional knowledge.

1.1 Philosophy of Property Ownership in the Western World and in Traditonal Communities

Two schools of thought inform the Western philosophy to property ownership. These are the deontological or natural rights approach and the consequentialist or utilitarian approach.

The *deontological school* teaches that a person has a natural right to a person's creation irrespective of the consequences. Hereunder, an inventor is rewarded for working hard. John Locke (1632-1704) tried to link natural rights to a theory of property. Locke propounds that God gave the earth to mankind in common and that each individual has 'property' in his/her own

'person' and the 'labour' of his/her body and the 'work' of his/her hands. In his Two Treatises of Government (1690) Locke says: 2

Whatsoever, then, he removes out of the state that nature has provided and left it in, he has mixed his labour with it, and joined to it something that is his own, and thereby makes it his property. It being by him removed from the common state Nature placed it in, it has by this labour something annexed to it that excludes the common right of other men.

In short, Locke justified private property ownership based on the premise that every individual should own what he/she produces from the commons. With respect to IPRs, the production of ideas comes from a person's labour, the ideas themselves coming from a commons without getting exhausted and that ideas can become property without being wasteful. According to the avoidance theory ³ of labour, labour is thought to be uncomfortable and therefore many people would rather avoid it. Hence, those who sacrifice to 'labour' should be rewarded with property rights. It is in fact said

that the unpleasantness of labour should be rewarded with property because people must be motivated to perform labour.⁴

Based on the avoidance theory, labour justifies the granting of IPRs to those who 'labour'. Locke's theory can also be seen in terms of value-addition,⁵ namely that labour produces social value. It is this 'value-addition' that deserves to be rewarded. *The 'non-obviousness'* requirement for patents is meant to emphasize the value addition. According to this thinking IPRs are given due to the benefits that are likely to accrue to society.

The *consequentialist/utilitarian school* holds that IPRs in one's creation is necessary as a means to further development. IPRs are seen as an incentive to further technological advancement. It is presumed that the invention is useful to society. This theory was first propagated by Jeremy Bentham (1748-1832) who rubbished the natural approach to law by saying:⁶

natural rights is simple nonsense: natural and imprescriptible rights, rhetorical nonsense-nonsense on stilts.

Bentham subscribed to the positivist school of law. The Utilitarian theory is to the effect that governments should enact laws that guarantee the happiness

DS Chisum et al (eds). *Principles of Patent Law. Cases and Materials*, 3rd edn., New York" Foundation Press, 2004, p.39

J Locke, *Two Treatises of Government. Civil Government* (see also Locke in MDA Freeman *Lloyd;s Introduction to Jurisprudence*, 7th edn, London" Sweet & Maxwell Ltd, 2001,pp.148-150.

³ DS Chisum, p.42

⁴ Ibid.

⁵ Ibid

J Bentham 'An introduction to the Principles of Morals and Legislation (edited by JH Burns & HLA Hart, (1970)

of the majority. Consequently, IPRs should be granted to individuals in cases where such rights guarantee happiness of the larger society. IPRs are thus granted to ensure that enough intellectual products are available to the larger society.

In traditional communities, however, property is communally owned. Even knowledge (TK) is communally owned. For example, traditional dances are known to belong to certain ethnic groups. Within those groups members identify with those artistic works. The same applies to traditional medicine. Knowledge about music, crafts or medicine is passed on orally. No one can rightfully claim to be the owner of TK. Some people may merely modify a dance, but they will not change the theme. Improvements on TK are slow to come by. In such cases, it is difficult to say whether a registered "rights holder" will do so on behalf of the community, a form of trust. Conventional IPRs do not foresee the establishment of such a trust. This disparity in understanding of the divergence in philosophies relating to property ownership between the West and developing countries has resulted in exploitation of TK by persons from the North with no benefits going to the communities that have nurtured such knowledge.

In summary, it should be appreciated that the Western philosophy of property ownership (both Lockean and Utilitarianism) emphasize individual ownership of property. It is the individual, who would have worked out an idea who is then accorded exclusive rights to property. Current forms of IPRs – patents, copyright, industrial designs and others are granted to individuals either singly or jointly. There is need for countries with TK to set up appropriate IPR regimes.

1.2 International Legal Framework

Intellectual property rights (IPRs) have a history going back many centuries. The first patent law for the protection of inventions was passed in Venice in 1474 during the Renaissance. Another early patent law was the English Statute of Monopolies of 1624. The Statute was amended several times, but remained in force until 1977, when Britain adopted the standards of the European Patent Convention. ⁷ The 1836 United States Patent Act was the first modern patent law. Under this law, all applications for patent registration had to be examined for novelty and usefulness. The German Patent Act of 1877 was similarly based on examination. ⁸ Switzerland had a

⁷ Ibid at p. 30-31

⁸ Ibid

patent system only from 1799 to 1802, and this was re-established in 1888, and the Netherlands prohibited patents from 1869 until 1912⁹.

However, all of these IPR Regimes were highly "deficient" by modern standards. Patent systems in many countries lacked disclosure requirements, incurred very high costs in filing and processing applications, and afforded inadequate protection to the patentees. Few of them allowed patents on chemical and pharmaceutical substances (as opposed to the processes).¹⁰

The pressure for an international IPR regime spearheaded by inventors and industrialists, started growing from the late 19th Century. Starting with the 1873 Vienna Congress, there was a series of meetings to create an international IPR regime. These finally resulted in the ratification by 11 countries of the 1883 Paris Convention of the International Union for the Protection of Industrial Property. ¹¹ Its membership currently stands at 173 Members. ¹² The initial objective of the Convention was:

the creation of a union which, without encroaching on the municipal law of the contracting countries, would lay down a number of general principles securing the interests of industrial property in the interior of a country as well as abroad.¹³

The Paris Convention was the first attempt at "harmonization" of patent laws. It covered "industrial property" including patents and trademarks¹⁴. Unlike the mandatory provisions of Article 27.1 of TRIPS, the Convention allowed exclusions from patentability and did not establish any patentability criteria or minimum duration for patent protection. It was up to the Paris Union countries to determine these in their domestic laws. Thus, many developed and developing countries had patent duration of 15 to 17 years counted from the date of grant. In some countries, protection was even shorter. For instance, in India, process patents for food, drug and medicines were granted for five years from the date of sealing or seven years from the date of filing, whichever was shorter.¹⁵

The Paris Convention did not cover copyright which was subsequently covered by the 1886 Berne Convention on the Protection of Literary and Artistic Works. The names of these two earliest multilateral instruments

⁹ Ibid at p. 30-31

¹⁰ Ibid at p. 30-31

¹¹ The Convention has undergone several revisions ending with the adoption of a revised Act of the Convention, the most recent being the Stockholm Amendment of July 14, 1967 of which the great majority of countries are party to.

¹² Source www.wipo.org last accessed 2nd February 2009

¹³ Ladas & Parry, The Paris Convention (July 2002) source www.ladas.com last accessed 2nd February 2009

¹⁴ Article 1 (2) of the *Paris Convention*.

¹⁵ Resource Book on TRIPS at p. 416

reflect the distinction which was customarily drawn between patents and trademarks as "industrial property", while the domain of the author and artist was protected by copyright. With the dawning of the "post-industrial" era i.e. the age of technological advancement, the boundaries between the industrial and artistic blurred, and the inclusive term "intellectual property" became commonly used to refer to the results of creative human endeavor protected by law.¹⁶

The international IPRs regime established by the Paris Convention was subsequently embodied in the 1967 Convention Establishing the WIPO (World Intellectual Property Organisation).

During the 1970s and early 1980s as part of their push for the New International Economic Order (NIEO) the G77 developing countries sought to have the international IPR regime relaxed to allow them to acquire technology cheaply, if not, freely. At the same time, multinational companies in USA & Japan felt that the existing IPR regime was not stringent enough to protect their business interests. They lobbied their countries for inclusion of IPRs in GATT (the Genaral Agreement on Trade and Tariffs) negotiations, hence the signing of the TRIPS Agreement by WTO member states in 1994. TRIPS differs from the previous multilateral instruments in two material respects: Firstly, unlike UN instruments where State parties can opt out, TRIPS is compulsory for members. Secondly TRIPS has a mechanism of sanctions for non-compliance. Given the importance of trade in the creation of wealth, all countries find themselves cornered to domesticate the provisions of TRIPS. TRIPS therefore forms the basis of modern IPRs in all countries, including Kenya.

The expansion of international IP protection is a process that has evolved steadily over the past few decades to the point that today, most countries of the world are now involved in what can best be described as a global system of intellectual property regulation. While TRIPS is the pre-eminent multilateral international text to recognize the nexus between IP and trade it is just one part of the broader system. The global IP system comprises a series of intersecting international agreements, regional conventions and instruments and bilateral agreements and several powerful international institutions, the most important institutions being the World Trade Organisation (WTO) and the World Intellectual Property Organisation (WIPO). The evolution of the global system on IPRs has been characterized by

the widening of protectable subject matter; the creation of new rights to accommodate technological advances; and the progressive harmonization and

standardization of the basic features of IPRs. 17

Of all the international legal instruments on IPRs, the one instrument that has had the greatest effect is the trade related intellectual property rights (TRIPS) agreement of the WTO. Whereas conventions under the UN system are fairly optional or have optional articles a member state may decline to ratify, the case is not the same with TRIPS. Whereas there is no mechanism for enforcing UN Conventions on IPRs, violation of TRIPS is accompanied by sanctions. Whereas UN Conventions are not usually time-bound, countries had specific timelines within which to conform to TRIPS, especially developed countries that asked for more time. TRIPS therefore stands out as a very unique instrument in the protection of IPRs.

1.3 The TRIPS Agreement

The TRIPS agreement took effect in January 1996. Unlike UN Conventions, all the agreements made under WTO are automatically binding to member States. The TRIPS Agreement introduced global minimum standards for protecting and enforcing nearly all forms of intellectual property rights (IPR), including those for patents. International conventions prior to TRIPS did not specify minimum standards for patents. Before TRIPS was concluded over 40 countries in the world did not grant patent protection for pharmaceutical products. The TRIPS Agreement now requires all WTO members, with few exceptions, to adapt their laws to the minimum standards of IPR protection. In addition to the minimum protection standards, the TRIPS Agreement also introduced detailed obligations on the enforcement of IPRs. All Member States have to comply with these standards by modifying, where necessary, their national regulations to accord with the rules of the Agreement.

Kenya became a member of the WTO on 1 January 1995. Kenya was a founding member of the WTO in 1995, having previously been a party to the General Agreement on Tariffs and Trade (GATT 1947). As a developing country member of the WTO, Kenya was required to implement TRIPs compliant legislation within five years of the entry into force of the Agreement, that is, by 31st December 1999. In 1998/1999 the Kenya Industrial Property Office (KIPO, since renamed the Kenya Industrial Property Institute - KIPI) initiated procedures to review the 1989 Industrial Property Act¹⁹ as a way of fulfilling the country's obligations under TRIPs. Like other common

¹⁷ ICTSD-UNCTAD at p.35

WHO Drug Information: Intellectual Property Rights, Impact on Public Health (Vol 19, No. 3, 2005) available at www.who.org last accessed 12th Jan. 2009

¹⁹ Chapter 509, Laws of Kenya (1989, repealed by IPA 2001).

law countries, Kenya recognises a division between industrial property (e.g. patents, petty patents, trademarks) and copyright.²⁰

Kenya has a long history of IP protection with the first patent registered in the country in 1912 using the laws of England. However, until 1989, Kenya's industrial property system was dependent on England's where the patents and trademarks granted in England were locally registered without going through examination processes. In 1990, however, the Kenya Industrial Property Office (KIPO) was created with the enactment of the Industrial Property Act.²¹. KIPO was given the mandate of examining, granting and registering industrial property rights under the provisions of the Industrial Property Act and the Trade marks Act Cap. 506.²²

With the creation of World Trade Organization (WTO) in 1995, and the coming into force of the TRIPS agreement, all members of WTO were required to revise their national patent laws to conform to the requirements of TRIPS and WIPO guidelines. Kenya as a member of WTO and a signatory to TRIPS, was obligated to amend the Industrial Property Act. This came into effect when the Industrial Property Act was passed by the parliament on 13th June 2001.²³ The Act excludes seeds from patentability as they are dealt with under the Seeds and Plant Varieties Act.²⁴

1.4 IPR Legislative and Institutional Framework in Kenya

The Industrial Property Act domesticates both the Patent Convention Treaty and TRIPS. This Act provides for the protection of industrial designs at section 86(1). The Act creates the Kenya Industrial Property Institute (KIPI), an institution for the administration of Patents, industrial designs and trade/service marks. The Act provides for an annual fee payable in respect of patents. In the matter of *Pfizer Inc v Cosmos Ltd*, ²⁵ the applicant alleged infringement by the respondent of its patent for the drug azithromycin, registered by ARIPO on 27th July 1989. Such patents apply to Kenya. The respondent denied infringing the patent or that the applicant had a valid patent for the product in the period 2005-2007 as it had lapsed in Kenya and the US patent had expired. The issue was whether the patent was valid in Kenya at the time of the alleged infringement. Evidence showed that the

²⁰ Lettington, R. and Munyi, P., *Willingness and Ability to Use TRIPS Flexibilities: Kenya Case Study*(DFID London: Sept.2004) at p. 16. [hereinafter Lettington and Munyi].

²¹ Cap. 509 of the Laws of Kenya

²² Calestous Juma & J. B. Ojwang, Innovation & Sovereignty, ACTS Press, Nairobi (1989).

²³ Note that KIPO was created in 1990 with the enactment of the Industrial Property Act. Cap. 509 in while the Industrial Property Bill passed in 2001 amended Cap. 509 and transformed KIPO to KIPI.

²⁴ Chapter 326 of the Laws of Kenya, Act No. 1 of 1972 and No. 2 of 2002. This is an Act of Parlia

²⁵ Case No. 49 of 2006 Industrial Property Tribunal at Nairobi

certificates for renewal during the said period were signed late by ARIPO. It was observed that ARIPO had a procedure for late payment and for removal of patents from its register. No evidence was adduced to show that the subject patent had been removed from the register of ARIPO. It was noted that KIPI has no powers to remove such a patent [registered by ARIPO] from its register. The applicant prevailed.

The Seeds and Plant Varieties legislation became functional in 1975 and dealt mainly with seed certification. The Act was revised in 1978 and 1991 to accord to changing trends in international trade relating to plants and seeds. The revised Act was to a large extent in conformity with the requirements of the 1978 version of UPOV convention. In line with the Act, new plant varieties in Kenya were protected by Plant Breeders' Rights (PBRs). Plants and seeds are not patentable but article 27.3(b) allows states to provide for special forms of protection for such material. Plant breeders are protected under the Act for 25 years. This Act recognizes the farmer's privilege to save and re-use seed of the protected variety. Kenya acceded to the 1978 International Union for the Protection of New Varieties of Plants (UPOV) Convention in 1999. At that time there was also UPOV 1991. Kenya found UPOV 1978 more flexible with respect to the farmer's privilege. The Seed and Plant Varieties Act creates the Kenya Health Plant Inspectorate Services as a body corporate to administer the Act. KEPHIS was established in 1996 to regulate importation and exportation of plant materials and the trade in bio-safety control organisms. KEPHIS is the liaison office for the UPOV convention. Part of the mandate of KEPHIS is to examine, approve and register new varieties of plants and seeds. A Plant Breeders Rights office was created in 1997 under KEPHIS to handle matters related to PBRs.²⁶ This institution has a tribunal for the resolution of disputes.

The Copyright Act 2001 attempts to domesticate both the Berne Convention and TRIPS. The Act confers copyright upon an author whose work may or may not be registered under the Act. Protection is pegged to run up to 50 years after the life of the author or up to 50 years after the life of the last author (in case of several authors). Section three of the Act creates a Copyright Board, the institution mandated to administer the Act. The Board has powers to licence inspectors and companies limited by guarantee to be collectors. The Act criminalises infringements of copyright. Electronic versions of copyrightable material pose some challenges. For example, music on the internet does not have details relating to when it was composed and whether the composer has died or not. It is thus difficult to ascertain whether copyright in such works still subsists. These matters came up in *R*

²⁶ This was pursuant to the establishment of KEPHIS through Legal Notice No. 305 0f 18th October 1996.

v Boaz Waswa.²⁷ The defendant was charged with the offence of infringing copyright by downloading and copying music to CDs. The company that brought the complain was a company limited by shares contrary to the express provisions of the Act. The prosecution was unable to prove that copyright still subsisted in the music that was the subject of infringement. The defendant was acquitted.

The Trade Marks Act was amended in 1995 to include service marks in an attempt to make the Act TRIPS compliant. In 2000, this Act was further amended to make it conform to treaties such as the Trade Mark Law Treaty, the Madrid Agreement and the Banjul Protocol of ARIPO. This Act is administered by KIPI.

The Counterfeit Act 2008 seeks to combat counterfeiting in trade in Kenya. Whereas IPR related laws may be seen as protecting inventions/creators against counterfeits, these were not deemed adequate. The Counterfeit Act provides for severe penalties for those convicted of promoting counterfeit trade. In addition, the Act empowers state agents are empowered to search premises and seize counterfeit goods. Additionally, the Customs and Excise Department may seize counterfeit goods at the point of entry into Kenya. The Act is administered by the Anti-Counterfeit Agency, a body corporate with perpetual succession.

The protection of traditional knowledge (TK) poses a great challenge to Kenya. The Environmental Management and Coordination Act regulates access to all genetic resources. The Act is administered by the National Environment Management Authority (NEMA). NEMA has the mandate to identify and codify all genetic resources in Kenya. NEMA has authority to regulate access and benefits sharing arising out of exploitation of genetic materials. In relation to access, NEMA requires a materials transfer agreement (MTA) after prior informed consent (PIC). The MTA is supposed to indicate the mode of benefits sharing. In relation to traditional medicine (TM), EMCA does not go far enough to offer comprehensive protection to local communities. It is submitted that NEMA is ill-equipped to protect TM at the local level. A case is made out for substantive law with an accompanying institution to protect TK. Folklore is defined under the Copyright Act to mean

...literary, musical or artistic work presumed to have been created in Kenya by an unidentified author which has been passed from one generation to another and constitutes a basic element of the traditional cultural heritage of Kenya

. . . .

²⁷ Criminal case No. 148 of 2005 Kiambu Resident Magistrates Court

The Act confers copyright upon an author without considering the community's contributions to the knowledge. Furthermore, the Act requires that the material eligible for copyright be in a fixed form. This requirement does not adequately address the practice of passing folklore from one generation to the next through oral traditions. In short, the Copyright Act does not sufficiently address the need for protecting expressions of folklore in Kenya.

Conclusion

Kenya has put in place legislation for protecting IPRs in line with the Western philosophy of property ownership. IPRs such as Patents, trade marks, industrial designs and copyright are protected. The Counterfeit Act can be seen as offering protection to IPRs. Attempts to protect traditional knowledge by using the Environmental Management and Coordination Act as well as copyright do not address the core issues in traditional knowledge. Kenya therefore needs to put in place a *sui generis* form of protection for TK.

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Chapter Two

Intellectual Property Rights in Health-Impact on Access to Drugs

By Linda Makutsa Opati

2.0 About this Chapter

his chapter provides an overview of the nature and significance of Intellectual Property Rights (IPRs); their evolution over time; the impact of IPRs on the pharmaceutical sector especially in the context of developing countries; and considers developments on the use by developing country members, of intellectual property law and policy as a tool to reduce drug prices, and by extension, to increase access to essential medicines. IPRs confer monopolies on the rights holders, thereby allowing them to set what are considered high prices for medicines, especially to the populace in third world countries. It is recognised that this advantage of monopoly has spurred a lot of R & D activities in the area of HIV and AIDS, which in turn has resulted in the availability of many drugs in the last ten years. The pharmaceutical industry has always argued for stronger IPRs protection to enable it recoup costs incurred in R & D, and also to make a profit. IPRs have therefore been seen to be more favourable to multinationals of the West to the detriment of public health interests of third world countries. More simply put, IPRs are viewed by some scholars as being an impediment to access to affordable drugs in developing countries. However, TRIPS, the most recent and binding multilateral instrument on IPRs has certain flexibilities built into it. These include compulsory licensing, parallel importation and government use. It is submitted that the use of these flexibilities can enhance access to drugs in developing countries. It is observed that Kenya has domesticated TRIPS through the 2001 Industrial Property Act (IPA 2001). This legislation specifically permits the utilization of a range of TRIPS flexibilities including parallel importation and voluntary

licenses. Kenya has one of the more well developed domestic pharmaceutical manufacturing industries in sub-Saharan Africa. This has been an important factor for the ongoing efforts by the government and other stakeholders to obtain and supply lower-priced generic medicines, especially ARVs. The in-built provisions in the IPA 2001 enabled the government in 2004 to work with the main domestic pharmaceutical company, Cosmos, to obtain two voluntary licenses from GlaxoSmithKline and Boehringer Ingelheim for ARVs. This resulted in steep reductions in the domestic price of important ARVs.

Whether the reduction in prices of HIV and AIDS drugs has resulted from such efforts or whether it is the effect of market forces resulting from more drugs being produced, is a question that deserves special interrogation.

2.1 What Are Intellectual Property Rights?

Intellectual property rights (IPRs) are legal devices that protect creations of the mind which have commercial value, such as inventions. They grant exclusive rights to the creators (right-holders) to protect access to and use of their property from unauthorized use by third parties. The term 'intellectual property' (IP) has no universally agreed definition. Rather than define IP as a concept, the various treaties and conventions on IP refer to various categories of IP. For instance, the 1967 Convention establishing the World Intellectual Property Organisation (The WIPO Convention) does not offer a formal definition of IP rather 'defining' IP broadly as including rights relating to:

"Literary artistic and scientific works; performances of performing artists, phonograms, and broadcasts; inventions in all fields of human endeavor; scientific discoveries; industrial designs; trademarks, service marks, and commercial names and designations; protection against unfair competition; and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields." ²

Similarly TRIPS does not define the term 'intellectual property' as a concept, but instead refers to sections of the Agreement that address categories of IP³.

ICTSD-UNCTAD Policy Discussion Paper, Intellectual Property Rights: Implications for Development (ICTSD-UNCTAD Geneva Switzerland: August 2003), p. 27 [hereinafter ICTSD-UNCTAD-]

 ^{27.[}hereinafter ICTSD-UNCTAD-]
 Convention Establishing the World Intellectual Property Organization, Signed at Stockholm on July 14, 1967; Article 2, § viii.

³ TRIPS Article 1.2

Subsequent to the 1967 WIPO Convention, the concept of IP has been stretched to include not only patents, copyright, industrial designs and trademarks but also trade secrets, plant breeder's rights, geographical indications and rights to layout designs of integrated circuits.⁴ This is evident from the wider categories of IP included in TRIPS.

The main categories of IP that play a significant role in public health and access to medicines are patents, trademarks and protection of undisclosed information (trade secrets).

Patents are granted for inventions⁵. TRIPS does not define 'inventions' leaving it to members to determine what should be deemed an invention. An invention is generally defined as a new technological improvement that contains some measure, great or small, of inventiveness over what is previously known. Patents are intended for breakthroughs in technology, but they are also intended for small technological increments such as a new lever on a machine that enables it to work just a little faster.⁶ The Kenya Industrial Property Act 2001 defines an invention as a solution to a specific problem in the field of technology⁷. A patent is issued, upon application, from a State or regional patent office for a fixed duration of 20 years.⁸ A patent is a document which describes an invention. It confers an exclusive right to an inventor to prevent all others from using the invention, without license or authorization, for the duration of the patent, in return for disclosure of the invention in a document known as the patent specification. The description of the invention in the specification must be sufficient so that others skilled in the technological field (skilled in the art) are able to read the specification and perform the invention for themselves after the patent expires. The patent application must meet the patentability criteria i.e. the invention must be new, susceptible to industrial application (or merely 'useful' in the United States), and its creation must involve an inventive step or should not be obvious to someone skilled in the art represented by the claimed invention.⁹ These criterion is established as follows:-

⁴ See Article 1(2) TRIPS for the 'definition' of the categories of intellectual property covered by TRIPS.

⁵ TRIPS Article 27.

⁶ Visser, C. and Pistorius, T, *Patent Law* (University of South Africa, WIPO Worldwide Academy, Pretoria: 2000) at p. 1.1.5

⁷ Section 21(1) Kenya Industrial Property Act 2001[hereinafter IPA 2001].

⁸ TRIPS Article 33.

TRIPS Article 27.1. Also see Section 22 IPA 2001 for criteria for patentability in Kenya. Note that the section includes 'New Use'. Under TRIPS WTO Members are free to decide whether to allow the patentability of the uses of known products. However because patents protect inventions and not discoveries, the discovery of a new purpose for a product is only patentable if in connection with the new purpose the product is forced to be presented in an amended new form.

- i. It must be new (novel), meaning that the invention must not have been disclosed or it must not be in the public domain in any part of the world prior to the application date. Since the inventor is granted a patent for disclosing something new, it follows that if the invention is already in the public knowledge, the applicant is either not entitled to be granted a patent. or if granted, is liable to have it revoked. It also follows from the nature of invention that the discovery of things already existing in nature eg. a new plant or mineral, is not an invention. For example in December 1993, the US Patent and Trademark Office (USPTO) granted the University of Mississipi Medical Centre Patent rights over "a new method of promoting healing of a wound by administering turmeric to a patient afflicted with a wound". Turmeric had been used in India for centuries for its medicinal and culinary qualities. The Council for Science and Technology of India successfully petitioned against the patent, arguing that the invention was not new. 11 Similarly in the U.S. a patent obtained by WR Grace Company for the manufacture of a pesticide with an active ingredient that naturally occurs in the neem seeds was revoked by the European Patent Office on the grounds of its use as a pesticidal activity having been known in India. 12
- ii. *The second criterion is that there must be an inventive step*. The invention must not merely be something new; it must represent a development over prior art. The inventive step is often evaluated by considering the "unexpected" or "surprising effect" of the claimed invention.¹³ The invention should not be obvious to a person of ordinary skill in the field concerned, otherwise it would not qualify for patent protection.¹⁴
- iii. *The third criterion is that it needs to be industrially applicable or useful*. ¹⁵ The invention must be capable of use in any kind of industry. ¹⁶ Industry in this sense is any physical activity of a technical character. ¹⁷ WTO Members considerably differ in their treatment of industrial applicability. Under U.S

¹⁰ See Section 23(2) of the IPA 2001 for the absolute novelty requirement that a patent application has to meet; UNCTAD-ICTSD, *Resource Book on TRIPS and Development* (Oxford University Press, 2005) at p. 359

Walker, S. *The TRIPS Agreement, Sustainable Development and the Public Interest.*Discussion Paper (IUCN Environmental Policy and Law Paper No. 41, IUCN-The World Conservation Union 2001, p.36) cited in Wekesa, M. Access to HIV/AIDS drugs after Research: Patents, Equity and the Law (July 2003).

¹² Correa, C., *Traditional Knowledge and Intellectual Property* (QUNO, Geneva: November 2001) at p.7

¹³ UNCTAD-ICTSD, *Resource Book on TRIPS and Development* (Oxford University Press, 2005) at p. 360

¹⁴ See Section 24 IPA 2001

TRIPS Footnote 5 of Article 27.1 specifically permits a Member to consider that "capable of industrial application" is synonymous with "useful".

¹⁶ See Section 25 IPA 2001

¹⁷ Resource Book on TRIPS at p.361

law, the concept applied is "utility". Hence, certain developments that do not lead to an industrial product may be patented in the USA: an invention only needs to be operable and capable of satisfying some function of benefit to humanity ie. be useful. This concept is broader than the industrial applicability required in Europe and in Kenya. The US rule permits the patentability of purely experimental inventions that cannot be made or used in an industry, or that do not produce a 'technical effect' as is illustrated by the large number of patents granted in the US on methods of doing business, and by the patenting of research tools, such as expressions sequence tags (ESTs) and single nucleotide polymorphisms (SNPs). Interesting to note in this regard is the historic US Supreme Court decision in *Diamond v. Chakrabarty*²⁰, which allowed for the first time a patent on a living organism *per se*. The Supreme Court made the sweeping generalization that "anything under the sun," apart from a human being, should be regarded as patentable. ²¹

Trademarks are signs that individualise the goods or services offered by an enterprise and distinguishes them from those of other enterprises. They are marketing tools which provide exclusive rights to use distinctive signs, such as symbols, colours, letters, shapes or names to identify the producer of a product, and protect its associated reputation eg. Coca-Cola®, Panadol®. TRIPS stipulates a minimum period of protection of 7 years. A trademark can be renewed indefinitely. In Kenya, the principal legislation dealing with the protection of trademarks is the Trademarks Act Cap. 506. Trademarks are granted protection for a period of 10 years renewable for successive periods of 10 years. To be eligible for protection a mark must be distinctive of the proprietor's goods or services. The trade mark owner has the exclusive right to prevent third parties from using identical or similar marks in the sale of identical or similar classes of goods or services that might mislead or confuse customers. In *Pharmaceutical Manufacturing*

18 Section 22 IPA 2001 requires that the invention be industrially applicable.

The guidelines for examining utility were changed in the USA in 2001, possibly leading to the exclusion from patentability of some of these matters. See USPTO Utility Examination Guidelines Federal Register Vol 66 No 4 January 5, 2001 (cited in Resource Book on TRIPS at p. 361)

⁴⁴⁷ US 303 (1980). The patent, filed in 1972, related to a genetically modified microorganism. It asserted 36 claims related to the invention of "a bacterium from the genus Pseudomonas containing therein at least two stable energy-generating plasmids, each of these plasmids providing a separate hydrocarbon degradative pathway".(cited in Resource Book on TRIPS at p.390)

²¹ Cornish W.R., Intellectual Property 3rd Ed. (Delhi 2001) at p.186

For definition of trademarks in Kenya see the Trade Marks Act Cap. 506 Section 2(1) [hereinafter Cap. 506]

TRIPS Article 18.

²⁴ Section 23 (1) and (2) of Cap. 506

Co v Novelty Manufacturing Limited²⁵, the plaintiff who was the registered proprietor of the trademark "Trihistamin" registered in class 5 in respect of pharmaceutical and veterinary substances brought an action for trademark infringement against the defendant for manufacturing and selling in Kenya a pharmaceutical product known as "Tri-histina" expectorant. The court in finding that the defendant's use of its mark was a clear infringement of the plaintiff's exclusive rights, held that the defendant's mark was so substantially similar to the plaintiff's mark as to be likely to deceive or cause confusion in the course of trade in relation to pharmaceutical and medical preparations and substances in respect of which the mark was registered. Similarly the High Court of Kenya in Beiersdorf AG v Emirchem Products Limited²⁶ in finding that the defendant's use of its mark "NIVELIN" on petroleum jelly infringed on the plaintiff's exclusive rights to its registered marks "NIVEA" and "NIVEA Crème" registered in class 3 and used on petroleum jelly, stated that the similarity and resemblance in the two marks was so striking as to cause confusion to consumers. In Parke Davis & Co. Ltd. v Opa Pharmacy Limited²⁷, which was an action in passing off, the court of appeal held that since the first two syllables in the marks "Capsolin" and "Capsopa" were identical and there were resemblances in the containers there was a real probability of confusion. The court found that the appellant who was the registered proprietor of its mark "Capsopa" used on ointment was entitled to an injunction against the respondent's use of the mark "Capsolin" on a similar ointment. The court ruled that the marks were identical and there was a real probability of confusion to the public. However, in *Unilever* Plc v Bidco Oil Industries²⁸ the court held that the use of the mark "Gold Band" by the defendant on its own brand of margarine did not infringe on the plaintiff's mark "Blue Band" also used on margarine. The court reasoned that the plaintiff's registration granted it exclusive rights over use of its mark "Blue Band" but not over the mere use of the word "Band" by other proprietors.

Trade Secrets or Know-how²⁹ is commercially valuable information such as production methods, business plans or clientele that may give a person or company a competitive advantage. As long as it is known only to a few people, such information can be legally recognized and protected as a trade secret but, once they are learnt through legitimate means they enter the public domain. A claim for protection of know-how as a trade secret requires that efforts be made to prevent disclosure. Law makes the taking without

²⁵ High Court of Kenya Civil Case No. 746 of 1998

²⁶ High Court of Kenya Civil Case No. 559 of 2002

²⁶ High Court of I 27 (1961) EA 556

²⁸ Kenya High Court Civil Case No. 1447 of 1999

²⁹ Trade secrets are protected in Kenya by applicable principles of English common law.

permission of a trade secret an illegal act, but not the discovery by proper means i.e. by independent discovery, accidental or actual disclosure or by reverse engineering.³⁰ In *Sunbird Helicopters Ltd v Michael Odongo*³¹, the Plaintiff sought, *inter alia*, orders to restrain the defendant from taking up employment with its competitor and an injunction for one year, to restrain the defendant who had been in the plaintiff's employ as a Helicopter Chief Engineer from using and/or disclosing any confidential information and/or any trade secrets acquired by the defendant from it. The court, ruled that it would not enforce any negative covenants that would result in either the defendant remaining idle or being forced to work and dismissed the case.

2.2 The Objectives Of Intellectual Property Rights

In general terms IPRs are tools for economic advancement that should contribute to the enrichment of society through:³²

- 1. The widest possible availability of new and useful goods, services and technical information that derive from inventive activity and;
- 2. The highest possible level of economic activity based on the production, circulation and further development of such goods, services and information.

Basically intellectual Property Rights provide incentives towards various creative endeavors of the mind by offering protection; giving such creators official recognition; creating repositories of vital information and facilitate the growth of both domestic industry or culture and international trade. ³³ In the pharmaceutical industry, patent protection provides the incentive for the industry to use its skills and resources in the discovery, development, testing, quality control and distribution of new drugs and vaccines. Few, if any companies will start on the long trail of new drug discovery and development, if they cannot be protected from competitors coming in once the drug is successful.

2.3 Intellectual Property Rights Pre-TRIPS

Prior to TRIPS, countries had adopted various approaches towards drug patents. While some used to grant patents for pharmaceutical product and process inventions, others allowed patent protection only for process

³⁰ Guide to Intellectual Property Rights source: www.iprsonline.org/guide/index.htm last accessed 20-Jan-2009

³¹ High Court of Kenya Civil Case No. 2622 of 1998

³² ICTSD -UNCTAD- at p. 30 - 31

³³ Ibid at p. 30 - 31

inventions, thus not preventing local companies from developing different manufacturing processes for drugs that were not patent protected as a product. Other countries did not grant any form of protection for inventions in the pharmaceutical sector. Moreover, the term of protection conferred by a patent varied greatly between countries. India and Thailand are two of the countries that allowed companies to produce generic versions of drugs patented in industrialized countries using alternative production methods (reverse engineering) from those developed by the original manufacturer. The drugs were then sold at very low cost to other developing countries. The bar to patentability of pharmaceutical products in several developed countries was lifted only in the 1960s or 1970s. At the same time a few developing countries moved in the reverse direction eg. in the late 1960s and early 1970s Brazil and India passed laws to exclude pharmaceuticals from patentability as well as processes to manufacture them..³⁴ In short, there was no uniformity in the grant of patents before TRIPS came into operation.

2.4 Intellectual Property Rights after TRIPS

In 1994, following the conclusion of eight years of trade negotiations under the aegis of the precursor body the General Agreement on Tariffs and Trade (GATT), the Uruguay Round of trade negotiations by GATT member countries resulted in the expansion of the international trade system to include an agreement on trade related intellectual property rights (TRIPS). It also led to the creation of the WTO, a new multilateral governing body, that is, in its own words, "...the only global international organization dealing with the rules of trade between nations".35 Based in Geneva, Switzerland, the WTO is a global institution that administers a set of trade agreements between nations. It was formally launched in January 1995. Most of the world's countries - 153 as of 2nd February 2009³⁶—are members of the WTO. An additional 30 had observer status as of that date. Those countries are also expected to become full members eventually because WTO rules require observer nations to begin accession negotiations within five years of becoming observers. In deciding to become Members of WTO, States also undertake to abide by its rules.

34 ICTSD-UNCTAD at p.96

³⁵ See www.wto.org/english/thewto_e/whatis_e/whatis_e.htm.; Tawfik, J. *Is the WTO/TRIPS Agreement User Friendly?* Final Report to the International Trade Treaties Committee of the Canadian Library Association January 30, 2005. Available at www.uwindsor.ca/law/tawfik/last-accessed-on-12th-January-2009

tawfik/ last accessed on 12th January 2009.
 There are currently 153 WTO Member States including Kenya. For further details see www.wto.org. last accessed on 2nd Feb. 2009.

The WTO is perceived as particularly important for establishing trade rules which are binding. This is because of the generality of its scope and the fact that it has power to impose trade sanctions. Breach by a WTO member state of its TRIPS obligations may lead to the WTO dispute settlement procedure. The outcome of such procedure may, if necessary, be sanctions withdrawing GATT advantages eg. suspension of concessions in the same commercial or industrial sector, or even cross-retaliatory measures such as the imposition of quotas or other exclusions on a country's export of goods or services.³⁷ This is why the developed countries chose GATT/WTO rather than WIPO as the appropriate mechanism for the globalization of IP protection through TRIPS. TRIPS is one of a number of agreements contained in the WTO Agreement, designed to liberalize world trade. The main shift with respect to pharmaceuticals, compared to the pre-existing multilateral conventions, is the obligation to grant patent protection to pharmaceutical product and process inventions. Thus, it is no longer possible for countries to exempt pharmaceuticals from patent protection. Nor can countries like India continue to limit pharmaceutical patents to process patents only.³⁸

2.5 The Impact of IPRS on access to medicines

On the one hand, stringent IPRs have seen to the proliferation of numerous drugs for myriad diseases. Even for a relatively new disease like HIV and AIDS, numerous drugs have been developed and availed to the market in the last ten or so years. On the other hand, the fulfilment of the obligations under TRIPS has generated a lot of controversy especially as they have been seen as a case of reduced access to essential medicines in developing countries

Access to medicines depends on various factors including patents. Patents create monopolies for the rights holders thereby putting them in a strong position to set prices. Such prices have made the new medicines too expensive for the target group in developing countries.

Patents are, therefore, at the centre stage of the friction between the private interests and profit motives of pharmaceutical companies on the one hand and the public health and social impact concerns of governments, especially in Africa, on the other.³⁹

Drug companies argue that they need patents to recoup their R&D costs and obtain profits. The pharmaceutical industry is also concerned that if

39 ICTSĎ-UNCTAD at p.15.

³⁷ Visser C. and Pistorius T., *Patent Law* (University of South Africa, WIPO Worldwide Academy, Pretoria :2000) at p. 1.1.7

TRIPS, Intellectual Property Rights and Access to Medicines, Antiretroviral Newsletter Issue No. 8 accessible at www.who.int/entity/3by5/en/Dec2002.pdf last accessed 12th Jan. 2009 [hereinafter ARV Newsletter]

copying is allowed in developing countries, these drugs will be exported to developed-country markets, where these corporations make most of their profits. Furthermore, they also point out that 95% of drugs on the WHO's essential drugs list can be legally copied, either because the patents have expired or because they had never been patented⁴⁰. Protagonists of affordable medicines have expressed doubts about the actual costs of R&D involved in the development of new drugs (including the marketing costs of pharmaceutical companies).⁴¹ They also argue that the pharmaceutical industry benefits from public funding in the discovery of new drugs. And they are against the use of patents to protect a myriad of minor improvements on existing innovations and thereby prevent or delay the entry of generic products after patent expiry. Lastly, they question the justification for extending to developing countries the same model of patent protection applied in developing countries.⁴² Patents therefore provide fodder for polarisation in the public goods (public health) versus private interests discourse.

IPRs therefore risk being used in a way contrary to their agreed purpose in the TRIPS Agreement, i.e. for the promotion of innovation, in a manner conducive to social and economic welfare. Indeed the WHO Commission on IP, Innovation and Health (CIPIH) concluded that patents do not work as incentives for research and development for medicines for poor people.⁴³

2.6 The Doha Declaration on TRIPS and Public Health

In 2001, World Trade Organization (WTO) members drew up the Doha Declaration⁴⁴ - named after the Qatari capital where the Declaration was agreed upon. Developing countries sought to clarify whether the provisions in TRIPS afforded them sufficient flexibility and discretion to ensure access to medicines in the interests of public health.

The relationship between the TRIPS Agreement and public health (access to medicines) was expressed as follows:

"We agree that the TRIPS Agreement does not and should not prevent Members from taking measures to protect public health. Accordingly, while reiterating our commitment to the TRIPS Agreement, we affirm that the Agreement can and should be interpreted and implemented in a manner supportive of WTO

⁴⁰ For the argument that patents do not hinder access to essential medicines in Africa see Attaran, A and Gillespie-White L, 2001 cited in ICTSD-UNCTAD at p.97.

For more on this see Gagnon MA, Lexchin J. (2008) *The Cost Of Pushing Pills*: A New Estimate Of Pharmaceutical Promotion Expenditures In The United States accessible at www.medicine.plosjournals.org/periserv/ last accessed on 19th January 2009

⁴² See Correa C. Public Health And Intellectual Property Rights (2002) cited in ICTSD-UNCTAD at p. 97.

⁴³ Accessible at www.who.int/intellectualproperty/report/en/index.html last accessed 15th December 2008.

The Declaration was adopted at the Fourth Session of the WTO Ministerial Conference in Doha, Oatar on 14 November 2001. See WTO document WT/MIN(01)/DEC/W/2.

Members' right to protect public health and in particular, to promote access to medicines for all.

In this connection, we reaffirm the right of WTO Members to use, to the full, the provisions in the TRIPS Agreement, which provide flexibility for this purpose." 45

In addition, the Doha Declaration also gave direction on how to interpret the provisions of the TRIPS Agreement generally and specific clarifications on compulsory licenses and exhaustion of rights. Further, it recognised the challenges faced by Members with insufficient or no manufacturing capacity in the pharmaceutical sector in using compulsory licenses⁴⁶ and addressed the special case of LDCs⁴⁷. One of the issues related to compulsory licensing.

Article 31(f) TRIPS restricted the scope of a compulsory licence to the domestic market. Consequently countries needing to import drugs under a compulsory licence could have difficulties in finding supplies. The WTO General Council has made two important decisions to implement this paragraph. First, in August 2003 the General Council adopted a Decision waiving certain obligations under Article 31 and establishing a mechanism to facilitate the import, by countries without manufacturing capacities, pharmaceutical products under compulsory licenses. The Decision, invariably referred to as *the paragraph 6 Decision or 30 August 2003 Decision*⁴⁸ was adopted in the form of a waiver to TRIPS Articles 31(f) and (h) as an interim measure pending an agreement on a permanent solution. Subsequently, in November 2005, the General Council adopted a Protocol⁴⁹ amending Article 31 of the TRIPS Agreement to incorporate the elements of the 30 August 2003 Decision into the text of the TRIPS Agreement.⁵⁰

On LDCs, paragraph 7 of the Declaration provides inter alia that:-

"We also agree that the least-developed country members will not be obliged, with respect to pharmaceutical products, to implement or apply Sections 5 and 7 of Part II of the TRIPS Agreement or to enforce rights provided for under these Sections until 1 January 2016, without prejudice to the right of least-developed country members to seek other extensions of the transition periods as provided for in Article 66.1 of the TRIPS Agreement. We instruct the Council for TRIPS to take the necessary action to give effect to this pursuant to Article 66.1 of the TRIPS Agreement."

⁴⁵ Para 4 of the Doha Declaration.

⁴⁶ Para 6 of the Declaration.

⁴⁷ Para 7 of the Declaration.

⁴⁸ This decision is contained in WTO Document WT/L/539.

⁴⁹ The protocol is contained in WTO Document WT/L/541 dated 5 December 2005.

⁵⁰ Sisule M.F at p. 5.

Following these instructions the TRIPS Council adopted a Decision in June 2002⁵¹ extending the transition period for LDCs with respect to implementing patent protection for pharmaceuticals until at least 2016 with the possibility of seeking further extension.

The Doha declaration reaffirmed the right of WTO members to use, to the full, the provisions in TRIPS which provide flexibility for the purpose of protecting public health.

2.7 Flexibilities Within TRIPS

The flexibilities within TRIPS guarantee the balance between the exclusive rights conferred under Article 28 of TRIPS and the interests of consumers, competitors and the public at large as envisaged in the objectives of TRIPS under Article 7. These flexibilities are "compulsory licensing", "parallel importing", Voluntary Licensing, Availability Of New Use Pharmaceutical Patents, Government Use Licenses, Research Exemption, Early Working (Bolar Exception) and Test Data Protection.

2.7.1 Compulsory Licenses and Government Use Order

Compulsory licensing is an important policy mechanism that can be used to address a number of situations in the context of public health including, among others: high prices of medicines; anti-competitive practices; failure to locally work the patent; failure by pharmaceutical patent holders to sufficiently supply the market with needed medicines; emergency public health situations; the need for countries to establish capacity to manufacture pharmaceuticals (a pharmaceutical industrial base). Compulsory licencing allows governments to permit generic manufacturers to produce the patented product without the consent (authorisation) of the patent-holder while Government Use Order refers to a situation where the government or its appointed agent (a government ministry or department, agency or person) exercises the right to exploit a patented invention without the authority of the patent holder. Under this government use" procedure, the prior consent of or negotiations with the patent holder is not required, but adequate compensation has to be paid.⁵²

Article 31 of the Agreement sets forth a number of conditions for the granting of compulsory licences. These include a case-by-case determination of compulsory licence applications, the need to demonstrate prior (unsuccessful)

⁵¹ The Council for TRIPS decision is contained in WTO document IP/C/25 dated 1 July 2002

⁵² TRIPS Article 31(g).

negotiations with the patent owner for a voluntary licence and the payment of adequate remuneration to the patent holder. Where compulsory licences are granted to address a national emergency or other circumstances of extreme urgency(Government use order), certain requirements are waived in order to hasten the process, such as that for the need to have had prior negotiations to obtain a voluntary licence from the patent holder. Although the Agreement refers to some of the possible grounds (such as emergency and anticompetitive practices) for issuing compulsory licences, it leaves Members full freedom to stipulate other grounds, such as those related to public health or public interest. The Doha Declaration states that each Member has the right to grant compulsory licences and the freedom to determine the grounds upon which such licences are granted.⁵³

Under 'the August 30th decision' WTO Members agreed on facilitated procedures for the exportation of pharmaceutical products manufactured under compulsory license to countries in need of medicines, but lacking the capacities to produce them domestically. To put the mechanism into operation, the importing Member must notify the WTO council for TRIPS of the name and expected quantity of the product, confirm that it has established that it has insufficient or no manufacturing capacity for the product in question (unless it is an LDC) and confirm that it has granted or intends to grant a compulsory licence if the product is patented in its The exporting member can then issue a compulsory license limited to the quantity of the drug necessary for the notifying importing Member with the whole production going to that Member. It must require the beneficiary (licensee) to identify the drugs to prevent re-imports, e.g. by adding a special color and to post quantities and distinguishing features of the drug on a website before shipment begins. Several importing members can pool as importers. The exporting member has to notify the Council for TRIPS of the grant of the license and its conditions. The notifications by importing and exporting members do not need approval by the WTO. The mechanism is subject to an annual review by the Council for TRIPS. As these licenses are granted under national law, exporting members must amend their patent laws for the mechanism to work. Several Members have done so albeit not in a uniform manner.⁵⁴ Since 2003 several developed countries including Canada, Netherlands, Norway, Switzerland, and the EU have moved to change their legislation to permit their producers to act

⁵³ WHO Drug Information: Intellectual Property Rights, Impact on Public Health (Vol 19, No. 3, 2005) available at www.who.org last accessed 12th Jan. 2009. [hereinafter WHO Drug Information]

Drug Information]
54 Hestermeyer H., Canadian-made drugs for Rwanda; The first application of the WTO waiver on Patents and Medicines (The American Society of International law: 2007 Vol 11 Issue 28) available at www.asil.org last accessed 15th Jan. 2009.

as exporters under the compulsory licence regime agreed under the WTO. India's 2005 legislation also implemented the waiver⁵⁵.

The threat of issuance of a compulsory licence may also be used to obtain a voluntary license. Compulsory licensing is therefore important both for improving access to essential medicines as well as facilitating the development of innovative capacities and R&D especially in developing countries. For example, a country can import a generic version of the patented product by issuing a **compulsory license** to a company or agency to import the drug. The imported drug can be from a country in which the drug is not patented, or in which the drug is patented (in which case the exporting country has also to issue a compulsory license). Import of a generic version of the patented drug can also be imported for "public, non-commercial use" by the government.⁵⁶

In Pfizer Inc vs Cosmos Limited⁵⁷, Pfizer Inc successfully enforced its ARIPO patent No. AP44 against Cosmos, a local generic manufacturing company. The alleged infringing acts by Cosmos were manufacturing and formulating, using, offering for sale and selling and stocking Azithromycin Dihydrate without authorization. Pfizer sought the following reliefs from the Tribunal:-A declaration that ARIPO Patent No. AP44 has been infringed by Cosmos Limited; an injunction to restrain Cosmos from infringing ARIPO Patent No. AP44; an order for delivery up and destruction on oath of all goods and chemical compounds in the possession, custody or power of Cosmos Limited which infringe ARIPO Patent No. AP44; an enquiry as to damages and/or an account of sales and profits made by Cosmos Limited by infringement of ARIPO Patent No. AP44; awards of damages based on the aforesaid sales and profits and costs of the action. Cosmos contended that the patent had expired in USA. The tribunal in dismissing this affirmed that patents being territorial in nature, this did not invalidate the patent in Kenya. The Tribunal further ruled that section 58(2) on parallel importation does not provide blanket protection for anyone to deal with the patented product without the patent-holder's authority save as spelled out under the Act and ruled that the respondent was not entitled to invoke the section to justify the stated acts of infringement. The tribunal granted an injunction in favour of Pfizer; an order for delivery up and destruction of the finished products but not for any other goods and chemical compounds which in their unfinished

WHO Report of The Commission On Intellectual Property Rights, Innovation And Public Health: *Public Health Innovation And Intellectual Property Rights* (WHO: 2006) at p. 116 available at www.who.int.intellectual property/en/ last accessed 20th January 2009 [hereinafter WHO Report].

Khor M., Patents, Compulsory License and Access to Medicines: Some Recent Experiences, (Third World Network: 2007) available at <u>www.twnside.org.sg/ipr.archives.htm</u> last accessed 15th Jan. 2009. [hereinafter Khor M.]

⁵⁷ Industrial Property Tribunal Case No. 49 of 2006

form do not amount to an infringement of the applicant's product as doing so "would be prejudicial to the respondent in its manufacture of other products that do not infringe the patent" and an order for the applicant to elect the remedy of account of sales and profits or damages based on the profits.

This ruling may be faulted for interpreting section 58(2) on parallel importation as being applicable only for "instances where the government has allowed a third party to exploit the patent....or with the authority of the patent holder by way of a contractual or voluntary license" This interpretation contradicts the relevant provisions of TRIPS as clarified by the Doha Declaration. As it stands, this ruling is a potent precedent for pharmaceutical companies who may wield it with success, to prevent parallel importation of much-needed drugs, unless the Tribunal departs from its ruling or the High Court on a reference to it, overrules the decision.

On 29 November 2006 Thailand's Ministry of Health announced a 5-year government use authorisation for the domestic manufacture and import from India of a much cheaper generic medicine Efavirenz, for which Merck, a pharmaceutical giant, had marketing licence rights in Thailand. The authorization granted the Government Pharmaceutical Organization (GPO) of Thailand, a government linked pharmaceutical manufacturer, the authority to start production of the generic. A royalty fee of 0.5 percent of the GPO's total sale value of the imported or locally produced Efavirenz would be paid to the patent holder. Since 2006, the Thai government has utilized TRIPS flexibilities by issuing seven compulsory licenses—including two for ARVs and one for a drug to treat heart disease. The government has also considered issuing similar licenses for certain cancer drugs. In October 2005, the government of Ghana issued a government use order to import (from selected generic pharmaceutical companies in India) generic versions of selected ARVs that are patented in Ghana. The cost of the ARVs dropped almost 50% from \$495 per year to \$235 for one year's treatment.60

To date the most high-profile usage of compulsory licensing has been for HIV and AIDS drugs. In May 2007, the government of Brazil issued a compulsory license for an important ARV, efavirenz. It took that step reluctantly when faced with rising costs of a much-needed drug. Health and trade officials previously had focused on negotiations with patent-holding companies for price discounts of patented products. Brazil has a domestic pharmaceutical industry with the capacity to manufacture generics.

⁵⁸ At p.19 of the ruling.

⁵⁹ At p.13 of the ruling.

⁶⁰ Ibid.

The August 30th decision" flexibility was first utilized in Rwanda in 2007. In July 2007, the Rwandan government announced its intention to import a generic ARV combination from a manufacturer in Canada. The Canadian government had changed its national patent law so it could formally issue a compulsory license permitting the generic drug maker to manufacture the combination using medicines still under patent in Canada.⁶¹ In USA and Canada, at the height of the Doha negotiations, mysterious anthrax attacks were causing panic in the USA, and health authorities began building stockpiles of ciprofloxazine to treat exposure. Concerns about the price and the patent holder's ability to produce adequate quantities of ciprofloxazine to protect its citizens led US and Canadian authorities to consider granting compulsory licences for generic production. Significant price reductions and guaranteed supplies were finally negotiated with the manufacturer.⁶² In Kenya no compulsory licence has ever been granted and it appears that no applications have ever proceeded beyond preliminary enquiries. The complexities and uncertainties of application procedures and lack of awareness and capacity may be to blame for this state of affairs. One of the local generic manufacturers, Cosmos Pharmaceuticals Ltd., made an application in August 2003 for government use. The genesis of the application is that Cosmos Ltd. was awarded a tender by the Ministry of Health in July 2003 to supply generic ARVs, which they cannot legally do without receiving either: a voluntary licence from the patent holder; a compulsory licence; or, a government-use order.⁶³ This has helped to improve access to HIV and AIDS drugs.

2.7.2 Exhaustion Regime: Parallel or Grey Imports

Exhaustion of IP rights refers to the point at which the IP holder loses legal control over a protected product by virtue of selling or otherwise releasing the product into the channels of commerce. With respect to patents, the rules on exhaustion determine whether the patent holder can prevent a generic firm from importing a pharmaceutical product from abroad in competition with the patent holder or his licensee (parallel import) where the patent holder or his licensee may have sold or released the product into commerce abroad. ⁶⁴

61 Playing by the Rules at p.26.

t'Hoen, E., TRIPS, pharmaceutical patents and access to medicines: Seattle, Doha and beyond. (Chicago Journal of International Law: 2002; 31(1) cited in WHO Drug Information available at www.who.int/medicinedocs/en/d/JS7918e last accessed 16th January 2009.

⁶³ Munyi and Lettington at p.31

⁶⁴ Playing by the Rules at p.32.

In practice parallel importation refers to a situation where a seller in Country A makes available to a purchaser in Country B a product patented in both countries, at a lower price than it is available in Country B. If country B allows parallel imports, then the purchaser could import the product at a lower price than the product is available locally. Thus in principle parallel imports are a means to reduce the cost of medicines where there are significant intercountry differences in prices. Prior to utilizing parallel importing, countries are generally required to draft and pass legislation specifically allowing it.

The Doha Declaration at Paragraph 5(d) clarifies that "the effect of the provisions in the TRIPS Agreement that are relevant to the exhaustion of intellectual property rights is to leave each member free to establish its own regime for such exhaustion without challenge, subject to the provisions of Articles 3 and 4". This means that members can choose how to deal with exhaustion in a way that best fits their domestic policy objectives. 65

Exhaustion can be approached from a national standpoint (where resell within the same country is permitted as in the case of the United States); regionally (where imports are permitted within a regional market as in the case of the European Union or OAPI countries); or international where the rights are exhausted with the placing of the product anywhere in the world market).⁶⁶

Kenya has resorted to the potential cost savings accrued by parallel importation of vital medicines and has over the years imported various HIV drugs through government-appointed agencies, donor organisations, mission and private hospitals.

2.7.3 Voluntary license

A voluntary license is a licence issued by the patent holding company that allows another company to manufacture a patented product subject to the payment of an agreed royalty fee to the patent holder. In Kenya, provisions in the Industrial Property Act 2001 enabled the government to work with the main domestic pharmaceutical company, Cosmos, to obtain two voluntary licenses in 2004 for ARVs. One license was with GlaxoSmithKline (GSK) for three technically different products: zidovudine, lamivudine, and a combination of the two marketed as Combivir. The other license was with Boehringer Ingelheim for nevirapine. All three medicines are essential parts of standard first-line ART regimens. Although both multinational companies reached agreement with Cosmos on terms for voluntary licenses, the local firm

⁶⁵ ARV Newsletter.

⁶⁶ Musungu, S.F. at p. 10.

benefited far less than it anticipated. Both GSK and Boehringer subsequently reduced their prices for those ARVs in the Kenyan market, thereby making it economically unviable for Cosmos to produce and sell generic versions. Even so, the effort to obtain the voluntary licenses proved fruitful in the most important respect: it led to lower ARV prices, which in turn increased affordable access to these vital medicines among Kenyan consumers.⁶⁷

2.7.4 LDC Transition Periods

WTO Members agreed to exempt least-developed countries (LDCs) until 2016 (Article 66 TRIPS) from the obligation to implement the TRIPS standards on patent law and the protection of undisclosed information with respect to pharmaceutical products. Accordingly, generic producers in LDCs may reproduce pharmaceutical products patented in other countries, which used to be the practice in India until 2005 and in many OECD countries until the 1970s. The German Government in collaboration with the United Nations Conference on Trade and Development (UNCTAD) and the United Nations Industrial Development Organization (UNIDO) are currently taking advantage of the 2016 window of opportunity to promote the production of innovative pharmaceutical products in selected LDCs. In order for an LDC to benefit from the 2016 transition period, it needs to implement the waiver in its domestic law ⁶⁸

Except for a few countries that have existing patent laws, many countries in Sub-Saharan Africa could go ahead and produce generic drugs or undertake parallel importing without raising any attention from pharmaceutical companies. Only a handful of African countries such as Kenya, South Africa and Zimbabwe have patent protection laws.

2.7.5 Availability of New Use Pharmaceutical Patents

Also referred to as 'Evergreening the patent' drug companies try to renew patents after they expire by applying for new patents for "new uses" of the same product. The TRIPS Agreement only requires that patents be granted to products and processes which are new, involve an inventive step and are industrially applicable. The Agreement does not require the patenting of new uses of known products including pharmaceuticals. Countries are therefore free to exclude such products from protection.

The majority of the literature on the subject suggests that it is prudent that developing countries exclude new uses of known products or processes from patentability, in order to promote access to medicines. According to

⁶⁷ Playing by the Rules at p.28.

⁶⁸ Gumisai M. at p.4.

the UK IP Commission, "most developing countries particularly those without research capabilities should strictly exclude diagnostic, therapeutic and surgical methods from patentability, including new uses of known products". 69 Notably section 22 of the Kenya Industrial Property Act 2001 allows the patentability of new uses.

2.7.6 Exceptions To Granted Patent Rights

Article 30 dealing with exceptions stipulates that:

"Members may provide limited exceptions to the exclusive rights conferred by a patent, provided that such exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking into account of the legitimate interests of third parties."

Apart from the conditions specified, States are allowed considerable leeway in its implementation, as the Article does not provide for specific grounds on which a state may base their exceptions. Several situations have been suggested as being possible grounds for this purpose such as acts carried out on a private basis and for non-commercial purposes including scientific research and experiments involving the patented invention; preparation of drugs by unit and on medical prescription in pharmacy dispensaries; tests carried out before the expiry of the patent to establish the bio-equivalence of generic drug; use of the invention by a third party that had used it *bona fide* before the date of application for the patent.

In the public health context, three patent exceptions take center stage. These are the Bolar Exception, the Research Exception and Exclusive protection of data.

⁶⁹ Sisule M.F. at p. 9.

⁷⁰ Nnadozie, K., *The TRIPS Agreement and access to Essential Medicines in Nigeria*. (MSF Lagos) at p. 10.

See for instance, Corea, Carlos M. *Intellectual Property Rights, the WTO and Developing Countries, The TRIPS Agreement and Policy Options* 2000, Third World Network, Penang p.74. (cited in Nnadozie, K. at p.10.). See Section 21(3) of IPA 2001 for exclusions from patent protection.

2.7.6.1 The Bolar Exception

It is also known as the regulatory review exception or the early working exception.⁷² This allows generic manufacturers to prepare production and regulatory procedures before patents expire so that products can be ready for sale as soon as the patent expires, rather than having to go through the lengthy preparatory process only after the patent expires. Developing country members of the WTO should be aware that TRIPS does not, prohibit countries from permitting the regulatory approvals of generic drugs to occur before the patent term expires. Regulatory review exceptions may authorize the use of a patented substance, without the consent of the patent holder, in the context of approval procedures for the marketing of generic medicines.⁷³ Many WTO Members have implemented this exception in their domestic laws to facilitate the early entry into the market by generic competitors.

In the Philippines, Government officials in 2006 imported generic samples of a key hypertension drug so they could prepare for generic drug registration when the medicine's patent expired a year later. However, the patentholding company filed a lawsuit against the officials, claiming improper patent infringement because there was no specific domestic law permitting such action. With civil society backing, the government in early 2008 was poised to approve a new law that specifically permits the steps its officials took, known as "early working" of patented drugs, as part of an effort to speed up marketing authorization. The new law is also intended to facilitate the use of compulsory licensing, and it includes a price control system and other important measures to lower prices and promote access to important medicines. In Kenya, section 54(2) of the IP Act 2001 allows for 'early working' by restricting from patent protection, research and other acts necessary for obtaining regulatory approval and registration of a generic product before the expiry of the patent term.

2.7.6.2 The research or experimental use exception

This exception is useful in fostering pharmaceutical technological progress by exempting from patent protection, experimentation acts for purposes

Generally known as the 'Bolar Exception', it was introduced for the first time by the U.S Drug Price Competition and Patent Term Restoration Act (1984) in order to permit testing of a drug for establishing the bio-equivalency of generic products before the expiration of the relevant patent, named after a case judged by U.S courts in *Roche Products Inc. vs Bolar Pharmaceutical Co.* (733 F. 2d. 858, Fed. Cir., cert. denied 469 US 856,1984) in which the issue of the exception was dealt with. The court denied Bolar the right to begin the FDA approval process before the expiration of the patent (cited in Resource Book on TRIPS at p. 431)

⁷³ Canada-Patent Protection of Pharmaceutical products, WT/DS114/R of 17 March 2000. (cited in Schmiedchen and Spennemann at p.10.

such as inventing around the initial invention, improving on the invention or for the purposes of evaluating the invention and determining if it works.

2.7.6.3 Protection of data submitted for registration of pharmaceuticals

As a condition for permitting the sale or marketing of a pharmaceutical product, drug regulatory authorities require pharmaceutical companies to submit data demonstrating the safety, quality and efficacy of the product. The TRIPS Agreement requires that WTO Members protect undisclosed test data, submitted to drug regulatory authorities for the purposes of obtaining marketing approval, against unfair commercial use. Under the data exclusivity approach, once a company has submitted original test data, no competing manufacturer is allowed to rely on these data for a period of time. Data exclusivity could thus pose an obstacle to effective use of compulsory licences, as the entry of the generic product would be delayed for the duration of the exclusivity period or for the time it takes to undertake a new compilation of test data. The public interest in limiting data protection is to promote competition and ensure that data protection does not become the means to block timely entrance of affordable generic medicines of public health importance.⁷⁴ The Kenya IP Act 2001 contains no provisions on data protection. Kenya's position is that, as in the United Kingdom, trade secrets are protected by the common law.⁷⁵

2.7.7 Competition law & policy

Competition law and policy can be used to control abuses of dominant positions by patent holders. Competition law and policy may make important contributions to the design of an IP system that appropriately balances incentives for originators and the promotion of follow-on innovation.⁷⁶

In South Africa the threat of filing of a lawsuit with the South Africa Competition Commission in 2005 by civil society organizations for excessive pricing of the drug amphotericin B - brand name Fungizone made by the multinational firm Bristol-Myers Squibb (BMS)-an antifungal agent used to treat cryptococcal meningitis, a common cause of death among HIV-positive people in South Africa, prompted BMS to unilaterally lower prices⁷⁷.

⁷⁴ WHO Drug Information.

⁷⁵ Otieno-Odek, J. Trading in Knowledge, Development Perspectives on TRIPS, Trade and Sustainability (ICTSD 2003)

⁷⁶ Schmiedchen and Spennemann at p.11.

⁷⁷ Playing by the Rules at p.13.

Notwithstanding the availability of flexibilities and the clear wording of Article 1 of the Agreement, however, these flexibilities have not been used to the full to improve access to essential medicines. The limited use and impact of the flexibilities in improving access can be explained partly by the technical and political challenges which developing countries including African countries face. One of the main challenges at the outset relates to defining the scope and interpretation of the flexibilities. Though the language in TRIPS appeared clear, there was significant pressure from major pharmaceutical companies backed especially by the government of the United States for developing countries either not to use the flexibilities or to interpret them very narrowly. It is this pressure and disputes about interpretation which led to the filing of the case in the High Court in South Africa by 39 pharmaceutical companies challenging the South African Medicines Act 1997, which among other things dealt with generic substitution and parallel imports. Apart from the legal challenge which was later withdrawn in the face of mounting international public outcry, the United States Trade Representative (USTR) had listed South Africa as a priority country in the Special 301 Report leading to limited sanctions and pressure on the South African government. At the same time, the United States had also filed a WTO case (which was later withdrawn also partly due to the mounting public discussion on the impact of United States policy on access to medicines in developing countries) challenging the Brazilian law relating to local working requirements for pharmaceutical patents.⁷⁸

Because of these and other new challenges such as those that arise because of a new wave of Free Trade Agreements (FTAs) as well as the European Communities (EC) and African, Caribbean and Pacific (ACP) Economic Partnership Agreements (EPAs) the debate on IP and access to medicines continues.⁷⁹

2.8 Kenya's implementation of TRIPS

Access to medicines became one of the main issues in the review of the 1989 IP Act with a wide range of stakeholders actively lobbying the Ministry of Trade and Industry, lead agencies, and Parliament over a period of some three years. Civil society (including local, national and international NGOs, private individuals and other institutions such as mission hospitals) was most prominently represented by the activities of the Kenya Coalition for Access to Essential Medicines (KCAEM), a loose coalition of institutions and individuals that initially formed around the review of the Industrial Property Act. ⁸⁰

Playing by the Rules at p.13.Playing by the Rules at p.18.

⁸⁰ The KCAEM membership included international NGOs such as Médecins sans

The Industrial Property Act in 2001 (hereinafter IPA 2001) received Presidential assent in July 2001 and was subsequently published in August 2001.⁸¹ The Act came into force by notice on 1st May 2002⁸² (repealing the 1989 IP Act). This effectively meant that Kenya was some 18 months late in fulfilling its obligations but this raised no protest at the WTO. The delay prior to the passage of the Act was due to problems with the Parliamentary calendar, and after the passage of the Act, there were delays in the preparation of implementing regulations.⁸³

The IPA 2001 incorporates the majority of recognized TRIPs-compatible access to medicines safeguards, including an expansive interpretation of the principle of international exhaustion of intellectual property rights (IPRs), rights of government use, and the issuance of compulsory licences. The Act also contains provisions on the Bolar limited exception and discretionary restrictions on patents whose subjects may be used to address serious health hazards. That section reads as follows: "the rights conferred on the owner of the patent under this section shall not apply to acts by third parties necessary to obtain approval or registration of a product from the Institute, for the purpose of commercializing the product after expiry of the patent".

The WTO TRIPS review of Kenya's patent legislation by the Council for TRIPs carried out on 19 June 2001 did not raise any queries with respect to the aforementioned flexibilities. Therefore on this basis the Kenyan legislation may be judged to be generally TRIPs compliant.⁸⁶

In addition to its core intellectual property rights elements, the IP Act 2001 also incorporates an element of competition law, primarily by empowering the Managing Director of KIPI to recommend the issuance of a government use order by the Minister for Trade where the Managing Director determines that the manner of exploitation of an invention by the owner of a patent, or licensee thereof, is not competitive.⁸⁷

Section 113 of IPA 2001 establishes the Industrial Property Tribunal which is tasked with adjudicating patent disputes in Kenya. A right of appeal lies to the High Court of Kenya. Patent disputes may also be filed in the High

Frontières, Health Action International and ActionAid Kenya, a number of Kenyan NGOs such as Women Fighting AIDS in Kenya (WOFAK) and a number of individuals from various backgrounds and professions (cited in Lettington and Munyi at p. 16).

⁸¹ Kenya Gazette Supplement No.60, 3rd August 2001.

See Section 1, IP Act 2001 and Legal Notice No. 53 of 2002 of 12th April 2002.

⁸³ Lettington and Munyi at p. 16.

⁸⁴ Ibid at p.16.

⁸⁵ Section 54(2) IPA 2001

⁸⁶ Lettington and Munyi at p.17.

⁸⁷ Section 80, IP Act 2001.

Court. The reliefs that may be granted include inter alia equitable remedies such as injunctions, delivery up of the infringing articles for destruction, account for profits, damages and compensation⁸⁸.

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Chapter Three

IPRs. Agriculture and Food Security

Lois Muraguri, Richard Boadi and Moni Wekesa

3.0 Introduction

he question of food insecurity in the world is one that has plagued the international community for decades. The world's population currently stands at 6.5 billion and is projected to rise to more than 9 billion by 2050. Estimates show that 852 million people suffer from hunger; a vast majority of these—815 million—are in the developing world ¹

The world's leaders and top development agencies have galvanised efforts in the form of the UN Millennium Development Goals, the first of which is to eradicate extreme poverty and hunger. This is evidence that food security is a paramount concern not only to individual governments but also to the global community as a whole.

This chapter seeks to firstly elucidate the food security phenomenon. It however does not seek to comprehensively address the myriad and complex interactions affecting food security. The aim is to highlight the difficulty in defining food security and to provide a snapshot of the multifarious constraints thereby making the case for concerted effort at all levels of policy making in addressing food insecurity.

The second section is a brief enquiry on what intellectual property is and the underlying theories. Rather than attempting an exhaustive discussion of the various theories and the history of IP, the section attempts to map notions relating to food security from the underlying IP theories particularly

¹ FAO, The State of Food Insecurity in the World (Rome: FAO, 2005)

the current economic theory. Lockean labour theory and its application to IP is discussed, but only in the context of rural agricultural communities in developing countries and how it would affect food security if it were to be applied. Lockean labour theory is chosen because it is one of the earliest theories describing the pre industrial state – much like the rural communities in developing countries. The current IP system is influenced by the economic theory and therefore, this is also briefly examined from the perspective of food security. This chapter is an exploration of the current IP system and its impact on food security.

The third section focuses on the legal regime on IPRs in agriculture and how this impacts on food security. It commences with an overview of the main international legal instruments namely those under the FAO system, the UPOV Conventions, the Convention on Biological Diversity (CBD) and the TRIPs agreement. A look at the developments in the international legal regime provides a basis for the analysis of the interface between IP and agriculture and the impact of IPRs on food security.

3.1 Definitions

The causes of global food insecurity are many and varied particularly in the developing world. The attempts at defining food security have been just as numerous and, to date, there is no one universally accepted definition. Maxwell lists over thirty different definitions of food security used by various authors between 1975 and 1991.² Various definitions proffered include:

- 1. Access by all people at all times to enough food for an active, healthy life. Food security includes at a minimum: i) ready availability of nutritionally adequate and safe foods, and ii) an assured ability to acquire acceptable foods in socially acceptable ways³
- 2. Physical and economic access, at all times, to sufficient, safe and nutritious food to meet dietary needs and food preferences for an active and healthy life⁴
- 3. Access by all people at all times to enough food for an active, healthy life⁵

4 FAO glossary, available at http://www.fao.org/ag/wfe2005/glossary_en.htm

Maxwell, S., Food security: a postmodern perspective, *Food policy* 21/2 (1996). See also Maxwell, S. & Smith, M., 'Household food security: a conceptual review' in Maxwell, S. & Frankenberger, T. (eds.) *Household food security: concepts, indicators, measurements: a technical review.* (New York & Rome: UNICEF & IFAD,1992)

³ USDA definition, available at http://www.worldhungeryear.org/fslc/faqs/ria_074.asp?section=14&click=9

World Bank, available at http://lnweb18.worldbank.org/ESSD/ardext.nsf/12ByDocName/KeyTopicsFoodSecurity

- 4. The state in which all persons obtain a nutritionally adequate, culturally acceptable diet at all times through local non-emergency
- 5. When all people at all times have access to sufficient food to meet their dietary needs for a productive and healthy life⁷
- 6. Condition of having enough food to provide adequate nutrition for a healthy and productive life⁸
- 7. The availability of foodstuff in sufficient quantity at a global level⁹

The Food and Agriculture Organisation (FAO) in the 1996 World Food Summit attempted to remedy earlier deficiencies in the definition of food security. The ensuing definition was:

> "Food security, at the individual, household, national, regional and global levels [is achieved] when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life."10

The FAO definition was refined in The State of Food Insecurity 2001 to include social access to food.11

Two observations can be made from the definitions in the above exercise. The first relates to the levels at which food insecurity can be analysed. The 1996 World Food Summit focuses on food security at the individual, household, national, regional and global levels. Cullet12 uses this classification in analysing the causes of food insecurity. The second observation is that the food security definitions acknowledge the importance of not only availability of food but also effective access and distribution of the available food and the appropriate utilisation of the food. These three distinct factors—availability, access and utilisation—are important not in the least because they help in developing the indices for measuring and analysing food security. It is noteworthy that the focus of a definition—whether on global production

Sustainable Agriculture Net glossary available at www.sustainableag.net/glossary e-i.htm

USAID, available at http://www.usaid.gov/our_work/agriculture/food_security.htm
Future Harvest glossary available at http://www.futureharvest.org/about/glossary.shtml

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FAO Report (2005) supra 11

Cullet, P. 'Food security and intellectual property rights in developing countries' a study conducted under the Interdisciplinary Biosafety Network and UNCTAD/ICTSD Capacity building Project on IPRs and sustainable development (Geneva: RIBios, 2003)

of food or on an individual's access to the food—depends on the defining authority. World Bank, WTO and IMF studies use the term food security to denote global food production in line with their macro-economic focus¹³ while development NGOs tend to be oriented to the impact of food insecurity on an individual in line with their micro-economic perspectives.¹⁴

The fairly recent focus on access and utilisation can be closely identified with Sen's seminal study where he challenged the then widely held conviction that lack of food supply (availability) was the primary cause of famine. 15 Sen avoided the adoption of the concept of food security and instead focused on the entitlements of individuals and households. As access issues are entrenched in social, political and economic relations, Sen's work represented a clear shift in emphasis from natural to societal causes of food insecurity.

It is estimated that 800 million people¹⁶ (17% of the world's population) in developing countries are undernourished.¹⁷ In Africa, 200 million people are said to be undernourished, 40% of the population in Central, Eastern and Southern Africa is undernourished. 2.69 million people in Uganda and 10 to 12 million in Ethiopia are malnourished. In Kenya, 60% of Kenvans (18 million) are food insecure and 40% of pre-school children are undernourished. Over 50% of Tanzania's population is food insecure; about 40% of school going children are malnourished. Estimates between 1987 and 1998 show that 33% of African children were either stunted or underweight¹⁸. Malnutrition causes 6.6 million deaths per year in children under five years old¹⁹ worldwide. Food security therefore remains a particular concern in poor countries.

3.2 Causes and solutions

Challenges that affect food security in the south include low yields due to drought and pests, low level technology and increasing population which

See Cohen, J., Harnessing biotechnology for the poor: challenges ahead for capacity, safety and public investment, *Journal of Human Development* 2/2 (2001); see also 13 Scoones (2002) supra

¹⁴ Murphia, S., 'Food Security and the WTO' a position paper presented to the International Cooperation for Development and Solidarity (2001)

Sen, A. Poverty and famines (Oxford: Clarendon Press. 1981) 15

Farhana Yamin supra

Cullet (2003) supra 17

Ochieng Ogodo (2006): Africa must embrace biotechnology or lose war against perennial 18

famine and drought, say experts, The Standard, Sunday, January 23, p.13. Indur M. Goklany (2000): Applying the Precautionary Principle to Genetically Modified 19 Crops, Centre of the Study of American Business, Policy Study No. 157, Washington University in St. Louis

reduces the acreage for food crops.²⁰ Biotechnology could potentially improve yields thereby increasing food production and could also improve the nutritional status of food. ²¹ However, claims of high yielding GM crops have not gone unchallenged in the recent past.²²

The causes of food insecurity can be analysed at the micro (individuals and household) and macro (national, regional, international) levels. Cullet²³ distinguishes between food security at national and at individual levels. Using his classification, at the individual level, poverty and lack of income is the leading constraint to food security. This is evinced in the Millennium Development Goals which address eliminating poverty and hunger as one goal (and indeed the first goal). Poor people are least likely to have access to sufficient safe and nutritious food to meet their dietary needs and food preferences.²⁴ The Rome Declaration recognised poverty as a 'major cause of food insecurity and sustainable progress in poverty eradication is critical to improve access to food.²⁵

Shiva²⁶ asserts that a distinction between global and individual food insecurity cannot be maintained as the causes and influences of food insecurity at both levels are inextricably tied. Adopting a wider approach to causes of food insecurity, Shiva goes further than stating poverty as a cause of food insecurity and instead addresses the *causes of poverty* as the causes of food insecurity. She argues that the failure to place food security in a framework of rural-oriented economic growth, in combination with policies to stabilise domestic food economies are to blame. Shiva contends that this failure is a direct consequence of the current international trade regime characterised by corporate driven reforms.

²⁰ Phillip Dobie (2006): This country can decide not to starve, *Daily Nation*, Monday, Jan. 23, p.9

Ochieng Ogodo *supra*; Richard Hamilton, B. Flawell and Robert B. Goldberg (2005). Plant Biotechnology: Advances in food, Energy and Health, Economic Perspective October, *Journal USA*

²² Carey Gillam (2006): Cotton farmers sue Monsanto, others, for crop loss in *Planet Ark* http://www.planetark.org/dailynewstory.cfm?newsrid=35313: More than 90 Texas cotton farmers sued Monsanto claiming they suffered widespread crop losses because Monsanto failed to warn them of a defect in its genetically, altered cotton products; Vandana Shiva (2006). Genetically modified seeds a threat to humanity, *The East African*, March 27 - April 2, p.15: The author says that Cotton has repeatedly failed India's farmers since Monsanto introduced it in 1998.

²³ Cullet (2003) *supra*

See Persley, G. 'Agricultural biotechnology and the poor: promethean science' (1999) available at http://www/cgiar.org/biotech/rep0100/persley.pdf and DFID, Hunger Factsheet (2005) available at www.dfid.gov.uk/pubs/files/mdg-factsheets/hungerfactsheet.pdf

See http://www.fao.org/wfs/index en.htm

²⁶ Shiva, V. 'Elections, Agriculture and the Budget', BIJA 33&34 (2004)

Population increase²⁷ is not only a cause of food insecurity in that it affects the availability aspect, but also presents a wider threat on the planet's sustainability.²⁸ Constraints to food availability include biotic and abiotic factors. This set of causes has been used to advocate for biotechnology as a tool for increasing productivity by adapting crops to the biotic and abiotic conditions. In advocating for biotechnology as part of the solution, Chaturvedi posits that the constraints on productivity have become more acute since the 1980s when the Green Revolution varieties reached their potential.²⁹ The USAID Policy Determination defining food security lists the causes of food insecurity through the three dimensions: availability, access and consumption.³⁰

Climatic change and natural disasters such as the Indian Ocean tsunami, earthquakes and the prevalence of armed conflict and wars lead to food crises. Inadequate rain and a locust invasion in 2004 lead to an 80% increase in grain prices and severe food shortage in Niger.³¹ Although there is no conclusive evidence that climatic variability and occurrence of extreme events such as drought, flood or storms have increased significantly, global models nevertheless suggest that such changes in climatic variability are likely to occur in the future.³²

Just as the constraints to food security are numerous, diverse and for the most part related, the tools for addressing food insecurity must likewise be diverse and targeted at the micro and macro economic levels and at addressing availability, access and consumption. Reforms in agriculture, economic, trade and distributive policies are needed as measures to increase productivity and create wealth in poor communities thereby improving access to food. Solutions need to take into account the drivers affecting the world food situation today.

3.3 Synopsis of IP origin and patent theory

Theories and justifications for intellectual property have been addressed by various western philosophers mainly as an extension of the notion of

²⁷ See Swaminathan, M. 'Genetic Engineering and Food Security: Ecological and Livelihood Issues' (1999) available at www.cgiar.org/biotech/rep0100/swaminat.pdf; see also Connor (2006) www.cgiar.org/biotech/rep0100/swaminat.pdf; see

²⁸ Id.

²⁹ Chaturvedi, S. 'Agricultural biotechnology and new trends in IPR regime: challenges before developing countries', *Economic and Political Weekly* 30 March, 2002

³⁰ USAID Policy Determination PD-19. 13 April 1992.

³¹ FAO/WFP, Special Report: FAO/WFP crop and food supply assessment mission to Niger (Rome: FAO, 2004).

³² FAO, 'Trade Reforms and Food Security: Conceptualising the Linkages' Experts consultation Rome 11-12 July 2002.

property. The concept of property is well developed in the western world and is subject to protection under both civil and criminal law in virtually all jurisdictions. Because notions of IP have been drawn from existing accepted notions of tangible property, philosophers have had to contend with the inherent differences between tangible property and intellectual property. The main point of departure between tangible property and IP is that the former is based on ideas which are largely nonrivalrous. This is critical to IP theory and renders the traditional economic justification for tangible property inapplicable to IP.

Grandstrand³³ traces the evolution of IP, mapping it within the context of capitalism while Endeshaw³⁴ begins with pre-Greco-Roman times through to the early stages of industrial development to modern times. Property notions in general have been much discussed by modern scholars and traditional philosophers with IP mostly discussed within the context of traditional property. ³⁵

According to the natural rights theory derived from the divergent ideas of Locke and Rosseau, the results of an individual's labour and ideas were part and parcel of his identity and were inalienable. Over time, this theory declined in influence and a more utilitarian one influenced by Bentham took hold. Under the more current utilitarian theory, patent rights are seen as creations by society for the purpose of serving the economic interests of the society as a whole. This theory is premised on incentives and rewards—that creators are encouraged to invent by the promise of a reward in the form of monopoly rights over their creation for a limited amount of time. Numerous scholars have argued that the upshot of this is that it limits the diffusion of ideas and therefore prevents many people from benefiting from them. Only those who pay the royalties are entitled to use the products of the intellectual efforts.

Most of the agricultural communities in developing countries lived in communal settings where land was owned communally and plant breeding and general agricultural activities were based on 'technology' passed down from earlier generations. This is the basis of the modern concept of traditional knowledge. This is still paramount in developing country

Granstrand, O., *The economics and management of intellectual property: towards intellectual capitalism* (Cheltenham: Edward Elgar, 1999)

³⁴ Endeshaw, A., *Intellectual property policy for non-industrial countries* (Aldershot: Dartmouth, 1996)

³⁵ See Macpherson, C. (ed.) *Property: mainstream and critical positions* (Oxford: Basil Blackwell, 1978).; see also Palmer, T. Are patents and copyrights morally 'justified'?, *Harvard Journal of Law and Public Policy* 13/3 (1990) for a discussion of main philosophers in this field.

agriculture given that rural communities still depend on knowledge passed down from earlier generations. This knowledge is often communal and in any case practically impossible to trace back to an individual. The reliance on traditional knowledge is not withstanding that land may no longer be owned communally owing to developments and reforms in land tenure systems. Macpherson³⁶ regards the demise of common property as one of the significant changes in the concept of property that arose in the seventeenth century. Extending this argument May argues that because of this, the notion of communal ownership of resources does not appear in the analogous construction of intellectual property. This absence allows for "bio-prospecting related 'theft'" and sparks resistance by critics.³⁷

It might seem that rural agricultural communities fall within the Lockean theory of property. Although some similarities may exist in some areas, such as the notion that God has given the world to people in common, that every person has a property in his own person and that a person's labour belongs to him, there are fundamental departures. To begin with, rural agricultural communities often worked on the land together and shared what they reaped communally so that it cannot be strictly said that a person's labour belonged to him only. If this labour is to be extended to the intellectual aspect of creating traditional knowledge, then the Lockean proposition would fall on its face given that traditional knowledge is the product of many 'mixtures of labour' and therefore does not belong to *an* individual. Furthermore, Locke's theory on labour is premised on the abundant availability of physical property; dire shortage of arable land is one of the most important factors exacerbating food insecurity.

There are various differing interpretations of the Lockean theory³⁸ which perhaps demonstrate the discomfort at applying it to a system such as the one under which rural agricultural communities live. In the context of IP, Lockean labour, once attached to an abstract object, is owned by the individual and the outcome (of labour and the abstract object) is curtailed from proceeding to the commons. As this ownership is indefinite, it would seem that a Lockean application of IP would result in a stricter regime than what exists today.

36 Macpherson (1978) supra

³⁷ May, C., A global political economy of intellectual property rights: the new enclosures? (London: Routledge, 2002).

According to Tully, Locke makes an argument not for private property but for the commons. Macpherson on the other hand interprets Locke as providing 'a moral foundation for bourgeois appropriation'. See J. Tully, A., *Discourse on property* (Cambridge: Cambridge University Press, 1980), Macpherson, C., *The political theory of possessive individualism* (Oxford: Oxford University Press, 1979) and Monson, C., 'Locke and his interpreters' in Ashcraft, R., (ed.) *John Locke* (London, 1991) who argues that divergent interpretations of Locke are inevitable given that his text invites them.

IP is based on the knowledge economy, on intangible property (read ideas) whose infinity is the point of departure from real property. It would follow that under a strong Lockean labour theory 'any given appropriation by an individual of an abstract object would be allowed.' This line of argument 'suggests that a much larger scale of appropriation of the intellectual commons is justifiable.' This could be extended to business models, mathematical and scientific formulas which are currently not protected by IPRs. Application of the Lockean theory to IP would gravely affect food security.

The current IP system is based on the economics theory stemming from the utilitarian justification influenced by Bentham's ideas. Under this theory, incentives are provided to encourage creators to engage in innovative activities while at the same time being rewarded for their creativity. Some writers argue that the economic justification lies in the former goal of providing incentives rather than in the latter.⁴⁰

The upshot of this is that it limits the diffusion of knowledge thereby preventing those without the creator's authority from using them. From a food security perspective this has grave consequences in a system already fraught with problems. In the case of plant breeders' rights, restricting farmer seed saving has direct food security consequences. In the same argument, any act, regulatory or otherwise, that results in higher seed prices jeopardises the situation⁴¹ given that lack of sufficient financial resources to buy food is a major cause of individual food insecurity.

3.4 International legal regime on agriculture and IP

IPRs are an economic creation granted to inventors of intangible property to protect their innovations and creations and to reward innovative and creative activity. As a concept, IPRs have not been problematic; what has been contentious is the nature of their meaning and the various interpretations with varying results and implications for different groups and jurisdictions.

There have been divergent opinions on the impact of intellectual property in agriculture particularly in developing countries. Some of the IP issues relating to agriculture include Plant Breeder's Rights (PBRs), agriculture biotechnology, and issues relating to access to plant genetic resources (PGRs) and the conservation of biodiversity. These have been fairly recent; earlier

³⁹ Macpherson (1979) supra

Merges, R., Menell, P. & Lemley, M. (eds.) *Intellectual property in the new technological age* (New York: Aspen Publishers, 2003)

See Oxfam, 'Rigged rules and double standards: trade, globalisation and the fight against poverty' (Oxford: Oxfam, 2002)

application of IP was concerned with mechanical agricultural implements and bio-chemicals. The application of IPRs to plant genetic resources in the form of patents and plant variety protection has only taken currency especially in developing countries in the last two decades.

The following section examines international instruments affecting food security. It is by no means an exhaustive exposé of all the legal instruments in the field but is instructive in the discussion of the main international legal instruments affecting food security. The section will attempt to locate the link between the instruments discussed and their impact on food security.

3.4.1 The common heritage of mankind principle

The common heritage principle was generally applied to the access to plant genetic resources (PGRs) prior to the CBD's entry into force. The principle states that PGRs are the common heritage of humankind and therefore should be freely available to all. Under the FAO system, the International Undertaking on Plant Genetic Resources (the Undertaking)⁴² adopted in 1983 was premised on this doctrine. PGRs were seen as a heritage of mankind and consequently available without restriction to anyone; at the same time, rights over PGRs could not be appropriated by private entities.

3.4.2 The International Undertaking on Plant Genetic **Resources for Food and Agriculture**

The Undertaking was intended to achieve a balance between biotechnology and farmers' varieties; between conflicting interests of the technology rich countries of the North and the gene rich countries of the South; and between rights of breeders and those of farmers. 43 The emphasis on free availability of PGRs did not augur well with developed countries some of which were already engaging in genetic engineering.⁴⁴ It was only after the numerous amendments that the International Undertaking became more acceptable to negotiating parties. The amendments resulted in the definition and recognition of farmers' rights⁴⁵ and the conferring on states the sovereign right over their genetic resources. 46 These amendments together with the 2001 adoption of the International Treaty on Plant and Genetic Resources for Food and Agriculture (the International Treaty)⁴⁷ resulted in subjugation of the common heritage of mankind principle.

⁴²

Available at http://ext-ftp.fao.org/waicent/pub/cgrfa8/iu/iutextE.pdf
See the Undertaking's website available at http://www.fao.org/ag/cgrfa/IU.htm 43

Cullet (2003) supra 44

Resolution 5 of 1989, available at ftp://ext-ftp.fao.org/waicent/pub/cgrfa8/Res/C5-89E.pdf Resolution 3 of 1991, available at ftp://ext-ftp.fao.org/waicent/pub/cgrfa8/Res/C3-89E.pdf 45

⁴⁷ The International Treaty on Plant Genetic Resources for Food and Agriculture, Rome, 3

Resolution 4 of 1989 which recognized plant breeders' rights, and resolution 5 of 1989 which defined farmers' rights, were a compromise between the conflicting groups: the developed countries were pleased with the recognition of plant variety protection which would benefit their industries, while the developed countries won endorsement of the provision for farmers' rights. 48 The effect of this is that it provided a basis for farmers to share in the benefits derived from the germplasm which they had developed and conserved over generations. The International Undertaking recognized that countries are interdependent in terms of PGR for food and agriculture, that most countries depend for their food security on crops that originated elsewhere⁴⁹ and that today's crops have been developed by activities of farmers and through the exchange of these crops between different regions. Renegotiating the International Undertaking began in 1994 as a result of calls for reforming and strengthening the FAO global system which had risen during negotiations on the Convention on Biological Diversity (CBD). These concluded with the adoption of the International Treaty in November 2001.

3.4.3 The Convention on Biological Diversity (CBD)

The 1970s and 1980s saw a number of initiatives to stymie the loss of species and the destruction of habitats and ecosystems. The United Nations Conference on the Human Environment held in Stockholm in 1972 was one such initiative. It brought biodiversity related issues to the international political and legal arena. The Conference underscored the link between development and conservation. Following this in 1983 was the World Commission on Environment and Development, which in 1987 published the *Brundtland report* entitled *Our Common Future*. The report alerted the world of the urgency of making progress in economic development without depleting natural resources or harming the environment. For example, the content of the urgency of making progress in economic development without depleting natural resources or harming the environment.

A consensus gradually emerged that the earth's priceless reservoir of biological diversity could be saved only through international cooperation and funding, based on the introduction of a suitable international legally binding instrument. It became clear that this new instrument should not

November 2001. Available at http://ext-ftp.fao.org/waicent/pub/cgrfa8/iu/ITPGRe.pdf

⁴⁸ Blakeney, M., (ed.) *Intellectual Property Aspects of Ethnobiology* (London: Sweet and Maxwell, 1999) at 13.

⁴⁹ Correa, C., *Intellectual property rights, the WTO and development policy*, Report of the UK Commission on Intellectual Property Rights (London: CIPR, 2002)

⁵⁰ UNEP, Declaration Of The United Nations Conference On The Human Environment, available at http://www.unep.org/Documents/Default.asp?DocumentID=97&ArticleID=15 03

⁵¹ See the *Brundtland Report* (Report of the World Commission on Environment and Development: Our Common Future available at http://www.un-documents.net/wced-ocf.htm)

absorb existing conservation conventions, but should build new mechanisms and action plans to fill the lacunae between them and to embrace all areas of conservation.⁵² The convention would provide a framework for the cooperation between the gene rich countries of the South and the technology rich countries of the North in order to conserve biodiversity.

The ensuing negotiations culminated in the signing of the Convention on Biological Diversity (the CBD)⁵³ in 1992 at the Earth Summit in Rio de Janeiro. This framework convention has as its objective the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources.⁵⁴ The CBD is the first global agreement to recognize that the conservation of biological diversity is 'a common concern of humankind' and an integral part of sustainable development.⁵⁵ The CBD acknowledges the sovereign rights of state parties over their own biological resources⁵⁶ and requires access to be on 'mutually agreed terms' and subject to 'prior informed consent'. 57 It provides for the sharing of benefits arising from biotechnologies with developing countries.⁵⁸

By reaffirming the sovereignty principle, the CBD effectively abolishes the common heritage of mankind principle hitherto used to refer to access to PGRs. It has been argued that the CBD, however, does not recognise the proprietary rights of the state over PGRs⁵⁹ and that PGRs are not treated as a form of property like other national resources which are subject to tangible property rights. 60 While this may seem so, in an ideal world, the effect of national legislation is that sovereign states retain a great degree of control over genetic resources and in any case, national law determines the question of ownership so that there would hardly be any difference in the effect if national governments were vested with proprietary rights over PGRs. In articles 15 and 19 of the CBD, sovereignty over natural resources lies with the individual states. These states are mandated to draw up standard material

Sanchez, V., 'The Convention on Biological Diversity: Negotiation and Contents' in Sanchez, V., The Convention on Biological Diversity, Regulation and Contents in Sanchez, V. & Juma, C., (eds.) *Biodiplomacy: genetic resources and international relations* (Nairobi: ACTS Press, 1994)
Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, 31 *ILM* 818 (1992),

⁵³ available at http://www.biodiv.org/convention/articles.asp

⁵⁴

CBD, Why Have a Convention on Biological Diversity?, available at http://www.biodiv. 55 org/convention/faq.asp?lg=0

⁵⁶ Article 3

⁵⁷ Art 15(4) & (5)

Art 19(2) 58

Odek, J., Bio-piracy: creating proprietary rights in plant genetic resources *J. Intell. Prop. L.* 2/141 (1994)

⁶⁰ Asebey, E. & Kempenaar, J., Biodiversity prospecting: fulfilling the mandate of the biodiversity convention, Vand. J. Transnat'l L. 28/703 (1995)

transfer agreements (SMTAs) for use of biological resources within their territories. It is hoped that SMTAS will give some leverage to countries of the South. However, given the weak negotiating power and concomitant lack of capacity currently prevalent in developing countries, this omission further tilts the balance away from the interests of developing countries.

3.4.4 The International Treaty on Plant Genetic Resources for Food and Agriculture

The negotiations leading to the International Treaty were in the wake of the CBD and, as expected, the International Treaty provisions buttress those in the CBD. Unlike its predecessor, the International Treaty is a binding treaty. It emphasizes the conservation of biodiversity and access and benefit sharing—the main tenets of the CBD. The Treaty's objectives are 'the conservation and sustainable use of plant genetic resources for food and agriculture,' and the 'fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity, for sustainable agriculture and food security.'61

The Treaty creates a multilateral system to facilitate access and benefit sharing. Exchange of PGRs through this system is by Material Transfer Agreements (MTAs) and reflects the aim of ensuring food security by facilitating access to breeding genetic material. Member states agree to provide facilitated access through the multilateral system to a collection of 35 crops and 29 grasses and forages contained in Annex 1. *Ex situ* collections held by the Consultative Group on International Agricultural Research (CGIAR) are also made available through the multilateral system. Although the range of crops covered in these two groups is limited, it accounts for 80% of the world's food calories from plants.⁶² The list however does not cover animals.

The International Treaty is unique in that it provides a direct link between biodiversity conservation, sustainable agriculture, IPRs and food security. Addressing mutually agreed facilitated access to PGRs, the International Treaty states that 'recipients shall not claim any intellectual property or other rights that limit the facilitated access to the plant genetic resources... or their genetic parts or components *in the form received* from the Multilateral System,'63 and that 'access to plant genetic resources for food and agriculture protected by intellectual and other property rights shall be consistent with

The International Treaty, article 1.

Tansey, G., 'Food security, biotechnology and intellectual property: unpacking some issues around TRIPs' a discussion paper commission by the Quaker United Nations Office, Geneva.(2002)

⁶³ Article 12(3)(d) International Treaty (emphasis added)

relevant international agreements, and with relevant national laws.'64 Restriction of appropriation of isolated components from PGRs accessed under the Multilateral System was opposed by some countries which argued that this would stifle innovation.65

The rights of communities are expressly recognised in the ITPGRFA, which at article (5) provides that "all efforts on plant improvement should be done in collaboration with the farmer." Although the International Treaty recognizes farmers' contribution to conserving and enhancing PGRs, 66 it stops short of acknowledging that farmers have IPRs over plants that they have bred over generations. In this regard, the only rights that the International Treaty acknowledges are farmers' residual rights to save, use, exchange and sell farm-saved seeds. 67 Moreover, Article 9(2) states that the responsibility for realizing farmers' rights rests with national governments. This is one regard where the Treaty's food security function could be enhanced; empowering farmers and communities is one way of encouraging increased food production.

The Treaty does not cover access for purposes that are not related to food and agriculture. It provides that access to materials found *in situ* should be according to national legislation or where this is lacking, in accordance with standards that may be set by the Treaty's governing body. To facilitate access, the Treaty requires the use of standard material transfer agreements (MTA), which would bind the recipient of the genetic material as well as all other subsequent recipients.

3.4.5 The UPOV Conventions

Before the introduction of IPRs in the Uruguay Round of Multilateral Trade Negotiations of the GATT, IP protection was under the World Intellectual Property Organisation (WIPO). One of the treaties administered under WIPO and dealing specifically with plant genetic resources is the International Convention for the Protection of New Varieties of Plants (UPOV Convention). The Convention's objective is to ensure that member states acknowledge inventions by plant breeders and reward them with exclusive rights over new plant varieties. It establishes the concept of plant breeders' rights (PBRs).

⁶⁴ Article 12(3)(f) International Treaty

⁶⁵ Cullet (2003) *supra*

⁶⁶ Article 9(1) International Treaty

⁶⁷ Id. Article 9(3)

⁶⁸ Signed in Paris in December 2 1961 and entered into force in 1968. The UPOV Convention has been revised three times: in 1972, 1978 and in 1991. See www.upov.int UPOV 1991 Act, article 2.

The underlying principle of plant variety protection is in many ways similar to that of patent protection. The main reason for plant variety protection is cited as to 'serve as an incentive to development of agriculture, horticulture and forestry and to safeguard the interests of plant breeders.' Recouping costs invested in breeding plant varieties as well as accumulating funds necessary for further investment is part of the justification for plant variety protection. ⁷¹

Since its inception the UPOV Convention has been amended three times—in 1972, 1978 and 1991. Membership to the 1972 and 1978 Acts has been closed and any country wishing to join UPOV has only the option of the 1991 Act. The main operating Acts are those of 1978 and 1991.

There are substantial differences in the two versions of UPOV.⁷² Under the 1978 Act, the breeder is entitled to protection, whatever the origin—artificial or natural, of the initial variation from which his variety is derived⁷³ that is, he is entitled to protection if he "discovers" a new plant variety. Authorisation is needed from the plant breeder for the production for purposes of commercial marketing, the offering for sale, and the marketing of the reproductive or vegetative propagating material.⁷⁴ The 1978 Act however does not require prior authorisation from the plant breeder for research and creating of new varieties from his varieties and the marketing of those new varieties.⁷⁵ Accordingly, protection under the 1978 Act does not give the plant breeder any rights in the genes, the underlying genetic resource, which is contained in his variety. Member States are however free to grant more extensive rights to breeders, and especially to extend the protection to the marketed product.⁷⁶

The 1991 Act broadens the scope of protection by widening the range of activities for which the authorisation of the plant breeder is required.⁷⁷

⁷⁰ UPOV, 'Why protect new varieties of plants?' Available at http://www.upov.int/eng/brief.htm

Mugabe, J. et al. 'Managing access to genetic resources: national policy and legislative framework' in Mugabe, J. et al (eds.) *Access to genetic resources: strategies for sharing benefits* (Nairobi: ACTS Press, 1997)

benefits (Nairobi: ACTS Press, 1997)
 See Watal, J., Intellectual Property Rights in the WTO and Developing Countries (London: Kluwer Law International, 2001) at 136-149 for detailed analysis on the differences and similarities. See also Verma, S., TRIPs and Plant Variety Protection in Developing Countries E.I.P.R. 17/6 (1995) 281-289

⁷³ Article 4 of UPOV 1978 Act available at http://72.14.203.104/search?q=cache:h-mzEoSqqKEJ:www.upov.int/en/publications/conventions/1978/msword/act1978.doc+UPOV+1978+text&hl=en&gl=uk&ct=clnk&cd=5

⁷⁴ Id., article 5(1).

⁷⁵ Id., article 5(3).

⁷⁶ Id., article 5(4).

Unlike the 1978 Act, mere discovery is not enough; a breeder must have developed his discovery in order to secure protection. The protection of a variety derived from a protected variety is controversial and difficult to determine. Although the 1991 Act exempts the obtaining of authorisation from the plant breeder for acts done privately, non-commercially and for experimental purposes, it requires authorisation for breeding and exploiting 'essentially derived varieties.' Under the 1991 Act, if a breeder makes some improvement over a protected variety he will have to seek permission from the holder of the original rights before marketing the new variety. The Act defines what constitutes a variety essentially derived from another. The 1978 Act does not require such permission.

With regard to farmer's rights, the 1978 Act allows farmers to save seed or reproductive material of a protected variety for re-planting to produce a further crop. The 1991 Act provides for an optional exemption from breeders' rights: Article 15(2) allows contracting parties to provide an exception in favour of farmers that is 'within reasonable limits and subject to the safeguarding of the legitimate interests of the breeder.' Thus saving of seed is a farmer's right under the 1978 Act but only a privilege that may be granted subject to the terms in Article 15(2) under the 1991 Act.

To be eligible for protection, varieties have to be distinct from existing commonly known varieties, sufficiently uniform, stable (the DUS test) and new in the sense that they must not have been commercialised prior to certain dates established by reference to the date of the application for protection.⁸⁰ Protection under the 1978 Act runs for 15 years⁸¹ while under the 1991 Act runs for at least 20 years.⁸²

3.4.6 The TRIPs Agreement

The introduction of IPRs in the Uruguay Round of multilateral trade negotiations in 1986 played a major role in the dramatic increase in the number of patents generally and in the field of agriculture. Plant variety protection before the inception of the TRIPs Agreement lay mainly within the UPOV Convention framework and in domestic law of most developed countries and some developing countries. The TRIPS Agreement⁸³ under

msword/act1991.doc+UPOV+1978+text&hl=en&gl=uk&ct=clnk&cd=6

⁷⁸ Id., article 15(1).

⁷⁹ Id., article 14(5)b

Article 6 of the 1978 Act and article 5 of the 1991 Act.

^{81 18} years for vines and trees

^{82 25} in respect of vines and trees

Agreement on Trade-Related Aspects of Intellectual Property Rights, Marrakech, 15 April 1994, 33 *International Legal Materials* 1197 (1994)

the WTO was to revolutionize the protection of IP, plant genetic resources included.

Negotiations for the inclusion of an IP protection regime in the existing GATT began amid claims by US industries that they were losing profits due to weak IP protection abroad. 84 The clash in interests existing between exporters and importers of products and technologies involving IP has been exacerbated by the mechanisms of globalisation: faster and cheaper means of transportation and communication, advances in science and technology, together with 'the growing ease of imitation'85 have contributed to the increased demand, especially by industries in the West, for increased IP protection.

Article 27.1 of TRIPs provides that patent protection shall be available 'for any inventions, whether products or processes in all fields of technology' subject to a number of exceptions. It further provides that for an invention to be patentable, it must be 'new', 'involve an inventive step' and be 'capable of industrial application.' Article 27 provides for exceptions from patentability. During the TRIPs negotiations, the debate on whether genetic resources should be patentable culminated in the Article 27.3(b) compromise. Article 27.3(b) excludes from patentability 'plants and animals other than microorganisms and essentially biological processes for the production of plants and animals other than non-biological and microbiological processes'. It however requires state parties to provide for the protection of plant varieties either through a patent system or through an 'effective *sui generis* system' or a combination of the two.

Although the TRIPs Agreement does not define what a *sui generis* system is, much less what an *effective* one might be, the UPOV Conventions have been taken to be a universal example of one;⁸⁷ virtually all those developing countries that did not have a PBR system prior to TRIPs have fashioned their PBR systems using the UPOV Conventions as a guide. The effect of this is that the criteria for protection of PBRs are virtually the same in all countries. Countries have generally opted for *sui generis* systems over plant patents⁸⁸

⁸⁴ Adede, A., The political economy of the trips agreement: origins and history of negotiations (Nairobi: ACTS Press, 2001)

⁸⁵ Watal (2001) *supra* at p2.

A footnote to this article equates the last two criteria to 'non-obvious' and 'useful'.

This is despite the fact that TRIPs does not mention UPOV. See Watal (2001) *supra* who argues that the possible reason for this was because at the time of the negotiations, the UPOV 1991 Act was not yet in force, and therefore reference to it would be premature while the UPOV 1978 Act was considered inadequate particularly by developed countries who drove the TRIPs negotiations.

⁸⁸ except USA, Japan and Australia

and most have elected to join UPOV⁸⁹ although there are some developing countries with existing plant variety protection legislation that are not members of any of the UPOV Conventions.⁹⁰ Developing countries who are members of UPOV joined the 1978 Act rather than the 1991 Act⁹¹ although in some the domestic plant variety protection (PVP) law is more in line with the 1991 Act.⁹² India presents an interesting case; it has developed its own PVP legislation that tilts the scales towards farmers' rights; its provisions are not compatible with the milder 1978 Act. India lodged an application to join the 1978 Act before entry was closed and it is speculated that its membership will be denied given the current state of its PVP legislation.

3.4.7 Other Forms of protecting IPRs relevant to Agriculture 3.4.7.1 Trade Secrets

Trade secrets are a form of Intellectual Property Rights which prevent misappropriation of information. They are usually used in combination with contract law, patents and plant varieties protection (PVP). They have no fixed term of protection and are used to prevent "reverse engineering." In *Pioneer Hi-bred Interntional v Holden Foundation Seeds*⁹³, the plaintiffs claimed that the defendants had used one of its inbred corn lines in the development of competing lines. Evidence from isozyme electrophoresis, reverse phase High Power Liquid Chromatography and grow out tests was admitted. These demonstrated substantial similarity between the Pioneer Holden lines. The defendant was unable to persuade the court that it had developed the line independently. The defendant was ordered to pay US\$ 46 million.

3.4.7.2 Contracts

Contracts are used to protect IPRs. For instance, a contract can be entered into between a patent holder and a user of the resultant technology. The most common form of contracts in this regard are the technology user agreements (TUAs). Biotechnology firms like Monsanto usually conclude TUAs with farmers in which the latter commit themselves not to keep some of the harvested seeds for the next planting season, not to share or sell seeds, and to sell their harvest to designated (licensed) traders only⁹⁴. The Convention on Biological Diversity foresees the use of contracts in the transfer of genetic

⁸⁹ See http://www.upov.int/en/about/members/pdf/pub423.pdf for an updated list of UPOV members.

⁹⁰ For example Tanzania and Indonesia

⁹¹ With the exception of Tunisia and Singapore.

⁹² For example Kenya which currently aspires to 'upgrade' to UPOV 1991.

^{93 35} F. 3d 1226 (8th Circ. 1994)

⁹⁴ Monsanto v Schmeizer supreme court of Canada, judgement of 21 May 2004, 2004 SCC 34

material on "mutually agreed terms." The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) proposes the use of Standard Material Transfer Agreement (SMTA), a form of contract⁹⁵. A few countries indeed use contracts⁹⁶

3.5 IPRs and Food Security

The effects of IPRs on food security are not simple and may not always be direct but are rather multifaceted and indirect insofar as IPRs affect markets and social and cultural relationships. These in turn have direct and consequential impact on food security.

3.5.1 Control over and access to PGRs

One of the areas that IPRs have had a direct effect on agriculture is the control over plant and genetic resources. The CBD acknowledges the sovereign rights of state parties over their own biological resources⁹⁷ and requires them to create conditions to facilitate access to PGRs and not to impose restrictions.⁹⁸ Although this forms a basis in international law for compensation for genetic resources found within state boundaries, it fails to take a step further and incorporate a mandatory declaration to ensure compensation.⁹⁹ The CBD whilst acknowledging sovereignty of states over PGRs does not however recognise the proprietary rights in the genetic resources of a state; ¹⁰⁰ it falls short of conferring IP ownership status of PGRs to states. The 'common *heritage* of humankind' is replaced by a 'common *concern* of humankind' where at best, control of PGRs rests with the country of origin 'but with an associated duty to participate in international law making towards sustainable conservation and use for the benefit of the whole of humankind.'¹⁰¹

⁹⁵ ICTSD" Transfer Agreement for genetic resources receives tentative Bridges support," Trade BioRes Vol. 6 #9, 19 May 2006 - The SMTA is expected to act as a contract between farmers, plant breeders, research centres and others. It is supposed to standardize benefits sharing and access to plant genetic resources.

BridgesTrade BioRes Vol. 6 # 4, 3 March 2006: The Environmental Cooperation Agreement is incorporated in a trade promotion agreement signed between the US & Columbia on 27th February 2006. This trade agreement has a wide understanding on TK and biodiversity. The agreement recognizes the use of contracts to achieve prior informed consent (PIC) & equitable sharing in the use of genetic resources and TK.

⁹⁷ CBD Article 3

⁹⁸ Id., Article 15(1) & (2)

Tilford, D., Saving the blueprints: the international legal regime for plant resources *Case W. Res. J. Int'l L.* 30/373 (1998)

¹⁰⁰ Odek, J., Bio-piracy: creating proprietary rights in plant genetic resources, *J. Intell. Prop. L.* 2/141 (1994)

¹⁰¹ Cullet (2003) supra

The introduction of IPRs in agriculture raises concerns with regard to farmers' control over their resources and knowledge. The introduction of PBRs potentially places restrictions on the free exchange of germplasm and knowledge that has characterised farming communities in developing countries for many generations. Rural farming communities in developing countries still trade and exchange seeds locally. The origin of many plant varieties can be traced to such exchange and selection. Such practices of on-farm experimentation and conservation form the basis of food security and livelihoods of communities throughout the developing world.

The justification behind the introduction of PBRs is similar to that of patents: to act as an incentive encouraging plant breeding and to enable plant breeders recoup the costs of their activities by the collection of royalties. The imposition of royalties on protected seed, alongside the restriction on farmers to save and re-use seed impacts directly on access to seed by farmers. As earlier seen, access to food is a major component of food security and therefore anything that increases the costs of seeds is a direct constraint to achieving food security. Thus, it is encouraging to note that several initiatives have emerged in the past decade to address the challenge of stimulating the development of innovative technologies while providing mechanisms that support farmers' access to these technologies. One such initiative is the African Agricultural Technology Foundation (AATF)¹⁰⁴, which negotiates for access to proprietary technologies and facilitates their delivery to farmers in Sub-Saharan Africa free of royalty and license payments.

3.5.2 The private sector and research priorities

Research and Development for biotechnology is estimated to cost US\$ 0.25 billion and that it takes 4 - 7 years. The biotechnology industry depends on IPRs as an inducement. Most of the biotechnology farmers are in USA and Europe. Kenya has a very thin budget for biotechnology research. Of the total amount allocated for research purposes, over 80% is taken up by salaries and a sizeable proportion of the remainder goes into maintenance of facilities. Researchers and public research institutions are open to public private sector collaboration more out of necessity than by purely mutual negotiation and agreement. The power play here is strongly tilted in favour of Multinationals that provide the finances. The advantage of this is possible transfer of technology through such joint ventures. The downside is that the research agenda is determined by the financiers and any resultant innovations (IPRs) belong to the financiers.

¹⁰² Downes (2003) supra

¹⁰³ UNDP, Making Global Trade Work for People (New York: UNDP, 2003)

^{104 &}lt;a href="http://www.aatf-africa.org/">http://www.aatf-africa.org/

The boundaries between private and public sector research is becoming blurred with respect to financing. It is difficult for a public research institute or university department to fund extensive tests that are often necessary to make available to the public a new pharmaceutical, agricultural, chemical product or plant variety. Support in the form of finances and expertise will be required from the private sector at some stage¹⁰⁵.

The patentability of life forms that is allowable under US law where majority of the biotech firms are based is also a source of disquiet. There are fears that vital components of life are being transferred into private hands, and that IPRs are a mechanism through which this is achieved. In the process, access to such knowledge is limited.¹⁰⁶

It is appreciated that IPRs shift research from the public sector to the private sector. In fact, the preamble to TRIPs recognises IPRs as private rights. Such recognition excludes knowledge in the intellectual commons, i.e. villages, universities, forests etc. It may not be far fetched to say that IPRs are only interested in profits not social needs, i.e. TRIPS Art 27 (1) talks of "industrially applicable." The focus of Research and Development is therefore on commercialisation. Food security and biodiversity are only important in as much as they fit in the **rubric** of commercialisation.

Most biotech R & D uses genetic resources found in the South which prior to the CBD were considered to be a "common heritage of humankind." Although the CBD vests sovereignty over such resources to Nation States, very little has been done to enable these countries benefit from their natural resources. The problem is compounded by the fact that the traditional knowledge about the usefulness of such genetic resources is communally held and does not lend itself to IPR protection in the Western style. Hence, such knowledge is "freely" appropriated but the resultant technology and

Moni Wekesa (2005). Internationalisation of Intellectual Property Rights through Information Communication Technologies, In: DAAD, ed., Re-invigorating the University Mandate in a Globalising Environment: challenges, obstacles and way forward, Nairobi: DAAD Regional Office, pp 121 - 130. The author analyses the level of partnerships and collaboration between Duke University, National Institutes of Health and various pharmaceutical companies that were mobilized in bringing the drug Fuzeon (an anti-retroviral) to the market.

Brower, V. (2000), Caravan families slam Scientist over patent profits, Biotechnology Newswatch, 2000:1 -one hundred and fifty families Worldwide took part in a study at Miami Children's Hospital (MCH) which led to the 1993 discovery of a gene linked to the Caravan disease, an inherited, fatal neurodegenerative disease largely affecting Ashkenazi Jews. MCH later patented the gene without the knowledge of the research subjects; Wekesa (2003), Access to HIV/AIDS drugs after research: Patents, Equity and the Law. Presented at a seminar on HIV/AIDS in East Africa organized by Hastings Centre (NY) and Kenya Medical Research Institute (KEMRI) in Nairobi, IPRs make HIV drugs unaffordable in Sub-Saharan Africa.

products are privately owned through IPRs. There is therefore a need for a paradigm shift to allow for "benefit sharing".

It is common knowledge that private science will invest where there are strong IPRs. The private sector looks at the scope and gravity of IPRs, *inter alia* before deciding to support a new technology. It has been observed that public research is diminishing as private research increases.

The IP system has played an integral part in attracting participation by the private sector in agriculture. The small potential for private returns historically left crop research and development largely in public research institutions. ¹⁰⁷ By providing the possibility of appropriation of private profits, the IP system is an incentive for private sector participation in this previously public sector domain. Although there are many other factors determining private investment in agriculture, ¹⁰⁸ a resounding suggestion is that private sector investment in the agricultural sector crucially depends on the protection of IP and that appropriation of benefits through trade secrets and IPRs remains a main deciding factor on private sector investment in agriculture. ¹⁰⁹

The current agricultural scene is characterised by growing privatisation of research set against a backdrop of reduced public investment in agriculture R&D. One concern with private sector led or influenced agriculture is the distortion of research priorities resulting in neglecting research in crops with low rates of profit returns. Evidence from various studies conducted on private sector investment in agriculture shows that the private sector investment is centred on commercial crops rather than food crops. This has the potential to cause food insecurity unless public sector efforts aimed at developing food crops are intensified. The emergence of public-private partnership project models – where private sector owned technologies are made available royalty-free to African institutions to develop food crops for African farmers - could also help achieve food security. Notable among such

107 Alston, J., Pardey, P. & Taylor, M., (eds.) *Agricultural science policy: changing global agendas* (Baltimore: John Hopkins University Press, 2001)

See Manicad, G., The CGIAR and the private sector: public good versus proprietary technology in agricultural research, *Biotechnology and Development Monitor*, 37 (1999) 8-13; Binenbaum, E., Pardey, P. & Wright, B., Public-private research relationships: the consultative group on international agricultural research, *Amer. J. Agr. Econ.* 83/3: (2001) 748-753 and Pray, C., 'The growing role of the private sector in agricultural research' in Byerlee, D. & Echeverría, R., (eds.) Agricultural research policy in an era of privatization (Oxon: CABI Publishing, 2002)

¹⁰⁹ Lele, U., Lesser, W. & Horstkotte-Wesseler, G., (eds.) *Intellectual property rights* in agriculture, the world bank's role in assisting borrower and member countries (Washington D.C: The World Bank. 2000)

 ⁽Washington D.C: The World Bank, 2000)
 Pinstrup-Andersen, P., Pandya-Lorch, R. & Rosegrant, M. World food prospects: critical issues for the early twenty first century (Washington DC: IFPRI, 1999)

project models are the Africa Bio-fortified Sorghum project coordinated by the Africa Harvest Biotechnology Foundation International¹¹¹ and the *Maruca*-resistant cowpea and Water Efficient Maize for Africa projects, both coordinated by AATF¹¹².

3.5.3 Agricultural biotechnology

IPRs offer certain advantages in the development of agribusiness. In theory, IPRs serve as incentives for the private sector to be involved in agrobiotechnology. They potentially promote the participation of the private sector in improving plant varieties, i.e. high yielding plant varieties, varieties that can grow faster and those that are pest and insect resistant.¹¹³

Biotechnology is often proprietary and is mostly conducted by the private sector. Six of the giant corporations namely Aventis, Dow, Du Pont, Misul, Monsanto and Syngenta control 98% of the global market for patented genetically modified crops, 70% of the global pesticide market and 30% of the global seed market. North America and Europe account for over 80% of all world patents.¹¹⁴

Some concerns have been raised about the impact of IPRs on food security. Firstly, farmers may be required to enter into contracts with multinational companies (MNCs) for seeds. These Technology use Agreements (TUAs) would typically prevent farmers from sharing seeds or even saving seeds for the next planting season. In effect, the seeds do not belong to the farmers. Secondly, growth of the patented seed, reproduction of the patented gene or cell, and sale of the harvested crop constitutes taking the essence of the patent holder's invention and can constitute infringement of a patent. Mckay, J. 115 put it thus:

"A farmer whose yield contains seeds or plants originating from seeds spilled into them, or blown as seeds, in swaths from a neighbour's land or van flowing from germination by pollen carried into his field from elsewhere by insects, birds, or by wind, may own the seed or plants on his land even if he did not set about to plant them. He does not, however, own the right to the use of the patented gene, or of the seed or plant containing the patented gene or cell."

This was a novel ruling in the field of biotechnology. In effect, a patent holder has superior rights compared to a landowner on whose land crops containing a patented gene grows.

¹¹¹ http://www.biosorghum.org/

¹¹² http://www.aatf-africa.org/projects.php

¹¹³ Cullet, P. (2004) *supra*

¹¹⁴ Farhana Yamin supra

¹¹⁵ Monsanto v Schmeizer supra

Thirdly, a close scrutiny of countries with plant breeders' rights systems shows that they are not linked to "food security" at all¹¹⁶. In Kenya for example, out of 135 PBR applications filed by May 1999, only one was for a food crop and this food crop was a variety of green bean usually exported to Europe. In Zimbabwe between 1973 and 1999, 534 applications filed were for industrial crops and 208 for food crops. In the Republic of South Africa, out of 1435 breeders' licences granted between 1977 and 1998, over half were for industrial crops. This illustrates the fact that protection granted to plant breeders encourages them to concentrate on industrial crops at the expense of food crops¹¹⁷. These industrial crops could potentially create a monoculture that does not work in favour of agrobiodiversity. In other words, plant variety protection in the above cases promotes neither food security nor biodiversity¹¹⁸.

Although the use of conventional breeding and the improvement of agricultural practices may have served some countries well in the past, biotechnology is increasingly being cited as offering the scope to resolve some of the agronomic problems affecting crop production in developing countries. Private sector presence in the agricultural sector has further increased with the advent of modern biotechnology. PRs have clearly contributed to the development of biotechnology by offering the prospect of private profit.

The use and application of agriculture biotechnology in developing countries raises various issues. Alongside global concerns for environmental and human safety, most developing countries lack the capacity and the supporting systems such as biosafety regulations under which biotechnology is applied. But, efforts are currently underway to enhance the infrastructural and human capacity in public research institutions in Africa to fully exploit the vast potential of biotechnology. One notable example is an initiative by the UK-based Kirkhouse Trust to not only improve the research laboratories

¹¹⁶ Genetic Resources Action International (1999) Plant Variety Protection to Feed Africa? Rhetoric v Reality, Barcelona: GRAIN.

¹¹⁷ Odame, H., P. Kameri-Mbote & D. Wafula (2003). Governing Modern agricultural biotechnology in Kenya: Implications for food security, IDS Working Paper 199, IDS: Sussex, P. 22.

¹¹⁸ Jeanne Zoundjihekfon (2003). The Revised Bangui Agreement and plant variety Protection in OAPI countries, In: Bellnan, C.

¹¹⁹ Swaminathan (1999) *supra*; Chaturvedi, S., Agricultural biotechnology and new trends in IPR regime: challenges before developing countries, *Economic and political weekly* 30 March 2002 to name a few.

¹²⁰ OECD. Accessing Agricultural Biotechnology in Emerging Economies, framework papers from the OECD Global Forum on Knowledge Economy: Biotechnology, Paris 18-19 November 2002. (OECD, 2003)

¹²¹ Kenya now has the Biosafety Act in place to regulate trade in genetically modified organisms.

of several countries in East and West Africa but to also help develop the capacity of African scientists to handle marker-assisted selection processes. Other initiatives include the establishment of centres of excellence by the New Partnership for Africa's Development (NEPAD) in the various subregions of Africa designed to help African scientists and institutions become significant technological innovators as well as users. 122 Further, Sub-Saharan African countries have acceded to the Cartagena Protocol on Biosafety - an international agreement governing the trans-boundary movement of GM organisms – and are in the process of developing their policy and regulatory frameworks. Most of these countries have received technical and capacity-building support from the USAID-supported Program for Biosafety Systems (PBS) as well as through the United Nations Environment Programme (UNEP) and the Global Environment Facility (GEF) to help them set up risk assessment and regulatory systems for managing the trade in GM organisms.

That apart, biotechnology is but a tool and does not contain all the answers to food insecurity. Analysing the possible impact of biotechnology on food security in developing countries, Spillane posits that biotech will benefit the poor farmers only if 'applied to well defined social and economic objectives.' Cullet adds that application of biotechnology increases the likelihood of specialisation and increase in commercial crops at the expense of food crops. However, as noted earlier, public-private partnerships have been created in the past decade to utilize biotechnological tools to develop drought-tolerant, disease- and pest-resistant food crops specifically for African farmers with a view to improving their food security and livelihoods.

3.5.4 Research and access to proprietary technology

Another concern particularly in the public research community is that IPRs may stifle innovation rather than promote it through the use of broad claims on proprietary technology. 125 Broad claims are favourable to the right holders but inhibit research by others. Public research organisations, particularly those working in developing countries, such as the Consultative Group on

¹²² These include the Kenya-based *Biosciences eastern and central Africa (BeCA)*, the South Africa-based *Southern African Network for Biosciences (SANBio)* and the Senegal-based *West African Biosciences Network (WABNet)*

¹²³ Spillane, C., 'Agricultural biotechnology and developing countries: proprietary knowledge and diffusion of benefits' in Swanson, T., (ed.) *Biotechnology, agriculture and the developing world: the distributional implications of technological change* (Cheltenham: Edward Elgar, 2002)

¹²⁴ Cullet (2003) supra

Barton, J. & Berger, P., Patenting Agriculture, *Issues in Science and Technology Online* (2001) available at http://www.nap.edu/issues/17.4/p_barton.htm

International Agricultural Research (CGIAR) have to be IP savvy to ensure that they do not infringe IPRs belonging to third parties.¹²⁶

This risk has made international agriculture research centres wary of using technologies patented in donor countries in developing countries. ¹²⁷ Research organisations have to negotiate Freedom To Operate (FTO) agreements with right holders to ensure that the former do not infringe on the rights of the latter. There has been a claim that this increases the costs of research and with the prevailing low levels of public funds, this cost may be passed on to local communities and farmers. However, this does not necessarily have to be the case. For, it is possible to negotiate for the right to use proprietary technology free of license fees or royalty payments. A classic example is the Water Efficient Maize for Africa project where the Monsanto Company licensed its technologies royalty-free to AATF and The International Maize and Wheat Improvement Centre (CIMMYT) for use in developing drought-tolerant maize for African farmers¹²⁸.

A major issue often cited is the lack of negotiating capacity at public sector institutions. Apart from AATF, several other institutions provide IP-related advisory and negotiation assistance. These include the Public Interest Intellectual Property Advisors, Inc. (PIIPA)¹²⁹, an international non-profit organization that makes intellectual property counsel available free of charge for developing countries and public interest organizations who seek to promote health, agriculture, biodiversity, science, culture, and the environment. PIIPA has, to date, facilitated the provision of IP management services for organizations based in Sub-Saharan Africa¹³⁰. One other institution is the Public Intellectual Property Resource for Agriculture (PIPRA), a US-based initiative with global reach that seeks to pool publicly owned and patented technologies for use by research institutions in developing countries and specialty crops in the developed world. PIPRA's core activities include IP policy analysis, IP landscape analysis on particular

¹²⁶ See Wolson, R., 'Intellectual Property Tools, Innovation and Commercialisation of R&D: Options to assist Developing Countries in Positioning Themselves to Reap the Benefits of a Stronger Intellectual Property Regime, with Special Reference to the Role of intellectual Property Management in Research Organisations' a paper presented at the ICTSD/UNCTAD/TIPS Regional Dialogue on Intellectual Property Rights, Innovation and Sustainable Development in Eastern and Southern Africa 29 June – 1July 2004, Cape Town, South Africa

¹²⁷ Barton & Berger (2001) supra

¹²⁸ See http://www.aatf-africa.org/aatf_projects.php?sublevelone=30&subcat=5

^{129 &}lt;a href="http://www.piipa.org/">http://www.piipa.org/

For instance, at the request of AATF, PIIPA arranged for the Intellectual Property and Business Formation Legal Clinic of the University of Missouri Law School to conduct a comprehensive *freedom to operate* (FTO) assessment for a project in which the National Agricultural Research Organization (NARO) of Uganda is developing banana resistant to banana bacterial wilt for small-holder farmers in Sub-Saharan Africa

technologies, development of biotechnology resources¹³¹ and the provision of research consortia support, IP management workshops at public institutions and the provision of regional IP resources, mainly in Latin America and Southeast Asia.

3.5.5 Agro-biodiversity

Generally, a plant variety must be new, distinct, universal and stable to qualify for protection. It has been argued that this will lead to replacement of diverse seed varieties adapted for local conditions, usually by local farmers, with genetically uniform modern varieties promoted by commercial seed companies. This replacement of landraces resulting in homogeneity of crops, termed as 'monocultures' has been blamed for lack of crops' resistance to pest and diseases. NGOs have further argued that a PBR system fashioned on UPOV—particularly 1991—undermines food security in developing countries by promoting cultivation of a narrow range of genetically uniform crops, usually non-food cash crops, ¹³⁴ at the expense of food crops which are often the crux of food security in developing countries.

Agrobiodiversity should be understood to refer to the growing of a variety of plants useful in agriculture, i.e., inter-cropping practices or subdivision of land into plots used for various crops. That biodiversity contributes to micronutrients in the diet in traditional communities is undisputed. Agrobiodiversity can be affected by monocultural practices, genetic engineering and contamination of non-GM plants by GM crops. Both PBRs and patents are geared towards production of large quantities of certain preferred crops. Most people worldwide feed on wheat, maize, rice and potatoes. These crops form the bulk of world trade in food crops.

Contamination of non-GM crops by genetically modified crops could potentially lead to loss of biodiversity. In Mexico, several fields of maize were found to be contaminated by Bt maize whose entry into the country had not been authorised¹³⁵. Similarly, the natural cotton in India was reportedly contaminated by Bt cotton¹³⁶. Further, possibilities of contamination by genetically modified Canola were alluded to in the case of *Monsanto v Schmeizer*¹³⁷. Conservation and sustainable use of biological resources is

¹³¹ PIPRA has developed a plant transformation vector with a transposon module and has licensed it to AATF for use in the development of nitrogen use efficient and salt tolerant rice traits for smallholder farmers in Sub-Saharan Africa

¹³² Downes (2003) supra

¹³³ Shiva (2004) supra

¹³⁴ Dutfield, G., *Literature Survey on Intellectual Property Rights and Sustainable Human Development* (Geneva: UNCTAD, 2002)

¹³⁵ Shiva (2006) *supra*

¹³⁶ Id.

¹³⁷ Id.

well captured in the Convention on Biological Diversity (CBD). Article 11 of the CBD provides:

"Each contracting party shall, as far as possible and as appropriate, adopt economically and socially sound measures that act as incentives to the conservation and sustainable use of components of biological diversity."

Arguably, this provision represents the disconnect between the need to conserve biodiversity and the need to protect proprietary knowledge. It should be remembered that parties to the CBD who are also parties to WTO have committed themselves to respect the WTO's TRIPs Agreement. TRIPs puts more emphasis on trade than on conservation. Herein lies the difficulty of using IPRS to conserve biodiversity. Similarly, PBRs are geared more towards protection of plant varieties that have high economic returns at the expense of biodiversity¹³⁸. However, biotechnology could play a role in the conservation of endangered plant species thereby upholding agrobiodiversity. Farmers' rights potentially provide effective protection for biodiversity; cooperation between commercial plant breeders and local farmers is vital if conservation of agrobiodiversity is to be achieved. 139

3.6 Conclusion

There is no easy answer in the effort to curb food insecurity. The constraints to food security are multiple and complex necessitating equally complex and multifaceted measures to stave off hunger. The advent of a global intellectual property system that requires all countries to adhere to set minimum standards regardless of their level of development (albeit with minimal flexibilities), coupled with the inequalities brought about by globalisation, could potentially exacerbate food insecurity particularly in vulnerable communities in developing countries.

Developing countries need to take full advantage of all the flexibilities in the international legal regime to ensure that, as much as possible, the fragile food security situation is not aggravated. With regard to IPRs, building capacity in the formulation of appropriate pro-food security policies and regulations, implementation and enforcement of IPRs in a manner supportive of national food security objectives is crucial in balancing interests between commercial and other IPR users and the general public. Global concerted efforts must be made at all levels of policymaking and implementation if the goal of eradicating hunger is to be achieved.

138 Zoundjihekpon (2003) supra

¹³⁹ Shiva (1994) Farmers rights and Convention in Biological Diversity, in Sanchez, V. & C. Juma, Biodiplomacy - Genetic Resources and International Relations, ACTS: Nairobi, pp 107-118.

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Chapter Four

Plant Variety Protection (Plant Breeder's Rights) in Kenya

By Dr. Evans Sikinyi

Introduction

lant breeder's right is one form of Intellectual Property (IP) that is recognised and protected worldwide. Property is traditionally known as an item that is owned by a person, whether natural or legal. This property can be sold (assigned), leased (licensed), developed (exploited), mortgaged and is usually enforced by law. There are two types of property, namely tangible and intangible property. Tangible property is more commonly known and may include fixed property like a house, land or movable property like a vehicle. However, intangible property, is less known or understood and this constitutes Intellectual Property (IP),

The name intellectual property arises from the fact that this property is a result of human intellect. It is a product of human creation, an idea that can only be protected upon expression. Intellectual property is divided into three major branches: Plant Breeder's Rights (PBRs), Copyright and Neighbouring Rights (CNRs) and Industrial Property Rights (IPRs). Intellectual property rights are granted and administered by an arm of a government or state(s) with the state reserving the right of eminent domain.

Kenya is party to the main regional and international treaties and agreements on Intellectual Property (IP)¹ and has enacted legislations on IPRs to

Including the Paris Convention for the Protection of Industrial Property (1883), the Nairobi Treaty on the Protection of the Olympic Symbol (1981), the Trademark Law Treaty (TLT) (1994), Madrid Agreement Concerning the International Registration of Marks (1891) since 26th June 1998, Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks (1989) since 26th June 1998, Patent Co-operation Treaty (PCT) of 1970 since 1994, Lusaka Agreement establishing ARIPO of 1976, Harare Protocol for the Protection of Patents and Industrial Designs of 1982, WIPO Treaty

accommodate changes in the local, regional and international scenes which include conformity to the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement. The three aspects of IP are administered in Kenya as follows:

Plant Breeders Rights, for new varieties of plants, are administered by the Kenya Plant Health Inspectorate Service (KEPHIS) under the Ministry of Agriculture under The Seeds and Plant Varieties Act, Cap 326, 1972, of the Laws of Kenya. Industrial Property Rights are administered by the Kenya Industrial Property Institute (KIPI) in the Ministry of Trade and Industry under the Industrial Property Act, 2001. Copyright and Related Rights that constitute literary (books, poems, etc.) and artistic (paintings, music, etc.) works as well as cinematographic works, performers rights, broadcasting rights, and the rights of producers of phonograms. These have been administered in the past by the Office of the Registrar General at the Attorney General's Office, through the Copyright Act, 2001. These will however be administered by the newly created Kenya Copyright Board.

Intellectual property rights are issued primarily to encourage the creator to disclose his creation to the public and thereby promote the progress of science and the useful arts. This arrangement has been considered as a bargain or contract between the government (state) and the creator where the creator discloses² the creation and the government in return provides the monopoly³ for a limited period of time. This contract is the basic foundation for IPRs, which are governed by IP laws, creating an important government system that provides incentives for creators to develop new technology and art for the society. The creators are assured that their IPRs are respected and they can make reasonable returns from their investment. Geographical Indications. This is another form of intellectual property, which identifies a good as originating in the territory of a particular country, or a region or locality in that country, where a given quality, reputation or other characteristic is essentially attributable to its geographic origin.

The role of Geographical Indications (GIs) is similar to that played by trademarks, because both geographical indications and trademarks are used to identify goods. The distinctiveness of goods for their identification is

Establishing WIPO of 1970, International Union for the protection of New Varieties of Plants (UPOV), 1978 Convention, since May 28 1999, Agreement on Trade-Related aspects of Intellectual Property Rights (TRIPS Agreement) of 1995.

The disclosure involves a description of the invention that must be clear and sufficient enough such that a man skilled in the "art" can carry it out.

³ Usually 20 years for inventions, over 50 years for copyrights, 10 year term for marks and renewable for ever.

mainly associated with their quality. For trademarks this quality is mainly accredited to the investor (company). For geographical indications, the "quality, reputation or other characteristic" of the good is "essentially attributed to the geographical origin of the good"⁴. This has been widely and effectively used in wines and spirits particularly in Europe.

An investor will feel protected to invest in goods that are of geographical origin in nature, in a country that respects geographical indications. Within the TRIP'S Agreement, the protection of GI's for all goods is only against misuse. However the level of protection for wines and spirits is higher. There is no requirement that the public is misled or that unfair competition has occurred. Presently there is considerable debate on the advisability of extending the higher level of protection (accorded to wines and spirits) to all foodstuffs or even to all goods and resolving problems caused by different evaluations of names in different jurisdictions. A draft GI Bill has been drafted and awaits discussion and passing into law by the Kenyan parliament. The Bill, to be administered by the Kenya Industrial Property Institute, provides for a wide scope of protection which will compliment protection provided by plant breeder's rights.

Kenya has a varying landscapes ranging from the mountainous regions, the highlands, 'nyika' plateau, the savannah grasslands, all the way to the coastal belt and coupled with different climatic and soil conditions have produced diverse agricultural products with very unique characteristics. These include Kenyan coffee and tea, well known throughout the world for its unique qualities. These are however exported raw, unprocessed or semi-processed, which is then blended with other cheaper products and sold worldwide sometimes as Kenyan coffee or tea. If protected they will fetch the premium price they deserve. Other products include honey from arid and semi-arid areas known for its unique taste, cheese and ghee with distinctive tastes and qualities that stand out from similar products sourced from Europe. A new initiative has been launched to capture the intellectual property value of these Kenyan products on the international markets, by directly involving in the marketing and distribution of the products.

The Agreement on Trade- Related Aspects of Intellectual Property Rights, (TRIPs Agreement) which came into effect on 1 January 1995, is the most comprehensive multilateral agreement on intellectual property negotiated under the World Trade Organization. The TRIPs Agreement forms what is known as the triple pillars of WTO Agreements namely, General Agreement on Trade in Goods (GATT 1994), General Agreement on Trade in Services

⁴ Article 22(1) of the TRIPS Agreement

(GAS), and Agreement on Trade-Related Aspects in Intellectual Property Rights (TRIPs). The TRIPs Agreement was among the new issues that were negotiated during the Uruguay Round including the Agreements on Trade-Related Investment Measures (TRIMS), and Trade in Services.

WTO-TRIPs is based on both Paris and Berne Conventions administered by the World Intellectual Property Organization (WIPO). It provides basic Principles on: a) National treatment and reciprocity, whereby a foreign national is afforded the same level of protection as a national of that country. Thus, a national of country X would receive the same benefits in country Y as if he or she were a national of country Y. Under the principal of reciprocity, a foreign national is given the same rights in a country as the rights that a national of that country has in that foreign country. Thus, a national of country X would receive the same benefits in country Y that a national of country Y would receive in country X. International IP treaties generally operate on the national treatment principle. b) The TRIPS Agreement adds another principle, the most-favoured nation treatment principle. According to this principle, any advantage, favour, privilege or immunity granted by a Member of the WTO to the national of any other country must immediately and unconditionally be accorded to the nationals of all other Members.

The TRIPs Agreement sets minimum requirements of IPRs, provides enforcement mechanisms, establishes dispute settlement procedures and provides transitional arrangements. It covers copyright and related rights; trademarks including service marks, geographical indications including appellations of origin;⁵ industrial designs; patents including the protection of new varieties of plants; the layout-designs of integrated circuits; and disclosed information including trade secrets.

Article 27 of the TRIPs Agreement is the most important as far as plant variety protection is concerned. It states that patents shall be available to all inventions whether products or processes in any field of technology provided that they are new, involve an inventive step and are capable of industrial applications. No discrimination as to place of invention or field of technology and whether products are imported or locally produced. However, members may exclude from patentability: 1. inventions contrary to ordre public or

^{5 &}quot;Appellation of Origin" refers to a sign that indicates that a product originates in a specific region, but is limited to those cases where the characteristic qualities of the product are due to the geographical environment, including natural, and human factors, of that region

[&]quot;<u>Geographical Indication</u>" is a term that is often used broadly to embrace all forms of protection for indications of geographical origin, including both indication of source and appellation of origin,

morality including to protect human, animal or plant life or health or to avoid serious prejudice to the environment, provided that such exclusion is not merely because the exploitation is prohibited by domestic law. 2. Diagnostic, therapeutic and surgical methods for treatment of human or animals. Article 27. 3 (b) states that 'members may also exclude from patentability; plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, members shall provide for the protection of plant varieties either by patents or by an effective Sui generis system or by any combination thereof.' (Sui Generis is a Latin phrase meaning "of its own kind". A sui generis system, for example, is a system specifically designed to address the needs and concerns of a particular issue. This could mean a system entirely separate and different from the current IP system. The term is sometimes used to refer to new IP, or IP-like, rights. Examples of sui generis IP rights, include plant breeders' rights (as reflected in the UPOV Convention) and the IP protection of integrated circuits (as reflected in the Treaty on Intellectual Property in Respect of Integrated Circuits, 1989 ("The Washington Treaty"). Article 27 3(b) was to be reviewed 4 years after the entry into force of the WTO agreement, which was in 1995, but so far still under discussion as it is controversial. Similarly, the developing countries consider Geographical Indications (GIs) Extension, Access to Genetic Resources (GR), Protection of Traditional Knowledge and Folklore (TK&F) very important. However, the TRIPS Council has only been able to continue the consultations / negotiations. This consultative process and Council negotiations have been on-going for a long time. Proposals in all these areas have been tabled by the Kenyan and other developing countries' delegations but opposed by some developed countries that are especially benefiting from the status quo, especially as regards to access to genetic resources and patents based on traditional knowledge and folklore.

Thus the four major intellectual property rights covered by TRIPs of relevance to plants and plant varieties are patents, geographical indications, undisclosed information (trade secrets) and trademarks.

The International Convention for the Protection of New varieties of Plants (the 'UPOV Convention') was signed in Paris in 1961 and entered into force in 1968. It was revised in Geneva in 1972, 1978 and 1991. The 1978 Act entered into force in 1981, while the 1991 Act entered into force in April 1998. The Convention established the International Union for the Protection of New Varieties of Plants, an independent intergovernmental body, based in Geneva.

An important feature of the IP system is that it is in constant evolution. New advances in technology particularly information technology and biotechnology and changes in economic, social and cultural conditions, have necessitated continuous appraisal of the system and at times adjustment and expansion. For example, the last few decades have seen the recognition of new forms of IP, such as sui generis form of protection for plant varieties (in the 1950s and 1960s), patent protection for biological material, plants and animals (in the 1970s and 1980s), a sui generis form of protection for layout designs of integrated circuits (1980s), copyright protection for computer software (1980s) and protection for databases and compilations of data (1980s and 1990s). The possible protection of tradition-based innovations and creations by the IP system is more recently being articulated and possible systems to be proposed soon.

Due to the advances in technology and years of experience in implementing plant breeder's rights since 1961, the UPOV Convention has been revised severally. Minor amendments were made in 1972 and 1978. However substantial amendments were made in 1991, which were necessitated by the fact that in 1961 certain concepts were still new to IP particularly in plant variety protection. In 1991, after 30 years of experience new improvement had to be introduced. Similarly from 1961 to 1991 had seen tremendous scientific discoveries and technological developments that had implications on plant improvement and variety protection. To handle the identified problems through experience or arising from scientific and technical progress changes were needed to maintain the integrity of the PVP system. The following were revised:

The standard rules for the grant of protection particularly on novelty, distinctness, uniformity and stability worked well in practice. Therefore Only some technical adjustments were made to the relevant texts, but no major changes.

Minimum number of genera and species to be protected: Under the 1978 Act, each member state was required to protect "the largest possible number of species" and must protect a minimum of five plant and genera on accession to 1978 Act rising to 24 after eight years. Under the 1991 Act each member state is required to protect a minimum of 15 genera and species on accession, but must protect all plant genera and species ten years after accession to the 1991 Act.

<u>Deadline for ratification of the 1978</u> convention was to be before 1991 Act came into force though not later than 31st December 1993 for developed countries or 31st December 1995 for developing countries. The 1991

Convention came into force on April 24, 1998 when a minimum required number of states (5) signed on to it.

Minimum Scope of Protection: Both the 1978 and 1991 Acts specify acts with the propagating material that require prior authorization from the breeder. The 1978 Act specifies production for purposes of commercial marketing, offering for sale and marketing of propagating material of the variety. The 1991 Act extends and specifies production or reproduction (multiplication), conditioning for the purpose of propagation, offering for sale, selling or other marketing, exporting, importing or stocking for any of the above purposes of the propagating material of the variety. It further specifies some acts in relation to harvested material if obtained through unauthorised use of propagating material and if the breeder has had no reasonable opportunity to exercise his right in relation to the propagating material. Thus breeder's Right may extend to harvested material.

In terms of <u>varieties covered by breeder's rights the</u> 1978 Act covers the protected variety and by implication, any other variety not clearly distinguishable from the protected variety and varieties whose production requires repeated use of the protected variety. The 1991 Act specifies The protected variety, expressly any variety not clearly distinguishable from the protected variety, varieties whose production requires repeated use of protected variety and Essentially derived variety which was a new introduction.

The 1978 Act provided for compulsory exceptions to the right of the breeder in terms of use of protected variety as source of variation of creating other varieties and marketing of such other varieties (breeder's exemption"). The 1991 Act also provides exceptions for acts done for breeding other varieties and acts done for the marketing of such other varieties (unless such varieties are essentially derived), but also adds acts done for experimental purposes and those done privately and for non-commercial purposes.

For minimum duration of Protection <u>for</u> Trees and Vines the 1978 Act provides for 18 years, while 1991 Act gives 25 years. Other plants had 15 years in the 1978 Act which was raised to 20 years under the 1991 Act.

Intellectual Property Rights in Agriculture

Historically, systems for the protection of intellectual property were applied principally to mechanical inventions of one kind or another, or to artistic creations. The assignments of IPRs to living things are of relatively recent origin in developed countries. Vegetatively propagated plants were first

made patentable in the US only in 1930 while the protection of plant varieties by plant breeder's rights only became widespread in the second half of the 20th Century. As a result, systems for the protection of plants were based on the economic structure and circumstances of agriculture that prevailed in developed countries during this period. This reflected the growing interest of private breeders in protecting their intellectual property. Farmers have traditionally replanted, exchanged or sold seed from the previous years' crop which means that breeders have difficulty in recouping the investments made in improved varieties through repeat sales. Patents or PBRs normally impose restrictions on farmers' ability to sell grown seed (and in some cases to reuse it) and thus enhance the market for the breeders' seed. Even in the developed countries, reuse of seeds remains quite common although for many crops annual purchase is now the rule. In developing countries the majority of farmers reuse, exchange or sell informally to neighbours, and annual purchase of new seed has been relatively low in most countries.

With the adoption of the TRIPS Agreement, developing countries have been obliged to adopt protection of plant varieties, by patents or by other means. There has been a debate whether plant variety protection is beneficial, both to producers and consumers, or its possible impact on food security. As with medicines, a crucial issue is whether and how intellectual property protection can help promote research and innovation relevant to the needs of developing countries and poor people. Another question asked is whether, and how IP protection affects the cost and access of farmers to the seeds and other inputs they need.

If the aim of the plant variety protection is to provide incentives to breeders, (as stated earlier) one of the questions that arises is how the contribution of farmers to the conservation and development of plant genetic resources should be recognised and preserved. Until formal breeding programmes were introduced, varietal and cultural improvements depended on a process of selection and experimentation by farmers. Formal breeding programmes have since utilised those varieties and knowledge in order to develop improved varieties of high productivity, or with other desirable characteristics. The question is whether this contribution of farmers to conservation and innovation should be either protected or rewarded. Building on the principles embodied in the Convention on Biological Diversity (CBD), the International Treaty on Plant Genetic Resources for Food and Agriculture (ITGFRA) seeks to establish principles for facilitating access to plant genetic resources and establishing fair and equitable mechanisms of benefit sharing.

Under TRIPS, article 27.3 (b) countries may exclude from patentability plants and animals and essentially biological processes for producing them

but no micro-organisms. And they are required to apply some form of protection, either by patents or a sui generis system to plant varieties. But it is important to note here that TRIPS does not mention whether or not genes should be patentable, whether derived from plants, humans or animals. The issue raised by TRIPS is what constitutes an invention in relation to genetic material. For instance, should genetic material identified in nature be patentable on the grounds that isolating and purifying it differentiates it from a non patentable discovery? This is a matter for national legislation. The only specific requirement, other than for micro-organisms, is that plant varieties be protected.

It should be noted that some people object altogether to the patenting of life forms on ethical grounds, considering that the private ownership of substances created by nature is wrong, and inimical to cultural values in different parts of the world.

Intellectual property protection can be conferred in relation to plant materials in a number of ways: a)The US model of plant patents, which are distinct from normal (utility) patents; b) Through allowing normal patents on plants or parts thereof, such as cells; c) Through patenting plant varieties as is the practice in the US and in few other countries (for example, not in the EU); d) Through applying a sui generis form of plant variety protection—such as plant breeders' rights (as in the EU or the US) or other modalities; e) Through allowing patents on DNA sequences, and gene constructs including the gene, plants transformed with those constructs, the seed and progeny of those plants. In addition, patents are widely used to protect the technologies which are employed in research on plant genomics.

Apart from the use of patents and PVP, the intellectual property in plants can be appropriated by technological means. For instance, crops such as commercial hybrid maize cannot be reused if hybrid yield and vigour are to be maintained. This characteristic of some hybrids confers a natural form of protection by which seed companies can more readily capture a return on their investment through repeat seeds sales. By contrast, seeds of other types of plant varieties can be replanted each year without deterioration in yield, so that farmers may replant their own seed (harvest) without re purchasing. The Green Revolution varieties were of this nature, which is one reason why they were so successful. It is only more recently that hybrid varieties of rice and wheat have been developed.

Genetic Use Restriction Technologies (known as GURTs) is a term used to describe different forms of controlling the action of genes in plants. The so-called "terminator gene" technology renders the seed sterile so that it is not physically possible to germinate or to grow a second crop. However, there

are other characteristics which can also be controlled, either for agronomic or commercial reasons. Though the effect of technological protection is similar to that of IP protection, it may be cheaper and certainly more effective in the sense that it is self-enforcing.

Under the Convention on Biological Diversity (the CBD), 1992, Article 8 (j) and related provisions, mandates Contracting Parties, as far as possible and as appropriate, subject to their national legislation, to "respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices."

Under TRIPS, developing countries may choose an "effective sui generis" PVP system. A major decision is to identify a system that is suitable to their particular agricultural and socio-economic circumstances. In the past, concerns have been expressed that though UPOV provides a ready made legislative framework, and so far "an effective sui generis system" the disadvantage is that it was designed with the commercialised farming systems of the developed countries in mind therefore not applicable to developing countries. There are therefore concerns expressed about the application of the UPOV model in developing countries, some of which may apply to other forms of IP.

This resulted in countries and organisations experimenting with a number of alternatives in this area. For instance, the OAU (now the African Union) produced a model legislation that was recommended to African countries to adapt in their own legislation. The model provided for the right to save, use, multiply and process farm-saved seed, but not to sell it on a commercial scale. However this has proved difficult to adopt since the 'model law' combined issues on plant breeder's rights, genetic resources, farmers rights and access and benefit sharing, which ideally should be in different pieces of legislations. Most countries that tried to adopt it took it as one legislation that proved impossible as far as implementation was concerned. Some of the provisions, when combined, are in contradiction. For instance, classical intellectual property is based on individual ownership, while issues on traditional or indigenous knowledge is communal ownership. The Indian government incorporated in its PVP legislation (2002) a clause 39 (1) (iv), that states:

"a farmer shall be deemed to be entitled to save, use, sow, re-sow, exchange, share or sell his farm produce including seed of a variety protected under this Act in the same manner as he was entitled to before the coming into force of this Act provided that the farmer shall not be entitled to sell branded seed of a variety protected under this Act."

India did request to join UPOV but this clause was however found to be inconsistent with the UPOV Convention, which will require clarification or amendment before joining UPOV. Presently there are very many states or countries that are adapting the UPOV Convention since it has proved to be an effective sui generis system so far, despite the concerns raised by some quarters.

The breeders' exception under PVP also differs from patent law in that breeders may, without authorisation, use a protected variety as the basis for breeding another variety (which itself may then gain protection). It has been suggested that PVP provides less protection than patents, offers little incentive for research, but correspondingly is less restrictive of incremental follow-on innovation than patents. Again developing countries are free to choose exactly what exceptions they provide.

4.1 What is Plant Breeding?

Over the years, farmers have been known to selectively choose or breed their plants and animals to get better or more suitable ones for their purposes. This was a trial and error process where the actual mechanism that determined inheritance was not known or understood. However, laboratory studies and the study of genetics in the early nineteenth century led to better understanding of the genetic mechanism of inheritance. Gregor Mendel was the first to demonstrate what happens in the transmission of hereditary traits from parents to children, forming the so called 'Mendel's laws of inheritance'. By carrying out selective cross-breeding of pea plants (*Pisum sativum*) over many generations, he discovered that certain traits show up in off-springs without any blending of parent characteristics and do so in a predictable pattern. This is a key principle in the modern plant breeding and plant breeder's rights. Plant breeding is therefore, the art and science of crossing and selecting better new plants from the existing plants

Plant breeding starts with the discovery or creation of genetic variation in a plant species. From within that variation, plants showing desirable traits that can be inherited in a stable manner are then selected. The plant breeder's final selection of superior plants will form the basis of one or more new plant varieties. Plant breeders use many techniques and forms

of technology to create genetic variation and to select from that variation. Different types of plant varieties have been developed depending on the physiology and reproduction system of each plant species. The breeder therefore aims at producing an improved variety that performs or have has other characteristics than the existing variety. These differences may or may not be of commercial value.

4.2 What is a plant variety?

Article 1 of the 1991 Act of the UPOV Convention gives a clear broad definition of a plant variety, including varieties not necessarily meeting the conditions for the grant of breeder's right. It is however important to note that the former Acts of the UPOV Convention (1961, 1972 and 1978) abstained from giving a clear definition on what was considered a variety. Article 19(vi) states:

(vi) "variety" means

"a plant grouping within a single botanical taxon of lowest known rank, which grouping, irrespective of whether the conditions for the grant of a breeder's right are fully met, can be defined by the expression of the characteristics resulting from a given genotype or a combination of genotypes distinguished from any other plant grouping by the expression of at least one of the said characteristics, and considered as a unit with regard to its suitability for being propagated unchanged".

Under section 2 of the Seeds and Plant Varieties Act a "plant variety" means an assemblage of cultivated individuals which are distinguished by any character (morphological, physiological, cytological, chemical or others) significant for the purpose of agriculture, horticulture or forestry, and which when reproduced (sexually or asexually) retain their distinguishing characters,". Though the two versions and not fundamentally different, the UPOV definition is now accepted internationally.

It should be noted that the technical criteria for a variety eligible for protection under the Kenyan protection system as well as the UPOV Convention are set at a higher level than the general definition as given above. These technical requirements are mainly covered under Article 5 of the UPOV 1991 Act, on conditions of protection which require the variety to be new, distinct, uniform and stable. The grant of the breeder's right shall not be subject to any other conditions as long as the variety has a designated denomination and the applicant complies with formalities and paid the requisite fees, as required by each territory where the application is made.

The novelty requirement is basically a legal criterion and does not depend on or imply the quality of the variety. The technical requirements of DUS are further elaborated in Articles 7 to 9.

Article 7 of the Convention on distinctness reads:

"the variety shall be deemed to be distinct if it is clearly distinguishable from any other variety whose existence is a matter of common knowledge at the time of the filing of the application. In particular, the filing of an application for the granting of a breeder's right or for the entering of another variety in an official register of varieties, in any country, shall be deemed to render the other variety a matter of common knowledge from the date of application, provided that the application leads to the granting of a breeder's right or the entering of the said other variety in the official register of varieties, as the case may be". This is an important technical requirement that has prevented varieties to be protected since the variety is not found to be different from other varieties after testing. Under Article 8 on Uniformity, "the variety shall be deemed to be uniform if, subject to variations that may be expected from the particular features of its propagation, it is sufficiently uniform in its relevant characteristics."

4.3 What is Plant Variety Protection (Plant Breeder's Rights)?

Plant Breeders Rights are rights, granted by the state (government) to persons, who have developed new varieties of plants, for a limited period of time. These rights allow the owner to have exclusive rights to exploit the variety, and entitle the breeder to prevent unauthorized use of their variety. A protected variety, therefore, is a plant variety for which plant breeder's rights have been granted to the owner of the variety and the variety complies with the internationally recognized standards, i.e. distinctness, uniformity, stability and novelty, and also designated by prescribed variety denominations. The protection is marked by a grant of special title of protection.

4.4 Why Plant Variety Protection (Plant Breeder's Rights)?

Successful breeding requires skill (art and science) together with great investment in land, specialized equipments, and scientific manpower. Additionally, it is a long-term undertaking which, for instance, it takes between 10-15 years to develop a new variety in many species. Not all new varieties are successful. Since society benefits from increased output and improved quality made possible by plant breeding, breeders need to be encouraged to continue investing and risk taking in this area. Secondly once a variety is released, other individuals can easily reproduce it, denying the breeder from benefiting from his innovation. For example one single cutting of a vegetatively propagated plant can result in plant covering hundreds

of hectares without reference to the breeder. Variety protection therefore is designed to encourage the development of new varieties by allowing the breeder to benefit from the investment.

4.5 What Does the Protection Mean?

The rights holder can exclude third parties from using the propagating material of the variety without his/her permission for: production or reproduction, conditioning for the purpose of propagation, offering for sale or any other marketing activity, exporting or importing and stocking for any of the purposes mentioned above.

4.6 Who can apply for protection?

Only the breeder of the new variety is eligible for application. The "breeder" in this case is

- 1. The person who bred or discovered and developed the variety.
- 2. Person who is the employer of the above mentioned, or who commissioned the work of the breeder.
- 3. Or successor in title of any or two of the above persons.

Note that farmers can also develop varieties and protect them so long as they meet the criteria for protection, which allows farmers to also be breeders.

4.7 What are the conditions for protection?

To qualify for protection, the variety must be

Distinct - from any other existing variety

Uniform - in its relevant characteristics

Stable - should remain unchanged in those relevant characteristics even after repeated propagation.

These are confirmed by the authorities through the DUS grow out tests which are based on data provided by the breeder. There are standard procedures that are used for these trials which are crop specific.

4.8 How does one access a Protected Variety?

Exploitation can take various forms:

- 1. The holder of rights can exploit the variety exclusively by themselves i.e. the holder can propagate and grow their own variety.
- 2. The breeder or holder of the rights can transfer the breeder's rights , hence , exploitation, to someone else, just like any other personal property.
- 3. The holder can give a non-exclusive license to other individuals to exploit the variety. In this case the material is availed to several individuals at the conditions set by the holder of rights.
- 4. An exclusive license can be given to one individual or entity, to exploit the variety. It is the prerogative of the holder of rights to decide on how the rights in the variety can be exploited. The state (government) has no role in deciding on how exploitation will be done, after issuing the rights.

However, since the plant breeder's rights constitute a contract between the state and the holder of the rights, it is expected that the breeder will supply the farming community with the variety in adequate amounts to satisfy the market. This should be a mutually negotiated and agreed upon process amongst the parties, through licensing, and contracts. In certain circumstances where the variety is not adequately availed and as a matter of national interest the government or the authority, may issue a compulsory licence to a third party, for a limited period of time, to supply the planting material to the farming community.

4.9 What is Plant Variety Testing?

Variety testing involves the growing of a variety in a way, which ensures the **expression** of the relevant characters of the variety. This can be in the field, green house, growth chamber or any other suitable environment. Different types of plants e.g. flowers; cereals, trees etc. require different designs of testing depending on the need of each type of plant. When different varieties of the same plant are grown together, the expression of their characters are evaluated and recorded, which is then used to distinguish the varieties and identify them.

4.10 Plant Variety protection in Kenya

Plant variety protection (plant breeder's rights) in Kenya is governed by the Seed and Plant Varieties Act, Cap 326 of the Laws of Kenya of 1972. This Act contains two major sections on seed certification and plant breeder's rights. In the year 1975 the Act became operational for the seed certification

section, without the plant breeders rights. However, under the plant breeder's rights, the Act provides for grant of proprietary rights to persons breeding or discovering new varieties of plants. The Act was revised in 1977 and 1991, to incorporate emerging issues. In 1994 the official regulations to guide the implementation of plant breeder's rights service were published. An office to administer the service was established in 1997. In May 1999 Kenya acceded to the International Union for the Protection of New Varieties of Plants (UPOV) under the 1978 Convention. In year 2002 some minor amendments were made to the Act, and published, for the Act to conform to the UPOV convention upon accession

4.11 Grant of Plant breeder's rights:

Under Article 17 (1) of the Seeds and Plant Varieties Act, plant breeder's rights may be granted in respect of plant varieties of such species or groups as may be specified by a scheme made by the Minister of Agriculture. Before making such a scheme, it is required that the Minister consults representatives of such organizations as he deems to have a substantial interest in the crops or species that may fall under the scheme, for purposes of plant variety protection. Any such scheme –

- 1. May make different provision for different species or groups of plant varieties.
- 2. May contain such supplemental, incidental and transitional provisions as appear to the Minster to be appropriate.
- 3. May be varied or revoked by a subsequent scheme.

It is important to note that if there is a variation or revocation of a scheme this shall not prejudice a grant of plant breeder's rights made before the variation or revocation was effected. This provision was made to protect the integrity of the plant breeder's rights system. Presently, there are 10 schemes covering over 250 crops, which were published in the year 2001. The Schemes specify the group of plant varieties and crops that are applicable, period of years for which the rights are exercisable, and the number of years prescribed before compulsory licensing can be applicable.

Plant breeders' rights shall be granted by the Authorized Officer only if he is satisfied that the conditions laid down in the Act are fulfilled. For the purposes of the Act, the Managing Director of the Kenya Plant Health Inspectorate Service (KEPHIS) under which the service operates, is the Authorized Officer. Initially prior to formation of KEPHIS, the Director of Agriculture was the authorised officer as stipulated in the Act.

4.12 Conditions for grant of rights:

There are specific laid down conditions that must be fulfilled in respect of a) the applicant for plant breeder's rights, and b) the plant variety to which the application relates.

4.12.1 a) Applicant

Section 18 (2) of the Seeds and Plant Varieties Act, states that an applicant for plant breeder's rights must be the person who bred or discovered the plant variety concerned, or his successor in title. References to the discovery of a plant variety included whether found growing in the wild or occurring as genetic variant, whether artificially induced or not. However, experience showed the discovery aspect as breeding a new variety was controversial, particularly to genetic resources and biodiversity issues. This necessitated an amendment with a proviso of 'discovering and developing' the variety on the International level. This takes into account for the innovativeness requirement to warrant protection of the intellectual input. This article has been one of the subjects considered for review where the aspect of discovery and development has been included.

4.12.2 b) The plant Variety

The plant variety must:

- 1. Be sufficiently distinguishable by one or more important morphological, physiological or other characteristics from any other variety whose existence is a matter of common knowledge at the time of the application, whatever may have been the origin, artificial or natural, of the initial variation from which it resulted; (Distinctness)
- 2. Be sufficiently varietal pure;
- 3. Be sufficiently uniform or homogenous having regard to the particular features of its sexual reproduction or vegetative propagation; (Uniformity requirement)
- 4. Be stable in its essential characteristics, that is to say, it must remain true to its description after repeated reproduction or propagation or, where the application prescribes a particular cycle of reproduction or multiplication, at the end of each cycle. (Stability)

In the original 1972 Act, there was a requirement that the agro-ecological value of the variety must surpass, in one or more characteristic that of existing varieties according to results obtained in official tests. However, this was found not to be a requirement for plant variety protection, but a valid requirement for release and commercialisation of new varieties. This was deleted and published in the miscellaneous amendments of 2002, given that it was in conflict with the UPOV convention

A variety can be considered to be of common knowledge if the plant variety is a) already in cultivation or exploited for commercial purposes, or b) included in a recognized commercial or botanical reference collection, or c) if there are precise descriptions of the variety in any publication.

4.13 Novelty Requirement

A variety shall be considered new, if at the date of filing an application:

- 1. No plants of the variety, or material forming part of the variety, or derived from plants of the variety may have been offered for sale or sold by **any person** in Kenya for more than twelve months before the application
- 2. No plants of the variety and no material forming part of, or derived from, plants of the variety, may have been offered for sale or sold by the **applicant** or with the **consent** of the applicant in Kenya or elsewhere
- 3. However, these restrictions do not apply to sales or offers for sale made outside Kenya during the period of six years for trees and vines and four years in the case of the rest of crops, ending with the date of the application.
- 4. Similarly the restrictions will not apply if another person uses reproductive material of the plant variety under the control of the applicant,
- 5. For the purpose of increasing the stock for the applicant, or
- 6. For carrying out tests or trials, and
- 7. The whole of the material produced, directly or indirectly, from that reproductive material remains the property of the applicant

4.14 Name or variety denomination

It is a requirement that on application for plant breeder's right, an appropriate name or denomination is proposed for the candidate variety. The denomination or name must enable the identification of the variety, and should not mislead or cause confusion concerning the characteristics, value or identity of the variety or the identity of the breeder. Under the Kenyan system, the Minister may require the person making an application to be included in the list or index, to provide an appropriate name for the plant variety. If the name provided is found to be unsuitable, the inclusion of the name in the index can be refused until a suitable name has been submitted. The procedure for compiling and amending the index or list of names is elaborated in the First Schedule of the Seeds and Plant Varieties Act.

4.15 Period for which rights are exercisable

Under the present Kenyan Law (Section 19 Seeds and Plant Varieties Act), specific schemes specify the period for exercising plant breeder's rights, which does not exceed twenty-five years, for all types of crops. However, for fruit trees and their root-stocks, forest and ornamental trees and grape vines the period should not be less than eighteen years, as specified by the various Schemes. For the rest of the crops, the period shall not be less than fifteen years. This period commences on the day on which the grant of the plant breeder's rights takes effect.

Extension of protection period

If, for reasons beyond the control of the applicant, and the authorized officer is satisfied that, such holder has not been adequately remunerated by the grant of the rights, the period may be extended, as the officer may think appropriate, on application. This, however, will not exceed twenty-five years Section 19 (5). It is important to note that under the UPOV system, varieties of tree species and vines can be protected for a period not less than 25 years, while varieties of other plants for not less than 20 years, to be counted from the date of grant (Article 19(2) UPOV 1991 Act). There is, however, no provision for extension of the period.

Surrender of rights

A holder of plant breeder's rights may at any time make an application to the authorized officer, offering to surrender his rights (Section 19(6) of the Act). However a notice of the application must be gazetted to allow for hearing any person affected by the rights to object the surrender. This could be, for instance, a person or entity licensed to produce or market the variety,

that may be adversely affected if the protection is surrendered. If properly surrendered, the authorised officer may accept the offer and terminate the rights concerned.

4.16 Cancellation of rights

Under Section 19 (7), the grant of plant breeder's rights shall be cancelled if the Minister is satisfied that:

- 1. Any **information submitted** in the application for the grant of the rights, by the applicant or on behalf of the applicant in connection with the application, was incorrect and that if the authorized officer had known that such information was incorrect, he would have refused the grant;
- 2. Facts have been **discovered** which, if known before the grant, would have resulted in the grant being refused on the grounds that it did not meet conditions for protection

Revocation of rights

The authorized officer shall revoke or, if it has begun, terminate, any **extension** of the grant of rights if at any time he is satisfied that information submitted in the application for extension by the applicant or on his behalf was incorrect and that had the true facts been known before the extension being allowed, the application would have been refused (Section 19(8).

Nature of rights:

The holder of plant breeder's rights in a plant variety (Section 20), shall have the exclusive right to do, and to authorize others to do, the following –

- 1. Produce propagating material of the variety for commercial purposes,
- 2. To commercialise the variety,
- 3. To offer the variety for sale,
- 4. To export variety,
- 5. To import the variety,
- 6. To stock the variety for any of the above purposes and
- 7. To have any or all of these activities performed.

It should be noted that the plant breeder's rights principally apply to the propagating material of the variety. However, under certain circumstances the plant breeder's rights are extended to harvested material under the Kenyan plant variety protection system, [which is the case internationally. Paragraph 1 of the Fifth Schedule, Plant breeders' rights in special cases, allows the Minister to provide, by a scheme, the extension of rights to include parts or products of varieties for certain species or group of plant varieties. This is only when it appears that plant breeders will not receive adequate remuneration unless they have control over the production or propagation of the plant variety in Kenya for the purpose of sales of cut blooms, fruit or some other part or product of plants of the variety, and the control will be of substantial benefit to the plant breeders. The rights can only extend to harvested material or products if the breeder has had no opportunity to exercise his rights on the propagating materials.

When rights are extended, the scheme also provides that plant breeder's rights shall include the exclusive right to sell or authorize others to sell the parts or products of the variety in relation to which the rights are extended, so long as they are obtained by the seller from plants of the variety which the seller has produced or propagated himself as authorised.

In summary, materials covered by the breeder's right constitute all propagating material, harvested material under certain conditions and, as an option, certain products produced from the harvested material.

4.17 Varieties covered by the breeder's right

Under the present Kenyan system the breeder's right cover in the first instance, the protected variety itself, but also those varieties that are not clearly distinguishable from the protected variety (Part II of the Fourth Schedule). Secondly, varieties whose production requires repeated use of the protected variety (Paragraph 2 of the Fifth Schedule) (e.g. a parent for a hybrid variety). There is, however, a third category, which is not covered in the present law, which has resulted from modern technology, though recent. very important and controversial. These are the essentially derived varieties from the protected variety. These are varieties that have been developed from protected varieties, albeit with minor variations, do meet the criteria for variety protection, i.e. distinct in at least one characteristic, uniform and stable. However, in all aspects they retain the essential characteristics of the initial variety. The purpose of the provision of essential derivation is to ensure sustainable breeding by providing effective protection for the classical breeder and encouraging cooperation between classical breeders and developers of new technologies, such as genetic modification.

4.18 Exceptions to the breeder's right

Exceptions to the breeder's right are provided for (Section 20 (1)) and can be grouped as compulsory or optional.

The compulsory exceptions include

- 1. Acts done privately and for non-commercial purposes
- 2. Acts done for experimental purposes, and
- 3. Acts done for the purpose of breeding other varieties

The optional exception or the so called "farmers privilege" may be provided by the authority, and allows farmers to use a protected variety:

- 1. For propagating purposes on their own holdings the product of the harvest obtained on their own holdings from the protected variety
- 2. Within reasonable limitsand
- 3. Safeguarding the legitimate interests of the breeder

This option is not contained in the present law but it is one that is left to each state or country to include in its laws. However, though silent, it is a practice in most developing countries where farmers have been used to saving their own seed. It is a provision that needs to be clearly stated on how it is applied and which crops it is applicable to.

4.19 Exhaustion of breeder's rights

Plant breeder's rights shall **not extend** to acts concerning any material of the protected variety, or any material derived from the said material, which has been sold or otherwise marketed by the breeder or with his consent, in Kenya, unless such acts

- 1. Involve the further propagation of the protected variety or
- 2. Involve the export of the material of the variety, which enables the propagation of the variety, into another country which does not provide for protection of plant varieties or genus or species to which the variety belongs, except where the exported material is for final consumption.
- 3. "Material" in this case means, in relation to a variety
- 4. Propagating material of any kind,

- 5. Harvested material, including entire plants and parts of plants, and
- 6. Any product made directly from the harvested material.

Filing of Applications

Similar to other intellectual properties, plant breeder's rights are given to the first to apply rather than the first to breed. It is therefore very important to observe the date of filing the application with the authority. The application of plant breeders' rights is submitted, together with a completed Technical Questionnaire, and proof of right to apply, to the Managing Director KEPHIS, who is the Authorised officer for the Act. The Technical Questionnaire provides a detailed description of the characteristics of the new variety, which distinguish the variety from other existing varieties. Plant material must be provided or be made available for purposes of examination to confirm the claim for distinctness, uniformity and stability. The application is then examined by KEPHIS and if satisfied that the variety complies with the requirements of the Seeds and Plant Varieties Act, and the plant material is as described in the Technical Questionnaire through a growing test of the variety, the right is granted. The examination period will vary depending on the growth period of the plants under test. For example slow growing plants such as trees and vines will take a longer period in test as compared to fast growing plants like cereals. Standard protocols are available for each crop or species for conducting these tests referred to as 'Distinctness, Uniformity, and Stability' tests.

Protection of Applicant for rights while application is pending:

Under the Act (Third Schedule) an applicant for the grant of plant breeder's rights shall state whether he is also applying for a protective direction (provisional protection) by the authorized officer in respect of the plant variety to which the application relates.

If a protective direction is applied for, then the applicant shall include an undertaking to the effect that, no plants of the plant variety, and no material forming part of, or derived from plants of that variety, will be offered or exposed for sale or sold in Kenya by the applicant or with his consent in the period between the making of the application and the time of final determination of the application. If the authorized officer is satisfied that the applicant has duly given the undertaking, and that he has furnished that officer with all such information, facilities and material as that officer may the officer may, give a protective direction.

The authorized officer shall not give a protective direction if there is any evidence before him, which tends to show that the applicant, or the successor

in title the applicant claims to be, is not the person who bred or discovered the plant variety under application.

While a protective direction is in force, anything which, if the plant breeder's rights had been granted, would have constituted an infringement of those rights, or would have been actionable in proceedings by the holder of those rights, would apply. In other words the applicant with a protective direction in force, may enjoy similar rights as if the grant has been granted

The protective direction ceases to be in force when a decision on whether the application for the grant of plant breeder's rights is allowed or refused is finally determined, or at such earlier time as is provided under the law. This may be when the authorized officer may, withdraw a protective direction, when satisfied that there has been a breach of the undertaking given by the applicant on sale of planting material. If this is the case, the authorised officer may refuse the application for the grant of plant breeder's rights and this may constitute an offence.

4.20 Priorities between applicants for rights:

If the plant variety was independently bred or discovered by two or more persons, the first of those persons who makes a complete application for that variety as per law is the person entitled to the grant of plant breeder's rights.

If two persons make applications on the same date, the first to make a valid application for the grant of plant breeder's rights, shall be the person entitled to a grant of plant breeder's rights.

4.21 Right of Priority

An application duly made in another country so long as it satisfies conditions

as stated under the Seeds and Plant Varieties Act will be treated as if duly

made under the Act, which is referred to as right of priority. This information must be provided as part of the application.

- 1. The plant variety under application must however, fall within a species or group prescribed by a scheme as eligible for breeder's rights in Kenya.
- 2. Not more than twelve months after the application duly made in that country, the applicant must make his application in the prescribed

- form, which includes a claim in respect of the priority of the applicant in the said country.
- 3. Within three months of the application, a copy of the documents constituting the application in that country, certified as correct by the authority in that country must be submitted to the authorized officer in Kenya
- 4. If application has been made in more than one country and at different dates, the period of twelve months above shall be taken from the earlier or earliest of those applications.
- 5. Under the Act the Minster may, by notice in the Gazette, designate any country or territory as a country to which right of priority applies, and may from time to time make or revoke any such order but not so as to prejudice application already made in Kenya or elsewhere. However, all member states of UPOV enjoy right of priority in Kenya as provided for under the UPOV convention
- 6. This right of priority obtained can be forfeited if the application does not satisfy all the requirements to be satisfied by an applicant before a grant of plant breeder's rights can be made.

4.22 Maintenance of reproductive material:

- 1. It is a requirement that every holder of a plant breeder's rights to ensure that, throughout the period for which the rights are exercisable, he is in a position to produce or provide, to the authorized officer, reproductive material which is capable of producing the protected variety with the morphological, physiological and other characteristics that were taken into account when the rights were granted for the variety.
- 2. Every holder of plant breeder's rights is required to provide to the authorized officer all such information and facilities as the officer may request for the purpose of ascertaining maintenance of reproductive material. This may include inspection of facilities and measures taken for the preservation of the plant variety.
- 3. If the holder of plant breeder's rights fails to fulfil these obligations, the rights shall be cancelled.

4.23 Licenses

When the state issues a grant of plant breeder's right in a variety, the holder of the right is obligated to stock the market with propagating material of the variety at reasonable prices. The holder may do this by himself or may grant such licenses to others, as are necessary, to stock the market with propagating material on reasonable terms and conditions. This obligates the holder of plant breeder's rights to furnish the licensee with the propagating material he needs at a reasonable price if he is to make proper use of the license.

4.24 Compulsory License

If the stocking of the market with the propagating material is not adequately ensured, this information shall be communicated to the holder of the plant breeder's rights by the authorised officer, to enable him to remedy the situation and, if the holder fails to do so, the authorised officer may grant any such rights for the plant variety in the form of a compulsory license to interested parties, who apply for it (Section 23).

The various schemes prescribe the period under which a compulsory license for such plant varieties shall not have effect (for most crops is at least three years) commencing on the date upon which the plant breeder's rights were granted. There are regulations that govern issuance of compulsory licensing under the Seed and Plant Varieties Act. First the breeder should have failed to provide the planting material over a specified period. Secondly, there has to be an application to the Minister of Agriculture giving the facts, after which a hearing should be made to determine whether the compulsory licence is justified. It should be noted that failure to negotiate a license agreement between a breeder and a farmer/propagator does not justify issuance of a compulsory licence. The detailed procedure for granting a compulsory licence are provided for under the Act, which take into account the legitimate rights of the breeder, and the user of the variety. To date, no application has been made for a compulsory licence in Kenya. However if and when a compulsory licence is issued to a third party, the breeder should receive adequate compensation for use of his/her variety.

4.25 The seeds and plants tribunal

The Act in section 28 provides for the establishment of a Seeds and Plants Tribunal to handle disputes or appeals that may arise in relation to plant variety protection decisions made by the Authorised Officer. Under this, the Minster may make regulations that authorize any other person, in addition to the appellant and the person whose decision is appealed against, to appear

and be heard as parties to any appeal. This could also provide for suspending the operation of any decision pending the final determination of any appeal and ensure those affected are notified about these suspensions.

The jurisdiction of the Tribunal extends to decisions a) to refuse an application, b) to allow or refuse the grant of plant breeders rights c) to cancel the grant of plant breeders rights d) to allow or refuse an application for extension of the period of protection e) to terminate an extension granted f) to allow or refuse any application made as relates to maintenance of propagating material, provision of information to licensees or compulsory licensing.

The decision of the Tribunal shall be final and conclusive except on any question of law, where a final appeal to the High Court, from a decision of the Tribunal, can be made.

The Tribunal may hear and determine any matters agreed to be referred to the Tribunal by any arbitration agreement relating to the infringement of plant breeder's rights, or to matters which include such infringement. It should be noted that issues concerning the enforcement and monitoring of plant breeder's rights is the responsibility of the holder of the rights and not the Plant Variety Protection Office.

4.26 Status of breeding and plant variety protection in Kenya The Role of Agriculture

The Agricultural sector is the backbone of the national economy, given that the economy is basically agrarian followed by services then industry. Agriculture contributes over 26% directly to the GDP and over 70% of the export earnings. Over 70% of the population are rural and over 70 % of labor is either in Agriculture or agricultural related activities. Two major sectors comprising the cash crop sector and the staple crop sector can be distinguished. Amongst the cash crops, Kenya has been an important world producer of industrial crops such as coffee, pyrethrum (largest producer in the world), sisal and tea. These crops were introduced to Kenya at the beginning of 20th century as plantation crops. Supported by Systematic research work, these crops were successfully introduced and adapted in Kenya, particularly by breeding locally adapted varieties. These constitute a lager portion of local crop varieties under application for plant breeder's rights.

In the recent past, the horticultural sector has rapidly gained importance in production and export in terms of the number of crops and the volumes as well as value. These include vegetables, fruits and ornamental plants for export. Presently, Kenya is the largest exporter of cut flowers to Europe. The

horticultural sector is now a major export, having surpassed tea and coffee in value. This has been carried out by both small and large scale farmers.

Staple crop production such as cassava, maize, rice, sweet potato and wheat is carried out mainly by small scale farmers primarily to satisfy the national demand. These have also had an active breeding program, resulting in a number of locally bred varieties that are up for protection

Research institutions involved in the development of varieties in Kenya include the Kenya Agricultural Research Institute (KARI), for food crops, horticultural crops, industrial crops, pasture and fodder crops; the Kenya Forestry Research Institute (KEFRI) for trees; and commodity research institutions such as the Coffee Research Foundation (CRF), the Pyrethrum Board of Kenya (PBK), the Kenya Sugar Research Foundation (KESREF) and the Tea Research Foundation of Kenya (TRFK). There are a number of International Research Centers based in Kenya that work with the local institutions in variety development. Similarly there are local and international private seed companies that have their research units breeding or developing new varieties that are candidates for protection.

The Kenya Plant Health Inspectorate Service (KEPHIS) was established in 1996 as the national regulatory agency responsible for variety evaluation, release, and registration; plant variety protection; seed certification; plant protection; and development and implementation of seed standards. Over the 12 years that it has operated, it has continually built capacity to handle the mandate of the organization, resulting in an internationally recognized institution. In terms of plant variety protection, it has played a leading role in spearheading plant variety protection in Africa, second to South Africa, as the two members of UPOV. Presently, there are more countries with plant variety protection legislation in place and membership to UPOV. Many more will have in the coming near future.

Technically, KEPHIS has trained manpower and put in place infrastructure to carry out variety testing particularly for release and for the Distinctness, Uniformity and Stability, a key requirement for protection. However, more needs to be put in place to cope with the number of different crops and applications that have increased over time. The international co-operation and collaboration in testing has been utilized and a method of coping with the demand, which has worked well. KEPHIS has only carried out tests in crops that it either has a comparative advantage and experience while taking over tests results from other authorities where tests are available and relevant to the environment. In the near future, other competent authorities may be identified and used to test locally.

Regular review of the law is critical to keep up with technological advances and legal changes in the breeding and intellectual properties arena. Regional collaboration and integration could be one way of reducing costs and improving efficiency in the plant variety protection.

4.27 Plant Variety Protection Regime

Kenya grants plant breeders' rights for all plant genera and species other than algae and bacteria

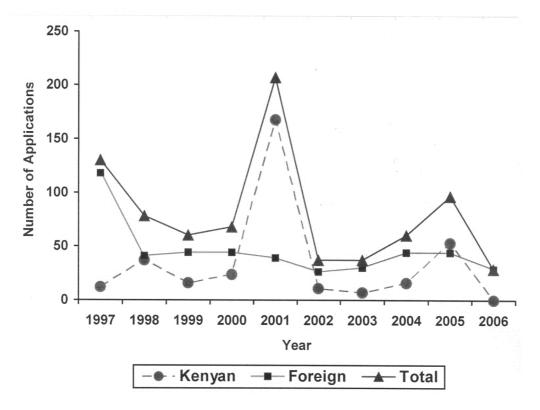


Figure 1. Trends in applications for PVP in Kenya (Source: KEPHIS)

The PVP system in Kenya became operational in 1997, a total number of 938 applications had been received by mid 2008. However the first protection title in Kenya was granted in 2003 when 109 varieties received grants for plant breeder's rights in that year. The lapse of time reflects the period that was taken to put all the legal requirements in place, and to establish and perform the required tests before protection. Over time the process has become faster.

As shown in the Figure-1, at the establishment of the office in 1997, there were applications that had already been submitted to the Director of Agriculture who was the implementer of the Act, at that time. Applications from foreign breeders dominated while only few were from local Kenyan breeders. Between year 1997 and 2000 the local applications increased while the foreign applications increased marginally. In 2001 there was a surge in PVP applications from local breeders which reflected an increased awareness among breeders in public institutions on the need to protect their varieties. This was also reinforced by the amnesty that had been provided to breeders of varieties that were already in the market given that the plant variety protection system was not operational though the legal provision was in place. Following discussion between the plant breeders association of Kenya and the Director of Agriculture, a task force was set up in year 2000 to make recommendations on the fate of these varieties and how to be handled. It was recommended that a one time amnesty for the novelty requirement be granted to all those breeders who would make applications by April 30, 2001. This is in line with the provision of 'varieties of recent creation' Article 6 (2) of the UPOV 1991 Convention which states "Where a Contracting Party applies this Convention to a plant genus or species to which it did not previously apply this convention or an earlier Act, it may consider a variety of recent creation existing at the time date of such extension of protection to satisfy the condition of novelty defined in paragraph (1) even where the sale or disposal to others described in that paragraph took place earlier than the time limits defined in that paragraph". This resulted in a large number of local applications that fell in this category.

As of mid 2008, local (Kenyan) breeders had submitted close to 45 % (372) of the total PVP applications, while 55 % (566) were from foreign applicants. Of the local applications 322 out of 372 are from public institutions while private institutions have 50 applications. Local applications are dominated by cereals and industrial crops and pulses.

Of all the applications the cash crops account for 732, food crops 198 while forest trees have 8 applications. However, the ornamentals plants dominate with 90% applications (comprising 56% of total PVP applications) of which foreign applications comprise (98%). Roses dominate ornamentals with 44% of total PVP applications. It should be noted that of all the varieties under application or granted protection, varieties of recent creation had to satisfy the requirements of distinctness, uniformity and stability. Since Kenya presently protects varieties of all genera and species, all plants including medicinal plants will be protected if they meet the criteria for protection, though none has been applied for yet. Similarly, new plant varieties will be protected

irrespective of the breeding method. Genetic engineering is one method of breeding that has been used to reduce the period of variety development where the required gene can be precisely inserted as designed. This variety will be tested as any other new variety for the characteristic. However this must be in conformity with the existing bio safety laws and regulation of the testing state or nation. Presently in Kenya the law governing introduction and use of genetically modified organisms has been officially approved but the regulations are yet to be finalised. The biotechnology policy has been published. Once all are in place, there will be clear guidance on the testing, release and use of genetically engineered plant varieties into the market. Presently, there is no application or protection of such types of varieties or officially released for commercialisation.

Summary

In the 10 years (1997 to 2007) since the Plant Variety Protection system was introduced in Kenya, the following impacts of the PVP system and the accession to the UPOV Convention have been observed:

<u>Table-1- Distribution of PVP Applications in Kenya by Country</u>

| Country | No. of Applications |
|----------------|---------------------|
| Kenya | 372 |
| Netherlands | 300 |
| Germany | 124 |
| France | 77 |
| United States | 13 |
| Israel | 8 |
| Italy | 7 |
| South Africa | 7 |
| Zimbabwe | 7 |
| Japan | 5 |
| New Zealand | 7 |
| United Kingdom | 6 |
| Ecuador | 1 |
| Belgium | 1 |
| India | 1 |
| Spain | 1 |
| Mexico | 1 |
| <u>Total</u> | 938 |

Source KEPHIS

By the end of year 2008 247 titles had been granted. These grants have been made based on DUS examinations carried conducted by KEPHIS in Kenya or Test reports taken over from other UPOV member states/authorities that collaborate with KEPHIS. Additionally the following were noted:

1 Increased investment in breeding and commercialisation of new varieties.

Mainly, in physical facilities and technology in the private sector. In contrast to private breeding institutions, investment has decreased in public institutions, especially in land acreages and financial allocations.

2. Increased collaboration between local breeders with foreign breeders and international institutions

There has been increased activity in capacity building, funding, germplasm exchange and commercialisation of foreign varieties in Kenya. Local breeders have also extended partnerships with farmers for on-farm testing of newly bred varieties.

3. Increased number and range of improved varieties available to the farmers

The number of new varieties in the horticultural and the agricultural field has increased in the last 10 years. For instance in the period 2 varieties of maize were released in 1999 while 42 were released in 2008, with a total of 166 in the period. These ranged in the various superior qualities ranging from disease and pest resistance to quality protein maize varieties after introduction of PVP higher and have superior qualities

Varieties Released Between 1998 and 2008

| Year | Maize | Bush bean | Climbing bean | Sweet potato | Cassava | Pearl millet | Sorghum | Wheat | Potato |
|-------|-------|--------------|------------------|-----------------|---------|-----------------|---------|-------|--------|
| 1998 | | 1 | | 3 | 3 | | 3 | 3 | 2 |
| 1999 | 2 | | | 1 | | | | 3 | |
| 2000 | 8 | | | | | 2 | 3 | | |
| 2001 | 13 | | | 4 | | 1 | | 3 | |
| 2002 | 10 | | | | | | | | |
| 2003 | 21 | | | | | | | | |
| 2004 | 22 | | | | | | | | |
| 2005 | 4 | | | | | | | | |
| 2006 | 11 | | | | | | | | |
| 2007 | 7 | | | | | | | 2 | |
| 2008 | 42 | 11 | 3 | | 6 | | 4 | 2 | |
| Total | 140 | 12 | 3 | 8 | 9 | 3 | 10 | 13 | 2 |

Table 2. Varieties released between 1998 and 2008

Source- KEPHIS

4 Enhanced access to internationally bred materials

59% of PVP applications are from foreign breeders, which indicates enhanced availability of foreign germplasm, and broadened genetic

base which can be used further in developing improved varieties in Kenya. A number of French bean varieties were developed by Moi University based on a protected variety, utilising the notion of breeder exemption. If these varieties meet the criteria for protection they will be protected and possibly available for commercialisation.

5 Generation of foreign exchange and employment

56% of PVP applications in Kenya are for ornamental varieties, and some of which are now commercially produced in the country for export. They are thus a source of foreign exchange and employment local people. It has been estimated that about 2.5 million people are directly employed by the horticultural industry while another 3.5 million people are indirectly earning their livelihood from the industry (Ministry of Agriculture reports) Horticultural exports were estimated to have generated more than Ksh 60 billion in year 2008, overtaking tourism as the main foreign exchange earner.

6 New types of breeders

Previously, research activities at the Universities were mainly geared at academic work and the varieties developed were not followed after publication. Presently they are actively developing, releasing and applying for protection of the new varieties. Similarly, farmers and farmer groups have applied for varieties that they have selected and developed on their farms either individually or as group. KEPHIS has made effort to assist such groups with the technical requirements for Variety protection. Research and Educational Institutions having IPR Policy or putting one in place. In the past plant variety protection was a new idea, where the breeders and the policy makers were not aware. There were no institutional policies to guide protection of the developed varieties. With awareness creation, most of the major institutions and breeding entities have recognised the importance of intellectual property and either has a policy in place or is under development.

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Chapter Five

Monsanto vs. Schmeiser: Implications for Land Rights of Farmers in Kenya

Prof. Patricia Kameri-Mbote

This paper looks at the implications of the decision in *Monsanto Canada Inc. versus Schmeiser*¹ on land rights in Kenya. It argues that the preference for intellectual property rights over land rights within a context of asymmetrical ownership of technology between developing and developed countries will lead to 'recolonisation' of land rights by Western firms. It concludes that the *Schmeiser Case* has far reaching implications for farmers in Kenya where most farms are small and the pressure over land does not allow for establishment of buffer zones between GMO and non-GMO zones.

5.1 Introduction

and is a critical facet of Kenya's political, social and economic life. The dependence of the economy on land makes tenure, access, distribution and regulation of land critical. From colonial times to date, there have been major contestations over land. These include colonial expropriation of land rights, the fight for independence, independence and its implications for rights' holding and the re-alignment of land rights in the independence period. Underlying these contestations are three critical issues that law seeks to mediate. One is the political issue related to the administrative and political control of the economy based on land. Two is the economic value of land as a major support of both the economy and communities' livelihoods. Third and related is the land-social

¹ *Monsanto Canada Inc. v. Schmeiser*, Supreme Court of Canada, Judgement of 21 May 2004, 2004 SCC 34.

structure nexus where land is linked to individual and community identity and therefore represents more than an economic commodity.

The use of land for agriculture and the introduction of genetically modified (GM) seeds will have far reaching consequences for farmers' rights to land as owners of proprietary technologies in the seeds seek to enforce their rights. The question of who has greater rights between the land owner and the technology owner will need to be determined. This is within a context where rights to land guarantee one ownership to all things on the land drawing from the common law maxim *Cuius est solum eius est usque ad coelum et ad inferos* (He who owns the land owns everything reaching up to the very heavens and down to the depths of the earth)². The maxim *quicquid plantatur solo solo cedit* (whatever is planted in the ground belongs to the ground)³ further amplifies the entitlements of a land owner.

While the Kenyan government has a policy of increasing agricultural production and key government functionaries⁴ have made pronouncements on the usefulness of new technologies in this quest, there is no clear agenda for strategic investment in GM for agricultural production enhancement. It is however notable that Kenya is among a small number of African countries that have invested in genetic modification.⁵ Kenya also has a Biotechnology Policy⁶ and a draft Biosafety Bill⁷ has been the subject of discussion since 2005. The target crops include maize (field trials), sweet potato (field trials concluded in failure and work has to start afresh), cotton (field trials) and cassava (field trials). Work on maize is so far the most advanced, even though work on the transgenic sweet potato had started much earlier. None of the crops has reached commercialization stage.⁸

The technology used in the GM work is obtained from outside Kenya. For instance, the Bt gene that is resistant against the stem borer and is being used in the Insect Resistant Maize for Africa (IRMA) project (jointly implemented

² A. J. Oakley, Megarry's Manual of the Law of Real Property (Sweet & Maxwell, 2002).

³ Ibid

⁴ See The People Daily, Thursday June 24, 2004, Hon. Mwai Kibaki, Kenya's President, said that increased incidents of drought and diseases demanded the employment of modern methods of farming to increase yields. He was speaking during the commissioning of the Kenya Agricultural Research Institute's Greenhouse Complex. He categorically said that Kenya had resolved to apply modern biotechnology in line with existing biosafety framework national statutes and international obligations.

⁵ Others are South Africa, Egypt, Zimbabwe and Nigeria

⁶ Republic of Kenya, Biotechnology Policy, Government Printers (2006)

⁷ The Biosafety Bill, Government Printers (2008) is the latest draft.

Patricia Kameri-Mbote, 'Kenya's National Biosafety Framework', in C.O. Okidi et al (eds.) Environmental Governance in Kenya: Implementing the Framework Law, East African Education Publishers, Nairobi (2008).

by the Kenya Agricultural Research Institute (KARI) and the International Maize and Wheat Improvement Centre (CIMMYT) with funding from the Syngenta Foundation for Sustainable Agriculture) was imported from Mexico.⁹

The Canadian Supreme Court's holding in *Monsanto Canada Inc. versus Schmeiser*¹⁰ where intellectual property rights (patents for canola seed) seem to have been weighted more heavily than a farmer's land rights raises questions that may arise in a country like Kenya as GM crops are introduced. This decision 'has the potential to influence developments in other countries and to bear on current and future negotiations on intellectual property rights'. For a country like Kenya which imports proprietary technology in the form of seeds and new plant varieties particularly in the flower industry, the likelihood of negation of farmers' rights in favour of breeders' rights and patents is real.

This paper looks at the implications of the decision in *Monsanto Canada Inc. versus Schmeiser*¹² on land rights in Kenya. I argue that the preference for intellectual property rights over land rights within a context of asymmetrical ownership of technology between developing and developed countries will lead to 'recolonisation' of land rights by Western firms. The result will be use of land for purposes that are not necessarily driven by national needs such as ensuring food security and liability of Kenyan land owners' where proprietary technology gets onto their farms through natural processes such as cross-pollination. This is a real danger considering the size of Kenyan farms and the absence of a land use plan that designates areas where GM crops may be grown and where they may not be grown.

Part II provides the conceptual framework for the paper juxtaposing land rights and intellectual property rights and highlighting the similarities and differences. Part III discusses the *Monsanto Canada Inc. versus Schmeiser*¹³ case while Part IV analyses the implications of the case for Kenyan farmers. Part V concludes.

⁹ Ibid

^{10 [2001]} F.C.T.D. 256 and Monsanto Canada Inc. v. Schmeiser, Supreme Court of Canada, Judgement of 21 May 2004, 2004 SCC 34.

¹¹ Cullet, P. 'Monsanto v. Schmeiser: A Landmark Decision Concerning Farmer Liability and Transgenic Contamination', 17 Journal of Environmental Law (2005), p. 83.

Monsanto Canada Inc. v. Schmeiser, Supreme Court of Canada, Judgement of 21 May 2004, 2004 SCC 34.

¹³ Ibid at para 6.

5.2 Conceptual framework

5.2.1 Property

Property has different meanings to different people. To the lay person, property is a thing represented in the physical res. Land can be categorized as a thing. There is, however, the meaning of property as a concept. ¹⁴ This is the meaning that law ascribes to property - a conception of the mind. In this view only through the protection of law is one able, for instance to enclose a field as property. ¹⁵ In this latter context, property represents the legal relationship among people with regard to the res or even an intangible subject such as an idea (patent/copyright). It is also the relationship between an individual and the community with regard to the use and exploitation of resources and is dependent on enforcement mechanisms of the state. Ownership of land historically constitutes one of the main categories of property rights conveying an array of rights upon the owner. ¹⁶ Property rights in land exist against other people with regard to the land, not against other parcels of land. ¹⁷

Ownership of property is a creation of law whereby a bundle of sticks/ entitlements are sanctioned by law against many persons.¹⁸ Property is that bundle of rights and expectations in a tangible or intangible thing that are enforceable against 3rd parties including the government. These include entitlements to possess; to use; to exclude; allow others to use; sell; give away; dispose of by will; recover from thief and compensation for damage.

5.2.2 Land as Property

Land as property draws from the universality of the theory of property in time and space with the earliest theoretical explanations of property being occupation where property belongs of right to him who seizes it first. Other theoretical explanations of property draw from the Natural Rights theory where property rights are perceived as natural rights; the Social utility where property is viewed as an index of social progress; the Labour theory where real title to property is seen as deriving from the toil and trouble experienced creating it; and Legal theory which holds that whatever is recognised as property by law is deemed to be property.

¹⁴ A.M., Honore, Ownership, In Oxford Essays in Jurisprudence 107 (A.G. Guest Ed, 1961)

¹⁵ Ibid

It confers the right to extract minerals from the land, to use and abuse and dispose of as the property holder wills. See Megarry, supra note 2.

¹⁷ Joseph Blocher, Building on Custom: Land Tenure Policy and Economic Development in Ghana, Yale Human Rights and Development L.J. [Vol. 9] 166, 177

¹⁸ Honore, supra note 14.

The term land has a wide connotation both in African customary laws as well as under modern systems of law. Its subject matter includes the surface of the soil, the things on the soil enjoyed as part of the land such as the air, water and growing trees or artificially fixed attachments such as houses, buildings and other structures. It also encompasses parts of buildings with the division anticipated to be either vertical or horizontal or otherwise and includes tenancies, easements, rights, privileges or benefits in, over or derived from land.

The maxim Cuius est solum eius est usque ad coelum et ad inferos (He who owns the land owns everything reaching up to the very heavens and down to the depths of the earth) underscores the sacrosanct nature of property rights in common law which vested the owner of property with all the rights necessary for enjoyment of property. By dint of the maxim, any conveyance of land includes all erections, fixtures, sewers, drains, watercourses appertaining to the land. This was further amplified by the maxims quicquid plantatur solo solo cedit (whatever is planted in the ground belongs to the ground) and superficies solo cedit (a building and other constructions become part of the ground). It is therefore not surprising that commentators like Blackstone should opine that

There is nothing which so generally strikes the imagination, and engages the affections of mankind, as the right to property; or that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe. ¹⁹

This has been explained in the context of Kenya by Miller who notes that a land fever grips Kenyans intertwining modern and traditional values since it offers basic survival opportunities in an insecure situation where there is no welfare system and no other forms of wealth are available.²⁰ This view colours the value of land and land use patterns.

Land in Kenya is currently designated as government land, trust land and private land. At present about 20% of the land in Kenya is government land, 17% is individual land and 69% is trust land. Trustland, the most predominant mode of land holding, is managed by local authorities on behalf of communities. Trustland was further divided into two, that awaiting adjudication and registration under the Registered Land Act and that which was to remain as trustland.²¹ The process of adjudication and registration

William Blackstone, (1765-1769). Commentaries on the Law of England: A Facsimile of the First Edition of 1765-1769, Vol. 1. Chicago: The University of Chicago Press (1979).

Yeager, R. & Norman K. Miller (1986) Wildlife, Wild Death: Land Use and Survival in Eastern Africa 98 New York: State University of New York Series in Environmental Policy.

Okoth-Ogendo, H. W. O., 1991 Tenants of the Crown: Evolution of Agrarian Law and Institutions in Kenya, Nairobi: African Centre for Technology Studies Press

has not been completed and the management of trustland has grossly undermined communities' rights and interests over the years defeating the original intention. Tenure is not secure for people living in these lands.²²

Another category of landholding which traverses both community and private land holding is the group ranch system.²³ The group ranch status in Kenya is granted to a group of herders that is shown to have customary rights over the range or pastureland in question. Group ranches have progressively been converted to individual holdings and the land use changed from pastureland to agricultural holdings. This circumvents the original intention of keeping the integrity of the range and in some areas has impacted negatively on the conservation and management of wildlife.

The 'bundle of entitlements' over land is as extensive as is the importance of land in a country such as Kenya where land is critical to the economic, social and cultural development of the country; is linked to sovereignty and was a key factor in the struggle for independence; is a politically sensitive issue and culturally complex; and has spiritual and religious dimensions in communities that perceive it as a host of the spirit of the community and the residence of the deity. The Registered Land Act Cap 300 of the Laws of Kenya was intended to provide a single code of substantive and procedural property law for the whole country and thus allows for the ownership under other regimes to be brought within its provisions. Sections 27 and 28 define the quantum of rights that the registered proprietor gets upon registration as absolute ownership of land together with all rights and privileges belonging or appurtenant thereto and not liable to be defeated except as provided for in Section 30 of the Act. Section 30 lists rights capable of overriding the rights of an absolute proprietor. It is notable that intellectual property rights are not included in this list and are therefore not capable of qualifying the absolute proprietor's rights unless they are recorded in the register.²⁴

The National Land Policy proposes three possible loci for entrusting the bundle: Individual; Community; National Land Commission. This approximates to the different types of landholding identified.²⁵

²² Kameri-Mbote, P. (2002) Property Rights and Biodiversity Management in Kenya, Nairobi: African Centre for Technology Studies Press.

²³ See Report of the East Africa Royal Commission of 1953-1955, Cmd. 9475 (1955) concluding the policy on land tenure in the East African Protectorate as Kenya then was, noted that while individualisation of land ownership should be the main aim, such ownership should not be confined to individuals but could also be extended to groups such as companies, co-operatives and customary associations of Africans. [351]

²⁴ See § 11(4) of the Registered Land Act, Cap 300 of the Laws of Kenya.

²⁵ Government of Kenya, Draft National Land Policy (May 2007).

5.2.3 Intellectual Property

Intellectual property rights (IPRs) are property rights in something intangible and protect innovations and reward innovative activity.²⁶ IPRs comprise a bundle of rights focusing on the physical manifestations of intellectual activity in any field of human endeavour. IPRs are concerned with the expression of an idea for an invention, the details of which have been worked out and which takes the form of a product or process that can be applied industrially.

Development over a century has given rise to various IPRs, which have become well known and fall into two broad categories: industrial property and copyright. These include patents, 27 trade and service marks, 28 copyright, rights in performances, 29 designs, 30 plant breeders' rights, 31 geographical indications or appellations of origins, 32 utility models, 33 and layout designs and topography. 34

US Council for International Business A New MTN: Priorities for Intellectual Property (1985) at p. 3.

28 Trade/service marks and trade names comprise symbols, words, phrases, or designs used to distinguish the goods or services of one person from those of others. They guard against unfair competition and serve as advertising tools.

- 29 Copyright and neighbouring or related rights provide protection for the expression of ideas. Copyright protects the original expression of thoughts or ideas and not the ideas themselves. It guards against copying of literary, musical and artistic work which includes writings, music, works of the fine arts, such as paintings and sculptures, and technology based works such as computer programs and electronic databases, broadcasts, audio-visual works, sound recordings. Copyright occurs automatically. Once an author has expressed an original idea in fixed or tangible form, there is no requirement for registration as a precondition for protection. Nonetheless, the Copyright Act 2001 provides an option for registration
- 30 Granted for novel designs establishing rights on the ornamental visual aspects as opposed to purely functional aspects of an article.
- 31 Plant breeders' rights are granted for varieties that are new, distinct, uniform, stable.
- 32 Geographical Indications guard against misleading the public on the geographic origin of goods.
- Also known as petty patents and defined "as any form, configuration or disposition of elements of some appliances, utensil, tool, electrical and electronic circuitry, instrument, handicraft mechanism or other object or any part of the same allowing a better or different functioning, use or manufacture of the subject matter or that gives some utility, advantage, environmental benefit, saving or technical effect not available in Kenya before and includes micro-organisms or other self-replicable material, herbal as well as nutritional formulations which give new effects", § 2 of the Kenya Industrial Property Act, 2001.
- 34 Provide protection of designs of integrated circuits used for telecommunications and the internet.

Patents comprise of inventions that are new, non-obvious and industrially applicable. It is required that the invention sought to be protected be not previously known or described; that it constitute a step forward in technology using the standard of the person having ordinary skill in the art (PHOSITA) – an objective and universal standard; and that it have practical utility in industry. They are exclusive monopoly rights preventing others from making, using, selling, offering for sale patented product or product made using patented process.

Allocating IPRs to the creator of a work balances the private interests of the creator, by ensuring that s/he still has an incentive to create, against those of the society at large in having the information available for its use. Even though it does not diminish once it is shared, the role of IPRs is to ensure that information providers do not lose rights to the information by disclosing it, since such information can be used by an infinite number of persons simultaneously.³⁵ Indeed, one of the philosophic underpinnings of IPRs is to ensure disclosure of the information, the assumption being that lack of such right would discourage information holders from sharing their information for fear of losing it. The fear of losing exclusive rights to the information once shared is real because another person can use the same idea without having recourse to the originator of the idea.

In protecting intellectual property, emphasis is laid on the commercial value of the innovation. Law is concerned to ensure that the IPR holder recoups their investment in the innovation and grants him a period of enjoyment of the right during which others must pay royalties or negotiate with the rights' holder to access the innovation. In granting IPRs therefore, there is a trade-off between the innovator and the state granting the rights whereby the former avails the innovation to the public in return for the legal rights that the latter grants him. The intervention of the state is made necessary by advertence to the public interest to have information available which calls for a balancing of that interest against the private interests of the innovator. By their nature, IPRs are territorial and thus effective only in the state granting them. Moreover, these rights subsist only for a limited duration after which they are freed into the public domain.

Interface between land rights and Intellectual Property Rights

The starting point in addressing the issues of land and IPRs is to point out some key differences. One, while land is a finite resource, products of the intellect are infinite. Biotechnology defined as 'any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use' provides the nexus between intellectual property rights and land rights. GM products of genetic resources are found on different ecosystems including land.

Generally, consensus has emerged over the different generations through which biotechnology has developed (Table A). Within this broad schema, biotechnology techniques may also be characterized into traditional,

³⁵ Karen W. Baer, A Theory of Intellectual Property and the Biodiversity Treaty, 21 Syracuse J. INT'L L. & Com. 259 (1995).

³⁶ United Nations Conference on Environment and Development: Convention on Biological Diversity - Done at Rio de Janeiro, June 5, 1992, reprinted in 31 I.L.M. 818 (1992)

conventional and modern techniques. Alternatively, biotechnology can also be classified through different levels, as being first, second and third generation.

| Technology | Era | Genetic interventions | | | |
|--------------|-------------------------------------|---|--|--|--|
| Traditional | ~10 000 years BC ~3 000 years BC | Civilizations harvested from natural biological diversity, domesticated crops and animals, began to select plant materials for propagation and animal breeding Beer brewing, cheese making and wine fermentation | | | |
| Conventional | Late 19th century | Identification of principles of inheritance by Gregor Mendel in 1865, laying the founda- tion for classical breeding methods | | | |
| | 1930s | Development of commercial hybrid crops | | | |
| | 1940s to 1960s | Use of mutagenesis, tissue culture, plant regeneration. Discovery of transformation and transduction. Discovery by Watson and crick of the structure of DNA in 1953. Identification of genes that detach and move (transposons) | | | |
| Modern | 1970s | Advent of gene transfer through recombinant DNA techniques. Use of embryo rescue and protoplast fusion in plant breeding and artificial insemination in animal production | | | |
| | 1980s | Insulin as first commercial product from gene transfer. Tissue culture for mass propaga- | | | |
| | 1990s | tion in plants and embryo transfer in animal production | | | |
| | 2000s | Extensive genetic fingerprinting of wide range of organisms. First field trials of genetically engineered plant varieties in 1990 followed by the first commercial release in 1992. genetically engineered vaccines and hormones and cloning of animals Bioinformatics, genomics, proteomics, metabolomics, microarrays, nanotechnology | | | |

Source: Adapted from van der Walt (2000) and FAO (2002) in FAO 2005: 6-7. See Patricia Kameri-Mbote, Idah Sithole-Niang & Godber Tumushabe *Unlocking Africa's Future: Biotechnology & Law* Chapter 2 (Forthcoming, on file with the author)

Modern biotechnology uses advanced techniques such as recombinant DNA technologies to introduce foreign genes into organisms, or molecular markers to accelerate breeding of both plants and animals, as well as for

diagnostic purposes. The introduction of foreign genes into cells is referred to as genetic engineering/ genetic modification/ genetic manipulation.³⁷

Three types of genetically engineered organisms exist: those that involve the transfer of genetic material from one species to another within the same taxonomic family; where a gene already present in an organism only requires altered expression to improve the level or pattern of expression; and the transfer of genetic material across taxonomic lines such as the use of the insecticidal toxin gene from the soil bacterium *Bacillus thuringiensis* (Bt) into cotton or maize.³⁸ Most of the transgenic crops planted so far have incorporated only a very limited number of genes aimed at insect resistance and herbicide tolerance. Work on drought tolerance is currently underway.³⁹ Four main crops have dominated GM activity around the world, accounting for 98 per cent of the total 140 million hectares of GM cropland worldwide.⁴⁰ These are maize (24%), cotton (43%), soybean (64%) and canola (20%).⁴¹

The main countries growing GM crops are the United States; Argentina; Canada; Brazil; and China. These five countries accounted for 67.5 million hectares of GM varieties of maize, soybeans, cotton and canola in 2003/04. USA remains the biggest producer of GM crops. ⁴² Developing countries are also entering the fray of GM crops. These countries include China, India, Colombia, South Africa, Paraguay, Indonesia, Uruguay, and Philippines. ⁴³

The products of genetic modification have been patentable since 1980, when the Supreme Court's decision in *Diamond v. Chakrabarty*. 44 Relevant IPRs in the field of biotechnology are patents and plant breeders' rights (PBRs). 45

- 42 Ibid.
- 43 Ibid.

³⁷ See Kameri-Mbote, P., Idah Sithole-Niang & Godber Tumushabe *Unlocking Africa's Future: Biotechnology & Law* Chapter 2 (Forthcoming, On file with the author)

³⁸ Ibid.

³⁹ Wekundah, J., 'Poverty Alleviation through Agricultural Development: 17A Role for Biotechnology' in International Centre for Trade and Sustainable Development, *Biotechnology: Eastern African Perspectives on Sustainable Development and Trade Policy*, Geneva, June 2007.

⁴⁰ Runge C. F. and B. Ryan, (2004) *The Global Diffusion of Plant Biotechnology: International Adoption and Research*. A report prepared for the Council on Biotechnology Information, Washington DC.

⁴¹ James, Clive *Preview: Global Status of Commercialized Biotech/GM Crops*, ISAAA Briefs No. 37, International service for the Acquisition of Agri-Biotech Applications, Ithaca, New York (2007).

^{44 447} U.S. 303, 309 (1980) (holding that an organism that contains "a non-naturally occurring manufacture or composition of matter--a product of human ingenuity" is patentable

Trademarks also relate to biotechnology in instances where products of biotechnology are branded to distinguish them from other products of competing firms. This is especially the

Traditionally, plants were excluded from patentability and were governed by PBRs. 46 The gradual move towards patenting of life forms in the US first affected plants and has recently been extended to animals. Since the case of *Diamond v Chakrabarty*, biotechnology IPRs are liberally granted. The Supreme Court allowed the grant of patent rights for living organisms stating that the patent system should grant patent protection for "everything under the sun made by the hand of man". 47 Many African countries exclude plants and animals from patentability. With respect to plants, countries provide for plant variety protection through plant breeders' rights. This genus of IPRs was first developed within the context of the International Convention for the Protection of New Varieties of Plants (UPOV). 48 These rights were an alternative to fully fledged patents and were seen as more flexible and admitting of seed exchange between farmers and breeders. The distinction between patents and plant breeders' rights has become increasingly blurred as the latter are strengthened. 49

Seeds over which IPRs have been granted are grown on fields over which individual farmers and communities have rights. The issue of the rights that should be given precedence in the event of a conflict is likely to arise. The relationship between land rights and intellectual property rights were well articulated in the case of *Monsanto v Schmeiser*, an action against the defendant farmer for "using, reproducing and creating genes, cells and canola seeds and plants containing genes and cells claimed in the plaintiff's patent without the consent of the plaintiffs for the infringement of the defendants." Judge Mc Kay held in this case that a farmer's rights over land do not entitle him to use proprietary genetic material if he does not have the permission of the owner of the patent irrespective of how that material gets onto his farm.⁵⁰

case in the area of pharmaceutical products.

⁴⁶ See, e.g., Eisenberg, R. S., "Proprietary Rights and the Norms of Science in Biotechnology Research", 97 Yale Law Journal 177 (1987). [188]

⁴⁷ Diamond v Chakrabarty, 100 S.Ct.2204, 2208 (1980). Chakrabarty applied to patent a bacteria from the genus Pseudomonas containing therein at least two stable energy generating plasmids, each said plasmid providing a separate hydrocarbon degradative pathway. The US Supreme Court held that "the patentee had produced a new bacterium with markedly different characteristics from any found in nature... His discovery is not nature's handiwork, but his own, accordingly, it was patentable".

⁴⁸ International Convention for the Protection of New Varieties of Plants, Paris, 2 Dec. 1961, as Revised at Geneva on 10 Nov. 1972, 23 Oct. 1978 and 19 Mar. 1991 (UPOV Doc. 221(E), 1996).

⁴⁹ Cullet, Philippe, 'Plant Variety Protection in Africa: Towards Compliance with the TRIPS Agreement', 45/1 Journal of African Law (2001).

⁵⁰ *Monsanto Canada Inc. v. Schmeise*r, Supreme Court of Canada, Judgement of 21 May 2004, 2004 SCC 34, at §6.

5.3 *Monsanto v. Schmeiser*

Monsanto had created a gene insert known as RT73, which, when introduced into the DNA of canola cells by a transformation vector, produces a variety of canola with a high level of tolerance to glyph sate. The insertion of the modified gene into the plant cells, the plant, its stem, leaves, and seeds ensured that the products of the seed contained the modified gene and were also glyph sate-tolerant. Monsanto's ownership of the "Glyph sate-Resistant Plants" (Roundup Ready) granted it the exclusive right, privilege and liberty of making, constructing, using and selling the invention for the full term of the patent.⁵¹ The defendant, Percy Schmeiser, was an individual farmer who, residing in Saskatchewan, had grown canola in that region for more than 50 years. In 1998, the year giving rise to the plaintiffs' claim, Schmeiser farmed nine fields, in which 1030 acres were devoted exclusively to growing canola. The plaintiffs' claim was that in 1998 the defendants planted glyph sateresistant seeds to grow a crop of canola, for harvest, having a gene or cell that is the subject of the plaintiffs' patent. This, according to the plaintiffs was an infringement of their patent since the defendants are said to use, reproduce and create genes, cells, plants and seeds containing the genes and cells claimed in the plaintiffs' patent.52

Monsanto's patent required every purchaser of the seed to sign both a Grower's Agreement and a Technology Use Agreement prescribing the conditions under which a farmer may use the patented seeds.⁵³ The farmer could use the seed for one-time planting and only sell it to a purchaser authorized by Monsanto.⁵⁴ The farmer was not allowed to sell or give the seed to anyone else and was also prohibited from saving the seed for replanting the following year.⁵⁵ The Technology Use Agreement also allowed Monsanto to enter the contracting farmer's land to verify compliance with the agreement.⁵⁶

The defendants had not at any time signed a Technology Use Agreement which was the plaintiffs' license for growers of the seed containing the patented gene. The plaintiff thus sought the following reliefs:

- 1. An injunction restraining the defendants and their agents, employees, servants, persons under the control of or acting in concert with the defendants from:
 - Using, growing, cultivating or harvesting any and all quantities

⁵¹ Schmeiser Case supra note 12.

⁵² Ibid.

⁵³ Ibid.

Preston, H., 'Drift of Patented Genetically Engineered Crops: Rethinking Liability Theories', Texas Law Review, March 2003, 1154

⁵⁵ Ibid. at 1155

⁵⁶ Ibid.

- of seeds and crop grown from said seeds containing the patented genes or cells thereof
- Offering for sale, selling, marketing, advertising, distributing or otherwise in Canada by any means any and all quantities of seed and crop grown from said seed containing the patented genes or cells
- 2. Delivery up by the defendants of any and all of the seeds or crop in the possession, care, custody or control of the defendants or for which the defendants have title to, in Canada, containing said patented genes or cells or produced according to said patented method
- 3. General damages exclusive of interest and costs; or an accounting of profits of the defendants, whichever the plaintiffs may elect after discovery in a reference as to both or either as the plaintiffs may elect;
- 4. Punitive and exemplary damages;
- 5. Pre and post judgment interest on all monetary awards at a rate of at least 1% more than the prime banking lending rates; and
- 6. The plaintiffs' costs of this action on a solicitor and client basis.

The defendants admitted that they had Roundup Ready canola present in their fields in 1998, but argued⁵⁷ that:

- 1. They did not deliberately plant or cause to be planted, any seeds licensed by the plaintiffs containing the patented gene;
- 2. They suffered substantial damage and loss because of the herbicide-resistant plants;
- 3. It is not possible to control the growth of the Roundup Ready canola with normal herbicides as it interferes with crop selection, making it difficult to plant anything other than canola, and it requires the adoption of new farming practices;
- 4. By the unconfined release of the gene into the environment the plaintiffs have not controlled its spread, and did not intend to do so, and they have thus lost or waived their right to exercise an exclusive patent over the gene.⁵⁸

The court found for the Plaintiff stating that

⁵⁷ Ibid.

⁵⁸ Ibid.

'the balance of probabilities supports a conclusion that the growing and sale of Roundup tolerant canola by the defendants infringed the exclusive rights of the plaintiffs to use the patented gene and cell....having also concluded on a balance of probabilities that the samples taken from the borders of nine fields in July 1998 and three samples taken at random from within each field in August 1998 are representative of the entire crop, bearing in mind that all of the nine fields were planted with seed that was saved in 1997 in field number 2, which seed was known to be Roundup tolerant.⁵⁹

The court held that infringement, defined as 'any act which interferes with the full enjoyment of the monopoly rights of the patentee' could occur in the absence of any intention on the part of the infringer. Consequently, intention is immaterial and "infringement occurs when the essence of an invention is taken", regardless of the intention of the infringer. Moreover, the court found it unnecessary to determine the source of the Roundup resistant canola in the defendants' crop in resolving the issue of infringement because in their view, Mr. Schmeiser had retained seed grown in 1996 which was the seed used for the 1997 crop. In the court's view, Mr. Schmeiser was aware that the crop in field showed a very high level of tolerance to Roundup herbicide and he harvested and retained the seed for the 1998 crop which was the subject of this case. Each of the seed for the 1998 crop which was the subject of this case.

The correctness of the reasoning in this case has been questioned considering that the subject matter of infringement is self-propagating material. The argument that it is not relevant to find out how the infringing material got onto the defendant's farm leaves poor farmers whose fields may host patented genes through cross-pollination open to liability claims by multinational firms holding patents for seeds. ⁶³ This is so despite the farmer's rights over their land and their entitlement to claim interference with this enjoyment through the introduction of GMOs onto their fields by neighbours who have chosen to use such materials in conjunction with the owners of the patented genetic material.

The manner in which Monsanto got information about the presence of roundup ready canola is also interesting. They had hired a private investigation agency to undertake random audits of canola crops growing in Saskatchewan in 1997 on farms which included their licensed farmers but also drawn from leads suggesting that Roundup Ready seed might be growing on property

⁵⁹ Schmeiser Case, supra note 12 para. 114.

⁶⁰ Quoting Mr. Justice Rothstein notes in Lishman v. Erom Roche Inc. (1996),68 C.P.R. (3d) 72 at 77 (F.C.T.D.).

⁶¹ See Computalog Ltd. v. Comtech Logging Ltd. (1992), 44 C.P.R. (3d) 77 at 88 (F.C.A.).

⁶² Schmeiser Case, supra note 12 at para. 119.

⁶³ Preston, supra note 54 at 1159

of an unlicensed farmer, or from random inspections undertaken to audit a farming area. Schmeiser's farm was included in this audit process after an anonymous tip was received indicating that Roundup Ready canola was being grown in his fields, where it was not licensed. This raises issues of the manner in which evidence was obtained and may also give rise to a counterclaim for trespass to land.

The likelihood of patented Roundup Ready seed finding its way into Schmeiser's farm through cross-pollination or genetic drift was not considered by the court since the case was tried strictly as a patent infringement case. In these cases, liability is strict meaning that a guilty mind is not a prerequisite. Environmental principles were not considered. For instance, the precautionary principle would have shifted the burden to Monsanto to ensure that preventive measures had been put in place to mitigate any potential negative impacts such as contamination of Schmeiser's crop. The likelihood of genetic drift has been recognised and in some regions such as the European Union, buffer zones are created between GMO zones and non-GMO zones to preserve the latter from contamination. In these cases, the distances of separation, also called distances of safety, between "GMO" zones and "non-GMO" zones are expected to prevent contamination and are to take into account the climate, the fauna and the flora of the place in question. Environmental principles were not considered.

The statement at paragraph 92 squarely canvasses this issue as the Judge states:

"a farmer whose field contains seed or plants originating from seed spilled into them, or blown as seed, in swaths from a neighbour's land or even growing from germination by pollen carried into his field from elsewhere by insects, birds, or by the wind, may own the seed or plants on his land even if he did not set about to plant them. He does not, however, own the right to the use of the patented gene, or of the seed or plant containing the patented gene or cell."

This statement grants more prominence to patent rights over land rights and is therefore in direct conflict with the maxims *quicquid plantatur solo* solo cedit (whatever is planted in the ground belongs to the ground) and superficies solo cedit⁶⁶ (meaning that the surface yields to the ground and

This is the case in the United States. In NSW Chapter 5 of the Protection of the Environment Operations Act 1997 (NSW) (PEO Act) categorizes environmental offences committed under the Act as tier 1 offences, which involve mens rea; tier 2 offences, which are generally strict liability offences; and tier 3 offences, which are generally absolute liability offences. See Honourable Justice Brian J. Preston [2006], 2.

⁶⁵ GMO Free European Regions Network, (2005) Technical Paper 1, 'Network's Technical Proposals on Coexistence Between GMO, and Conventional and Organic Agricultures, Rennes, 30 November 2005

⁶⁶ Megarry supra note 2.

therefore buildings and other constructions become part of the ground). If buildings become part of the ground, the assumption is that plants and their various components would also become part of the land.

5.4 Implications for Kenyan farmers

Agriculture is an important sector in Kenya's economy. It contributes 26 per cent of GDP and generates 60 per cent of total foreign exchange earnings. Agriculture provides seventy per cent of Kenya's employment.

The decision in *Monsanto v Schmeiser* has far reaching implications for farmers in Kenya where as we pointed out above, experimentation with GM is already happening. Most of Kenyan farmers are small scale farmers and own small farms. Because of the absence of a master land use plan, the possibility of one farmer growing GM seeds and another growing conventional seed is very real. The fact that most of the land in Kenya is arid and semi-arid (80 %?) puts a lot of pressure on arable land (20%) in Kenya. Additionally, the population has grown rapidly and is now estimated to be close to 40 million people.⁶⁷ There is no provision for corridors between GM and conventional crops and given the average farm sizes, this may not be feasible. Kenya's main market for agricultural goods is Europe and market preferences there as well as the growing awareness among Kenyan consumers is likely to impact on famers' views on GMOs.

Vision 2030 identifies agriculture as a main driver of growth and puts it out as one of the sectors that will catapult Kenya to a middle income country. Among the measures to raise incomes in agriculture are use of innovative means and introduction of modern agriculture to increase yields in key crops and increase smallholder specialisation. Modern biotechnology is one of the possible ways of increasing yields and in fact the Biotechnology Policy in Kenya identifies increased yields in agriculture as a reason for introducing the new technology. Vision 2030 also identifies the introduction of new land use policies and increase of agricultural production through irrigation.

While concerns about introduction of GM seeds to Kenya have been confined to negative environmental effects, the holding in the *Schmeiser* case brings IPR issues to the fore in countries such as Kenya. Legal liability for patent infringement is likely to adversely affect farmers as they seek to access seeds. The research and development costs and the time taken to develop GM-seeds make the price of these seeds much more expensive than public

⁶⁷ Government of Kenya, Vision 2030 (2007)

⁶⁸ Ibid.

⁶⁹ Ibid.

seeds or traditional ones. ⁷⁰ To protect their proprietary rights over technology from infringement and ensure that farmers come back to buy more seed, farmers are required to sign a commitment to not sell, distribute or stock seeds for the next year.⁷¹ When they utilize a GM-seed they are obliged to pay the use of the patent and enterprises establish their own police to sue anybody who uses their seed illegally. This raises the issue of the control that farmers have or can have over the land they own or use.⁷²

Apart from legal liability for patent infringement, there is also the issue for liability for contamination or other damage caused by GMOs. If a farmer has opted to plant non-GM seeds, the presence of GM seeds on a neighbor's farm can adversely affect the former. With prominence given to IPRs, the Schmeiser Case glossed over the issue of liability by the owner or user of proprietary technology to a farmer who does not want to have GM seed. This issue is critical in a country like Kenya where the main market for agricultural goods is Europe.⁷³

The law of torts provides a good basis for handling liability caused by GM products. Tort liability arises from the breach of a duty primarily fixed by law towards persons generally whose breach is redressable by an action for unliquidated damages.⁷⁴ The law of torts defines the obligations imposed on a person to his fellows to provide for compensation for harms caused by breach of the obligations.⁷⁵ Tort has been said to be concerned with loss adjustment and judged by its success as a compensation system. The primary issue to be determined is who should bear the relevant loss or should the loss lie where it falls? In determining whether the loss should be shifted to a defendant, a relevant issue is whether the conduct of the defendant warrants such shifting. Since tort concerns situations where one person's conduct causes or threatens to cause harm to the interests of others (broadly defined), it provides a basic infrastructure for building a liability for GM contamination.

The three torts that are relevant to liability and redress for biotechnology are negligence, nuisance and the rule in Rylands v Fletcher. 76 Negligence protects interests in physical and mental health, reputation, property interests,

Spring, Úrsula Oswald, 'Genetic Modified Organisms: a Treat for Food Security and a Risk to Food Sovereignty and Survival' in Hans Günter Brauch et. al eds. Coping with Global Environmental Change, Disasters and Security – Threats, Challenges, Vulnerabilities and Risks, Berlin – Heidelberg – New York: Springer-Verlag, 2009).

⁷¹ Ibid.

Cullet, supra note 11.

Kameri-Mbote, P., 'GMO Regulation: Kenya Case Study', New York University Law School Global Study on Conflict in GMO Regulation (October 2005)
Rogers, W V H Winfield and Jolowicz on Tort, 17th Edition, Sweet & Maxwell (2006)

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⁷⁶ [1868] UKHL 1

economic relationships and public rights.⁷⁷ To establish negligence, there has to be in existence of what in law "a duty of care situation", namely, a situation in which the law attached liability to carelessness; secondly, there has to be breach of the duty of care by the defendant, that is, failure to measure up to the standard set by the law; a causal connection between the defendant's careless conduct and the damage complained of; and damage that is foreseeable and not remote.⁷⁸ It has been noted that the concept of negligence presents a difficulty in enforcing liability and redress for biotechnology activities because of the *locus standi* requirements and the time limits.⁷⁹ The person or entity that is vested with the GMO when it causes damage may not be the one who made it and the question is whether right to sue resides in the person buying from the maker of the GMO; the one buying from the stockist or from the farmer. Similarly, the issue of whether the maker, seller, user/farmer are all enjoined as defendants. [can the case of *Donoghue v Stevenson* be of help here?] Given the period of time that the effects of the GMO may take before they become manifest, the risks of suits being time barred is also real because tort suits are required to be brought within six years.80

There are also differing standards of liability, namely, strict which makes a specific person responsible regardless of fault, but offers limited justifications; absolute liability which makes a person liable regardless of fault and allows no justifications/excuses and fault based liability where there is need to prove negligence on part of person responsible for damage.

Liability can also be attributed to several persons where the cause of loss is attributable to a number of persons. However, most torts require that the plaintiff have suffered damage and it is for this damage that the law gives compensation. There is also a fundamental requirement that the damage should have been caused by the Defendant's tortuous act or omission. The "but for" test is applied to establish the causative link, namely, the D's wrong is a cause of the damage if the damage would not have occurred if his wrongful act or omission had not taken place.

Most actions under tort law are based on common law which comprises rules of customary law which have been recognized by English courts and is built on precedents thus focusing on individual decisions. Common law was adopted in Kenya through the Judicature Act, Chapter 8 of the Laws of

See Migai Akech, Common Law Approach to Liability & Redress and its Application to East African Countries, Paper presented at the International Environmental Law Research Centre Workshop held on 22-26 September 2003, Mombasa. Available at www.ielrc.org.

⁷⁸ See Winfield & Jolowicz supra note 74.

⁷⁹ See Migai Akech, supra note 77.

⁸⁰ See § 4 Limitation of Actions Act, Cap. 22 of the Laws of Kenya.

Kenya. It provides that courts are to apply "the substances of the common law" but only to the extent that Kenya's circumstances and its inhabitants permit. Indeed, the common law constitutes a significant source of law for Kenya, since it is the applicable law in the absence of legislation. Preston proposes that the common law remedies of nuisance and trespass should be availed to farmers whose non-GM crop is interfered with by GM crops through cross-pollination. Indeed these have been the mechanisms used at common law for protection of a property owner's right. Trespass is defined as an invasion interfering with the right of exclusive possession of the land, and which is a direct result of some act committed by the defendant.

The rule in Rylands v Fletcher applies to anything brought on land in the course of its non-natural use that is likely to do mischief on escape. 85 Damage and escape need not be reasonably foreseeable. In the event that it escapes and causes harm, the person bringing it onto the land is held to be strictly liable. One could argue that GMOs brought on land are non-natural uses of land and the owners of the land where the GMOs drifted from should be held strictly liable for the damage caused to the field on which they land and the contents thereof. Nuisance on its part comprises an act or omission, which is an interference with, disturbance of or annoyance of a person in enjoyment or exercise of a right belonging to him as a member of the public, his ownership/occupation or enjoyment of his land, easement or profit or other use connected with land.86 Nuisance and trespass are the most often used mechanisms for protecting a property owner's rights and the question arises as to whether a non-GM farmer can use these mechanisms in the event of genetic drift leading to contamination of their crop. Case law has not conclusively determined this issue.87

In the case of *R. V. Secretary of State for the Environment ex parte Watson*⁸⁸, an organic sweet corn farmer, Guy Watson, successfully challenged a decision to allow a trial planting of a GM crop near his farm by judicial review. The Court of Appeal however avoided finding for the organic farmer, even though it recognised the GM plant variety trial in question

⁸¹ See Migai Akech, supra note 77.

⁸² Preston, *supra* note 54.

Rodgers, Christopher, in Tansey G., and T. Rajotte (eds.) The Future Control of Food: A Guide to International Negotiations and Rules on Intellectual Property, Biodiversity and Food Security, Earthscan London & Sterling VA (2008) p. 21

⁸⁴ Preston, supra note 54.

⁸⁵ Rylands v Fletcher (1868), LR 3 HL 330.

⁸⁶ Ibid

⁸⁷ Hoffman, LB Hoffman Farms Inc. and Beaudoin v. Monsanto Canada and Aventis Crop Science Canada Holding Inc (2005) and in the US (in the Star Link Corn Products Liability Litigation (2002) cited in Rodgers, supra note 83.

^{88 1999} Env. L. R. 310 (Court of Appeal, England)

was unlawful (by saying that he was only interested in the GM aspect of the trial, not in whether it was legal under the Plant Variety Regulations). The challenge was unsuccessful because in the Court's opinion, organic farming was a hypersensitive land use that would not be protected through the common law of nuisance. This case illustrates the difficulties that farmers encounter when asserting their rights to uninterrupted use of land such as would occur when there is GM contamination. Rodgers argues that there is difficulty in establishing causation and defining cross-fertilisation as property damage.

Moreover, the emphasis on intellectual property rights for GM negates the rights of land owners to the extent that once GM technology is found on a farmer's land; the proprietary rights of the patent holder subjugate those of the land owner - the rights of farmers to deal with produce on their land as they wish. The *Schmeiser Case* implies that both land rights and intellectual property rights can subsist in the same field irrespective of the circumstances under which the proprietary technology found its way onto the field. The holding that intention is not a prerequisite implies that the introduction of GM seeds onto a farmer's field makes the maxim *quicquid plantatur solo solo cedit* inoperative. This is not as problematic for a farmer who has signed an agreement with the GM patent owner as it is for a farmer whose field gets the GM seeds through cross-pollination.

5.5 Conclusion

The *Schmeiser Case* has far reaching implications for a country like Kenya for a number of reasons. One, there already exist plurality of farm holdings' sizes with many farms being small and farmers thereon being inclined to save seed for the next season. Small farms accompanied by immense pressure over land makes the possibility of gene flow real. Besides, the crossing of GM material from larger farms whose owners can afford GM seeds bought from multinational seed companies is likely to impact of farmers; practices of saving seed. Two, the existence of different tenurial systems over land also implies that movement of GM products from one farm to another could affect the quantum of rights of the land holders and buttress the rights of individual owners which are the best protected under the law currently. As pointed out above, tenure to trustland remains insecure because of absence of legal provisions to secure the rights of the people living there

⁸⁹ Rodgers, supra note 83.

⁹⁰ Rodgers, supra note 83.

⁹¹ Rodgers, supra note 83.

and progressive conversion of the land to individual holdings. GM flow to such land could exacerbate the tenure insecurity for communities living in the trustland. Three, the fact that most patents for GM seed are held by multinational corporations may result in less space for farmers in Kenya to access seed. This is serious in a country that already suffers from food shortages and whose economy largely depends on agricultural produce.

Fourth, the fact that there are no Kenya owned GM patents means that GM flow would result in reduced rights over land. This has implications for sovereignty of a nation where the struggle to wrest land from colonial powers was a major factor in the struggle for independence. Ceding rights over land on account of gene flow is akin to 'recolonisation' of land rights by western firms that own GM technologies.

Fifth and finally, the population pressure, that is over 80% of the population living on about 20% of the land means that there can hardly be room for a GMO 'buffer zone' and therefore cases of GMO pollution are likely to be common place.

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Chapter Six

Copyright in E-commerce and the Music Industry in Kenya

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6.0 Prolegomenon

his chapter analyses copyright in the context of e-commerce in Kenya. It explores whether the music industry in Kenya is sufficiently protected in the digital era by focusing on five interrelated themes.

Part One explores the interrelationship between e-commerce and intellectual property in Kenya. It discusses e-commerce in the context of patent, trade mark, trade secret and domain names. Part Two, Copyright law in e-commerce. It introduces copyright law; copyright in musical works; music in the Internet; the music industry in Kenya; legal dimensions of online music; and the challenges facing the music industry in Kenya.. Part Three explores copyright enforcement in Kenya with respect to civil and criminal remedies for copyright infringement as well copyright management organizations. We conclude Part Four critically

6.1 Introduction to e-commerce

Electronic commerce (e-commerce), consists primarily of the distributing, buying, selling, marketing, and servicing of products or services over

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electronic systems such as the Internet and other computer networks. ² E-commerce is a means of enabling and supporting the exchange of information, goods and services among companies inter se companies and their customers; or between the Government and business or consumers, among others. Well known e-commerce websites are www.amazon.com which offers more than one million books and music CD's for sale and www.ebay.com which is online auction and shopping website in which people and businesses buy and sell goods and services worldwide. Kenyan examples are discussed in part 1.3. of this chapter. E-commerce as a business model vastly improves efficiency and reduces transaction costs for businesses, consumers and Governments.3

E-commerce has increased exponentially since the advent of the Internet. The internet (an international network of computers) is a world wide network linking countless computer networks through data and telephone lines.⁴ The Internet developed in the US as a system for reliable, cheaper, faster and decentralized communication. It was felt that there was need to develop a system that would be safe and secure - for example one that could withstand nuclear war.⁵ Researchers especially in universities quickly adopted it. More recently, its architecture and values have largely been shaped by business interests and now include teleconferencing, video conferencing, email, and the use of voice telephony.6

The World Wide Web (Web) is a major part of the Internet. The world wide web (www) is a system of interlinked hypertext documents accessed via the Internet. Using a web browser, users can view web pages that contain text, images, videos, music, and other multimedia.

It is largely proprietary, that is, many websites are protected by trade mark, domain name, and copyright.7 Users sometimes have to pay or secure specialized software to have access. Email, on the other hand, can be

Reid Bannecker and Ed Harper (eds) (1999) E-commerce Development: Business to Consumer, Microsoft Press, Washington; Shahid Alikhan and Raghunath Mashelkar (2004) Intellectual Property and Competitive Strategies in the 21 Century, Kluwer Law International, the Hague.

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A. Michael Froomkin, (1997) "The Internet as a source of regulatory arbitrage," in Brian

⁵ Kahin & Charles Nesson (eds) Borders in Cyberspace, MIT press, Cambridge...

A. Michael Froomkin, "The Internet as a Source of Regulatory Arbitrage," ibid; Lawrence Lessig (2003) The Future of Ideas: the Fate of Commons in a Connected World, Random House, New York.

Lawrence Lessig (2004) Free Culture: How Big Media uses Technology and the Law to Lock Down Culture and Control Creativity, Penguin Press; A. Michael Froomkin, "The Internet as a Source of Regulatory Arbitrage," ibid

Internet-based. Examples of free e mail providers are Yahoo! and Microsoft's Hotmail and Gmail, among others.8

Innovations in the Internet which facilitate e-commerce include electronic funds transfer (EFT), supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, automated data collection systems, automated teller machines (ATMs), credit cards and telephone banking. 9

There are two major aspects of e-commerce. Firstly, the direct e-commerce which entails the electronic textual reproduction of a product's information (e.g. advertising material) as well as an electronic contracting process. 10 The delivery and payments are also carried out electronically (especially in the case of digital products such as music, software, images, data, graphics, and even texts). These are the pure play e-commerce, which have been referred to as click-and-mortar transactions. 11 Teleconferencing and videoconferencing where business decisions are taken. Secondly, there are transactions that may be initiated electronically but completed physically. These include contracting processes which may be electronic, but other processes such as delivery are done physically, for example, buying paper books from www. amazon com 12

There are several advantages of using e-commerce as a business model. First, it enables business enterprises to eliminate paper work; second, it facilitates instantaneous exchange of information; third, it enables enterprises to advertise products and services to the global market; fourth, it has low entry and transaction costs; fifth it grants access to the global market; and sixth, it provides online distribution of goods and services.¹³ Seventh, the facilities for teleconferencing and videoconferencing cut down costs in making business decisions.

Several advantages accrue to consumers engaging in e-commerce. First, consumers are able to easily search through a large database of products and services. Second, consumers can see actual prices, build an order over several days and email it. Third, customers can compare prices with a click

A. Michael Froomkin "The Internet as a source of regulatory arbitrage." op.cit. Shahid Alikhan et al (2004) Intellectual Property and Competitive Strategies... op. cit.; Ben Sihanya (2001) "Regulating e-commerce for agribusiness in Kenya," JSM (LLM) and predoctoral essay submitted to Prof Margaret J.Radin under the Stanford Program for International Legal Studies (SPILS).

Turban et al (2004) Electronic Commerce: A Managerial Perspective, op.cit. 10

Margaret Jane Radin, John A. Rothchild and Gregory M. Silverman (2002) Internet commerce, op.cit.

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¹³ Reid Bannecker and Ed Harper (eds) (1999) E-commerce Development..., op. cit.

of the mouse and buy the selected product at the best prices. ¹⁴ As opposed to brick and mortar businesses, consumers can conduct transactions from the relative comfort of their homes or offices without making actual visits to a store.15

6.2 E-commerce: a historical context

The emergence of electronic commerce can be traced back to the early 1970s to the invention of electronic funds transfer (EFT), which enabled organizations to transfer funds between one another electronically. Then another technology, electronic data interchange (EDI), was introduced. ¹⁶ EDI facilitates interbusiness transactions from financial institutions to other types of business and also provides transactions and information exchanges from suppliers to the end customers. However, these technologies were limited to special networks such as large corporations and financial institutions. They are costly and complex to administer for small business, hence, their use is limited 17

The other technological innovation largely credited with the emergence and growth of e-commerce is the Internet. The Internet was conceived in 1969, when a US Department of Defense Organization, the Advanced Research Projects Agency was funded to research on computer networking.¹⁸ Gradually the Internet gained popularity and during the 1990s, it was opened for commercial use and the world wide web emerged. 19 It is now a mass or popular communication platform.

Although the Internet began to advance in popularity among the general public in 1994, it took approximately four years to develop the security protocols (for example, Hyper Text Transfer Protocol (HTTP) and (Digital Subscriber Line (DSL)) which allowed rapid access and a persistent connection to the Internet.20

¹⁴ Sihanya (2001) "Regulating e-commerce for agribusiness in Kenya".op cit

Reid Bannecker and Ed Harper (eds) (1999) E-commerce Development: Business to 15 Consumer, op.cit.

¹⁶ H. Chan, R. Lee, T. Dillon, and E. Chang (2001) E-Commerce: Fundamentals and Applications, John Wiley & Sons Ltd, England.

B. Mahadevan, "Business models for internet based e-commerce: an anatomy," available at http://www.iimb.ernet.in/~mahadev/bmodel.pdf (last accessed on 9/01/09). 17

Adam Engst, Corwin Low and Michael Simon (1995) Internet Starter Kit: Éverything You 18

Need to Get on the Internet, Hayden Books, Indiana. H. Chan, R. Lee, T. Dillon, and E. Chang (2001) E-Commerce: Fundamentals and 19 Applications, John Wiley & Sons Ltd, England, op. cit.

Adam Engst, Corwin Low and Michael Simon (1995) Internet Starter Kit: Everything You 20 Need to Get on the Internet, Hayden Books, Indiana.

6.2.1 Popular e-commerce companies

The history of e-commerce is incomplete without the mention of two companies: Amazon and E-Bay. These were among the first Internet companies to allow electronic transactions. Currently, the five largest and most famous worldwide Internet retailers are: Amazon, Dell, Staples, Office Depot and Hewlett Packard. The most popular categories of products sold in the World Wide Web are music, books, computers, office supplies and other consumer electronics.²¹

Amazon.com, Inc. is one of the most famous e-commerce companies. Amazon headquarters is located in Seattle, Washington (USA). It was founded in 1994 and it was one of the first American companies to sell products over the Internet.²² In the beginning, Amazon.com was largely an online bookstore, but it has expanded and diversified into selling electronics, software, DVDs, video games, music CDs, MP3s, apparel, footwear and health products amongst others.²³ The company has set up separate websites in other economically developed countries such as the United Kingdom, Canada, France, Germany, Japan, and China. Amazon.com is one of the first e-commerce businesses to establish an affiliate marketing program and nowadays the company gets about 40% of its sales from affiliates and third party sellers who list and sell goods on the web site. According to research conducted in 2008, the domain name www.Amazon.com attracts about 615 million customers every year.²⁴

6.3 The extent of e-commerce in Kenya

There are growing numbers of e-commerce ventures in Africa. Many of these businesses are based in South Africa. Egypt, Kenya and Nigeria are the other leading e-commerce centres in Africa.²⁵

Online money transfer services in Kenya include: Kenwan Global, PoaPay and M-Pesa.

 Kenwan Global; http://KenwanGlobal.com allows users to send money to Kenya from anywhere else in the world through credit cards;

²¹ Jeffrey. F. Rayport (2002) Introduction to E-commerce, McGraw-Hill/Irwin, Boston.

²² Robert Spector (2000) Amazon.com - Get Big Fast : Inside the Revolutionary *Business Model* That Changed the World. Harper Collins Publishers.

²³ F. Schneider (2002) E-commerce, Thomson Learning, Massachusetts.

²⁴ Ibid.

Ben Sihanya with Prof James Otieno Odek, (2006) "Regulating and mainstreaming ICT in Kenya for socio-economic and cultural development," in Mainstreaming ICT in Kenya: Research perspectives from Kenya. "E-commerce in Africa," available at http://ictinafrica.com/sector/ecommerce.htm (last accessed on November 11, 2008).

- 2. PoaPay; http://poapay.com allows users to send money, flowers or shopping vouchers to anyone in Kenya;
- 3. The popular m-pesa service provided by Safaricom in Kenya is an innovative mobile phone money service.

Online shopping services include: Biashara.Biz Limited, African Colours and Mamamikes stores.

- 1. http://biashara.biz users can buy art, crafts, coffee, tea, food and clothes from Kenya;
- 2. http://mamamikestores.com allows users to send mobile phone airtime, shopping vouchers, school fees etc;
- 3. http://www.africancolours.net allows users to buy contemporary African art on the web.

The value of the e-commerce industry is estimated at US\$ 2 trillion worldwide. ²⁶ Statistics on the exact value of the Kenyan e-commerce industry are unavailable ²⁷

E-commerce has modified the traditional means of transacting business. Parties are able to transact business without being physically proximate. There are many broad impacts of the Internet on commerce generally. For instance, there is greater ease and efficiency of business communication through email, and advertising to a large number of consumers via the Internet. E-commerce removes the need for middle persons as companies are able to advertise and transact directly. This has low cost and wide market coverage implications for businesses. Trading information is also available online with relative ease, thus sales and purchases can be made online from producers and manufacturers worldwide.²⁸

The use of e-commerce is still fairly limited in Kenya. In 2001, Internet access was²⁹ limited to about 200,000 people in a country whose population is around 30 million. E-mail accounts were about 50,000.50% of these users were multi-national corporations, international corporations and NGOs. According to the Ministry of Information, Internet users in Kenya are 1.5 million (about 5% of the population). Thus, the level of Internet usage is

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Aida Mensah et al (2005) "E-commerce challenges in Africa: issues, constraints and 26

opportunities," available at http://www.uneca.org (last accessed on 10/11/2008). Sihanya (2002) ".Regulating agribusiness in Kenya's e-commerce," op. cit Ben Sihanya, Intellectual Property and Innovation in Kenya and Africa; (forthcoming

George Outa, Florence Etta and Erick Aligula (2006) Mainstreaming ICT: Research 29 Perspectives from Kenya, International Development Research Center (IDRC) and Myule Publishers, Nairobi.

still relatively low as compared to the population, which is 33.8 million.³⁰ Nevertheless, it is rapidly growing due to serious investment and interest in ICT. E-commerce has great potential to expand markets, productivity and competitiveness of Kenyan music.

Some of the challenges to e-commerce development in Kenya include:- 31

- 1. Lack of a proper policy framework on e-commerce;
- 2. Lack of legal and institutional framework on e-commerce
- 3. Telecommunication infrastructure is limited to urban areas;
- 4. Inadequate technical and institutional capacity to monitor e-transaction;
- 5. Human resource development;
- 6. Low rate of compliance and enforcement especially in the informal sector; and
- 7. Communications infrastructure.

Technology is dominated by two types of people: those who understand what they do not manage and those who manage what they do not understand. The Kenya Communications (Amendment) Act 2008 has made a spirited attempt in assisting Kenyans manage what we many don't fully understand. However, it has been justifiably criticized as vesting too many draconian powers on the Minister, as we discussed below and elsewhere.

With regard to electronic commerce; the Act has commendably addressed various substantive issues. A range of financial tokens that underlie e-commerce have been secured against fraudsters. A case in point is formation and validity of contracts where a contract shall not be denied validity or enforceability solely on the ground that an electronic message was used for the purpose. A range of financial tokens that underlie e-commerce have been secured against fraudsters. It is therefore possible to use digital signatures that provide reliable authentication of documents in computerized digital form. These signatures have been legally recognised. This means that where a law requires a signature of a person, this requirement can be met

Ministry of Information and Communication, "Kenya: a globally competitive ICT outsourcing destination," available at http://www.information.go.ke (last accessed on November 12, 2008).

November 12, 2008).

31 James Kiiri (2002) "Revenue implications of e-commerce for development," conference paper presented during the World Trade Organization's Seminar for E-commerce, April 22, 2002, Geneva.

if an advanced electronic signature is used within the context of a relevant agreement.

The implications of this aspect on e-commerce are wide-ranging. One can electronically sign credit contracts with virtual banks and use virtual letters of credit to conduct business. Other aspects that will enhance e-commerce include attribution or retention of electronic records and acknowledgement of receipts.³² On ICT security and forensics, the Act has fundamentally altered the electronic security landscape in Kenya. The notable inclusions include the entrenchment and substantiation of electronic records (or evidence). Electronic records are now legally recognised and can be retained in their original form. This means that your internet history logs, for instance, can now be used as evidence. Attribution is also now legal in that an e-mail receiver can legally act on the contents of an e-mail after identifying its source. It is now illegal to gain unauthorised access to a computer system, modifying computer material without authority, disclosing passwords, committing electronic fraud, publishing obscene information and planting viruses/Trojans in systems.³³ It provides that any person who fraudulently causes loss of property to another person by any input, alteration, deletion or suppression of data; or any interference with the functioning of a computer system, with intent to procure for himself or another person, an advantage, shall commit an offence and shall, on conviction be liable to a fine not exceeding two hundred thousand shillings and or imprisonment for a term not exceeding two years or both.

However, there are some significant omissions that should have been included in the Act.. Firstly Kenya must divorce ICT from media and publish a dedicated and detailed ICT Act. Some might argue that ICT and media are converging. My contention is that ICT, being a complicated technology with multi-faceted functions and scope, should be recognised as an independent framework despite its use in the media and other sectors. This should also provide a basis for integrating legal regime on ICT with the relevant sectors in which it is applied. Electronic investigation has been given a cold shoulder by this Act. Codes of electronic investigation and evidence handling procedures should have been outlined in more detail. Information is today's commodity of choice. This digital property will invariably ignite conflict. It would therefore have been advisable to include an ICT intellectual property framework in this Act. Finally the Act could have meted stricter penalties

Section 90, 91 and 94 of the Kenya Communications (Amendments) Act. Section 110 of the Kenya Communications (Amendments) Act.

for sponsors and perpetrators of child pornography, which has become a menace in Kenya.

In sum, this Act is a commendable first step. What should be appreciated is that ICT is dynamic and more legislative and policy work needs to be constantly developed.³⁴

Some elements of a policy framework for a vibrant e-commerce in Kenya would include the following:³⁵

- 1. Provision of network and information security to prevent hacking, viruses and worms. This involves protection by authentication, encryption, and regulatory principles.
- 2. Regulatory role of the Government. This is carried out by the Communications Commission of Kenya formed under the Kenya Communications Act,³⁶ to regulate the telecommunication industry in Kenya.
- 3. Infrastructure development for ICT in Kenya. The Government has responded by encouraging investment in the ICT sector. The ongoing construction of the fibre optic cable is expected to increase Internet usage in Kenya as it will provide faster and cheaper Internet connection. This will enhance the viability of call centres and ICT or "digital villages". ICT or a digital village is basically a computer facility located in rural or peri-urban areas that provides access to ICTs (information and communication technologies) in addition to accelerating the economic and social development of local communities.³⁷ There have been a lot of talks in Kenya on digital or ICT villages.
- 4. Facilitation of online transactions for instance by recognizing e-signatures, e-contracts, etc.³⁸
- 5. Some Government of Kenya initiatives for ICT include the formation of the a Nationwide Task Force on E-commerce and the Directorate

http://www.ictvillage.com/DVN_FAQ.asp (last accessed April 6,2009)

Muthoga Kioni, "M-Pesa - legislative safeguards should be in tandem with electronic ones," Kenya – Byte, Saturday January 24, 2009, available at http://kenya-byte.blogspot.com/2009/01/m-pesa-legislative-safeguards-should-be.html (last accessed on March 9 2009)

³⁵ Tarun Sawney, "Emerging intellectual property issues in electronic commerce: music, software and films on the internet," available at http://www.wipo.int/edocs/mdocs/copyright/en/wipo_cr_ec_mnl_01/wipo_cr_ec_mnl_01_7.pdf (last accessed on July 4, 2008)

³⁶ Act No. 2 of 1998, Laws of Kenya.

Jeremmy O. Okonjo (2008) Digital Signture Legislation in Kenya. The Quest for a Public Key Iinfrastructure for E-ommerce, Dissertation submitted to the University of Nairobi in partial fulfillment of the requirements for the award of Bachelor of Laws (LB) degree.

of E-Government

- 6. ICT related technological innovations. Some innovations that can encourage e-commerce in Kenya include m-pesa service.³⁹ M-pesa service, introduced by Safaricom, has revolutionized banking and commerce in Kenya. Already, millions of Safaricom subscribers can purchase airtime from their mobile accounts.⁴⁰
- 7. Protection of individual intellectual property rights in e-commerce.

Intellectual property rights, very broadly, are rights granted to creators and owners of works that are a result of human intellectual creativity. Everywhere and every time, people come across the things created, invented, discovered and produced by some human kind .Almost all the things that surround a common man are one way or another ,intellectual properties of someone; these includes products listed in online shopping services All these common things which are intellectual property belonging to someone are protected by law.

6.4 Intellectual property in e-commerce

E-commerce has vastly affected the protection and promotion of intellectual property rights. These effects are both positive and negative. On the one hand, e-commerce offers unique opportunities to market and sell products worldwide. On the other hand, the technologies used in e-commerce such as the Internet create serious challenges to intellectual property protection and promotion.⁴¹

Intellectual property (IP) recognizes, rewards, protects and promotes creativity - the product of the mind. It can also facilitate access to the products of innovation and creativity by the public.

IP is divided into two broad categories:⁴²

1. Copyright and related rights; and

- M-Pesa (M-money) is a mobile money transfer service introduced by Kenya's Safaricom Ltd in 2007. The service allows customers to deposit, transfer and withdraw funds from their mobile accounts. In 2008 revenue from m-pesa is predicted to generate \$52.4 million. See www.safaricom.co.ke.
- 40 E-commerce Journal, "Mobile money services in Kenya," available at http://www.ecommerce-journal.com/news/mobile_money_services_in_kenya (last accessed on November 11, 2008).
- 41 Hector MacQueen, Charlotte Waelde and Graeme Laurie (2008) Contemporary Intellectual Property Law and Policy, Oxford University Press, Oxford.
- Paul Goldstein (2002) Copyright, Patent, Trademark and Related State Doctrines, Foundation Press, New York; Ben Sihanya (forthcoming, 2009) Intellectual Property and Innovation in Kenya and Africa: Transferring Technology for Sustainable Development, Innovative Lawyering and Sihanya Mentoring Nairobi and Siaya.

2. Industrial property. This includes:-

- Patent
- Trade secret (TS)
- Trade mark (TM, ®) Service Marks (SM) and domain name system (DNS)
- Utility model (UM)
- Unfair competition (UC)
- Geographical indication (GI)
- Mask work or layout of integrated circuits
- Plant breeder's rights (PBR)
- Industrial design (ID).

The aspects of IP that have the greatest impact on e-commerce are patent, trade mark, trade secrets and copyright. These are discussed in detail in this part.

6.4.1 Patent and e-commerce

A patent is a certificate; and a jural, juridical or legal relationship. It is a document issued by or in the name of the sovereign and addressed to all subjects or citizens. As a juridical relationship, a patent is a bundle of rights and obligations conferred or imposed, respectively, on an innovator. It provides an innovator with exclusive control of the innovation in exchange for disclosing it to the public through the patent office.⁴³

Patent protects and promotes high technology inventions rather than lower level innovations, fabrications, improvement, modifications or "discoveries." An invention embodies scientific intervention or a qualitative leap in technology. It may involve substantial modification or improvement.⁴⁴

A patent may be granted for a product or a process or both.⁴⁵ A patent may also be granted for a technological improvement especially in a case where

Ben Sihanya, Patent Law, LLB, IV Teaching Notes and Materials. 2006/7/8/9 on file with the author at University of Nairobi Law School and Innovative Lawyering; Ben Sihanya, "Patent law and practice in Kenya," in William Cornish et al (eds) (2007) International Review of Intellectual Property and Competition Law, Max Planck Institute for Intellectual Property, Competition and Tax Law, Hart Publishing, Munich, pp. 648-658.

⁴⁴ See sec. 22-25 of the Industrial Property Act, 2001 dealing with inventions; patentability (novelty, inventive step, industrial application or utility); application for grant of a patent; and priority in the grant of a patent.

An example of a product patent is pharmaceutical drugs, like the anti-retroviral drugs (ARVs) or coartem, the anti malaria drug, while a process patent would protect a particular method of making a contact lens or the method of making an optical membrane, or the process of making Citizen "Beer Tosha" which was claimed by the East African

the patent term is about to lapse.⁴⁶ In Kenya the grant is for 20 years upon application made by the inventor or beneficiary to the Kenya Industrial Property Institute (KIPI).⁴⁷

For a patent to be awarded four main standards must be achieved, namely: novelty, inventive step (or non obviousness), industrial application (or utility) and (sometimes) reproducibility. Moreover, the invention must not be excluded by statute.⁴⁸

There is no clear legislation or policies on patenting e-commerce related innovations in many countries. This is partly because it is not yet very clear how most of the e-commerce transactions and products should be treated. In the US, for instance, there has been a tendency to use copyright law, trade mark law, design law, as well as patent law. Some argue that patent may not be appropriate.⁴⁹

The US has granted a number of patents on computer programs, for example, the Quick Install Process (QIP) was granted a patent as a silver bullet to fix the Y2K problem. On 28th September 1999, Amazon.com obtained a patent on a method and system for placing a purchase order via a communications network using only a single action, hence the "one click patent." In Amazon. com v. Barnesandnoble.com the subject matter of the suit was Amazon. com's "one click patent." The suit was filed for alleged infringement by Barnesandnoble.com of the one-click web-shopping system patented by Amazon.com. Amazon.com alleged that Barnesandnoble.com's feature,

Breweries (Kenya) Ltd in its patent war with Castle Brewing Kenya Ltd in 1998. I discuss the case below. See Ben Sihanya, "Patent law and practice in Kenya," *op. cit*.

For instance, a new patent was acquired for Panadol Extra when the Panadol patent was about to expire. See Ben Sihanya, Intellectual Property and Innovation in Kenya and Africa..., op. cit.

⁴⁷ See s. 60 of the Industrial Property Act, 2001.

⁴⁸ See Art. 27 of the Agreement on the Trade Related aspects of Intellectual Property, including Trade in Counterfeit Goods (TRIPs), 1994, of the World Trade Organization (WTO); Ben Sihanya, Intellectual Property Law, LL.B. IV Teaching Notes and Materials, 2006/7/8/9, and Ben Sihanya, "Patent law and practice in Kenya," op. *cit*.

⁴⁹ See, e.g, Margaret Jane Radin, John A. Rothchild and Gregory M. Silverman (2002)
Internet Commerce, Foundation Press, New York.; Lawrence Lessig, "Europe's 'Me-Too'
Patent Law," Fin Times, July 12, 2000, at 17, Lawrence Lessig, Online Patents: Keep
Them Pending, Wall Street Journal, March 23, 2000, at p. 22.

The Year 2000 problem (also known as the Y2K problem, the millennium bug, the Y2K bug, or simply Y2K) was a notable computer bug resulting from the practice in early computer program design of representing the year with two digits. This caused some date-related processing to operate incorrectly for dates and times on and after January 1, 2000 and on other critical dates which were billed "event horizons" Dr. Robert Sullivan, "The Y2K Problem - What You Need to do! ©" available at http://www.pertinent.com/articles/starting/robsullivan3.asp (last accessed on 17/02/09).

See also Amazon.com Inc. v. Barnesandnoble.com, Inc, 73 F.Supp. 2d 1228 (1999) available at http://cyber.law.harvard.edu/property00/patents/AmazonInjunction.html (last accessed on 10/01/09).

which allowed users to purchase products by pressing a button labeled "Buy it now with just 1 click" violated its patent. The court granted an injunction in favour of Amazon.com's and held Barnesandnoble.com liable for patent infringement.⁵²

The issue of patenting business methods has been controversial. Business method patents are granted to inventors that have devised a novel technology or means of doing business via computers or the Internet. According to some, business methods are legitimate inventions that deserve the protection by patent law. According to others, business methods are unpatentable and may inhibit innovation in e-commerce. ⁵³

The idea of patenting a way of doing business is still relatively new in jurisdictions like the US. In Kenya, section 21(3)(b) of the Industrial Property Act, 2007 specifically excludes the means of conducting business from patent protection. Thus, e-commerce related innovations are unpatentable in Kenya. Instead, companies venturing into e-commerce have sought to protect their services, names and marks through trade marks.

6.4.2 Trade mark and e-commerce⁵⁴

Trade mark (TM) largely deals with the second level of innovation, which consists of going to market. Trade mark more directly seeks to answer the question, "what is in a name, a symbol, a sign, a mark, etc" TM is an IP right granted in order to distinguish the goods or services of one trade mark proprietor or licensee from those of the competitor. The cognate expression is service marks. For example, Windows is a service mark for Microsoft; University of Nairobi (UoN) and Jomo Kenyatta University of Agriculture and Technology (JKUAT), are service marks for the respective universities; Safaricom, the Hilton, are other examples.

Trade mark serves the following four purposes:

1. To identify, or indicate the source or origin of the goods, services or technologies, by linking a product to the source;

⁵² Ibid.

⁵³ Stephen Dirksen et al, "Who is afraid of Amazon.com vs. Barnesandnoble.com? in 2001 Duke L. & Tech Rev 0003, available at http://www.law.duke.edu/journals/dltr/articles/2001dltr0003.html (last accessed on 10/01/09).

See generally, David Bainbridge, (2007) Intellectual Property, Pitman Publishing, London, 6th Edition; William Cornish and David Llwelyn (2007) Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights, Thomson Sweet and Maxwell, London, 6th Ed; Ben Sihanya, "Trade Mark Law…," Teaching Materials in Intellectual Property, LLB. IV, 1997-2009; Ben Sihanya, "Trade Mark Law Teaching Materials, LLM.," 2003-2006.(on file at Innovative lawyering and Sihanya Mentoring ™ Nairobi and Siaya, Kenya.

⁵⁵ Ben Sihanya, Intellectual Property and Innovation in Kenya and Africa., op. cit.

- 2. To protect the goodwill or investment by the trade mark proprietor, trader, or corporation;
- 3. To limit or eliminate confusion of consumers.; and
- 4. To confirm consumer expectation.

A trade mark must be registered for it to be protected. Trade marks can exist intermittently, and are protectable in Kenya for a renewable period of 10 years. However, sec.. 5 and 15A of the Trade Mark Act Cap. 506 protect and promote unregistered marks where good will has developed to the benefit of an individual or an enterprise (hence passing off under sec. 5), or where the mark is well known, famous or notorious in the relevant industry or market (under s. 15A).

Trade mark is a common feature in commerce as it constitutes the interface between invention and packaging or marketing. Various companies have registered trade marks which feature in e-commerce.

A domain such as www.amazon.com may also function as a trade mark where consumers associate goods and services sold via the website with the company. The name amazon.com has been promoted through advertising, sales and marketing, and has gained notoriety throughout the world. No other company can sell online products using the brand, amazon.com as it would constitute trade mark and domain name infringement.⁵⁶

The registration of a domain name, which is identical or confusingly similar to another entity's trade mark, is likely to constitute trade mark infringement or unfair competition. Thus any company engaging in e-commerce should be careful in the choice of a domain name, so as not to infringe others' trade marks. In the case of Perfumebay.com Inc. v. eBay Inc⁵⁷ the Court addressed the issue of the rights associated with domain names and trade mark on the Internet. It granted an injunction preventing Perfumebay from using the word "Perfumebay" as it was likely to cause confusion with eBay. The court held that the marks were similar because "Perfumebay" incorporates "eBay" in its entirety, especially when it is spelled "PerfumeBay."58

Further, the sale of products or services that infringe registered trade marks may make the company liable for trade mark infringement. There

Stephen Elias et al (2007) Trade Mark: Legal Care for your Product and Product Name, 56 Nolo, Houston.

⁵⁷

Perfumebay.com Inc. v. eBay Inc., No. 05-56794, 14521 (9th Cir. Nov. 5, 2007). Sheppard Mulin (2008) "What's in a name: perfumeBay v eBay trade mark litigation," available at http://www.fashionapparellawblog.com/2008/01/articles/fashion-cases/whatsin-a-name-perfumebay-v-ebay-trademark-litigation/ (last accessed on 12/1/09).

have been a number of related trade mark infringement suits. In a case from France, a company called Worldmedia infringed Christian Dior's trade mark and copyright by illegally producing and disseminating Dior's garments electronically through its commercial website.⁵⁹ Christian Dior sued Worldmedia and the Tribunal de Grande Instance of Paris ordered Worldmedia to refrain from reproducing Christian Dior's trade marks and logos, as well as from further copyright infringement though its commercial website 60

Another alternative to protecting ones innovations and creations is trade secrets. Unlike trade marks trade secrets deal with protecting the technological know how and components of a product.

6.4.3 Trade secrets and e-commerce

Trade secrets are protected where they consist of confidential information with commercial value (for example the secret Coca Cola formula has proved to be of immense value), and there is an obligation to keep the information secret. Secrets without commercial value may be covered under the laws on defamation, privacy and the right of publicity, among others.

Trade secret law recognises that products of the mind may not be effectively protected by patent, copyright, trade mark or any other traditional IP doctrine. Trade secrets are protected in order to protect and promote technological or commercial know-how that may not be effectively governed by other IP regimes. 61 For instance, under the Kenya intellectual property regime, a way of doing business is unpatentable. Thus any e-commerce related innovation may be protected as a trade secret.

However, the law of trade secrets is not very reliable because of a number of limitations. These include the fact that it may be very difficult to establish the right; competing enterprises may have similar trade secrets. The enforcement and protection of trade secrets is equally problematic. For instance, policy questions arise since the concept of confidentiality may be considered unacceptable for exchange of information and technological progress: disclosure in exchange for protection underpins most IP doctrines in Kenya.⁶²

See I*M Europe, France-Internet Marketing of Exclusive Fashion Designs and Counterfeited Videotapes constitutes Copyright and Trade mark, Infringement, at http://158.169.50.95:100801/legal/en/news/9904/chapter 10.html (visited April 14, 2001).

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Ben Sihanya, "Intellectual Property and innovation in Africa... op. cit James J. Fialka (1997) War by Other Means: Economic Espionage in America, W.W. Norton & Company, New York.: Paul Goldstein (2002) Copyright, Patent, Trademark and Related State Doctrines, Foundation Press, New York.

⁶² Sihanya (forthcoming, 2009) Intellectual Property and Innovation in Kenya and Africa:

Trade secrets related to e-commerce may include formulas, processes, patterns, software designs, customer lists, customer preferences and internal business and marketing plans.

Domain names are another form of intellectual property to protect ones innovations. Domain names allow Internet users to more easily find and communicate with web sites and any other IP-based communications services

6.4.4 Domain names and e-commerce

A domain name is an identifier, which corresponds to a particular web page, for instance www.innovativelawyering.com. A domain name is a name associated with a particular computer online. Domain names are looked up on name servers in the domain name server (DNS) hierarchy to resolve them to numerical IP addresses. The Internet uses the DNS to identify the millions of machines connected by the Internet. Each machine's address is composed of four numbers, each less than 256. Since it would be incredibly difficult for users to remember long numerical addresses, the domain name system makes it easier to navigate the Internet.⁶³

Domain names have become serious IP issues, partly because they serve as business addresses. These include ".com" (commercial enterprises), ".org" (organizations) ".net" (intra-nets), or ".ke (names of countries, in this case Kenya).

There have been several disputes regarding the allocation of domain names. Such names are largely allocated through the Internet Corporation for Assigned Names and Numbers (ICANN), an organization that has evolved from private sector interests in the US. There have been suggestions that this should be done in consultation with public and private enterprises as well as citizens associations in other countries to enhance transparency, accountability, and participation. 64

In the case of Alice v. Alice, 65 Alice 1966, a French company, was sued by Alice 1957 for trade mark infringement and unfair competition. The defendants stated that there was no risk of confusion as regards the trade name that they had registered the domain name in 1995 with the French registration authority and that registration in France was governed by the

Transferring Technology for Sustainable Development, op..cit

Adam Engst, et al (1999) Internet Starter Kit... op. cit; Reid Bannecker et al, E commerce 63 Development... op. cit. Kenya: has supplied Africa's representative to ICANN, the former CEO of Wananchi, an

⁶⁴

⁶⁵ C.A. Paris, Dec. 4, 1998 (Fra.)

principle "First come first served." The Tribunal de Grande Instance of Paris ruled on March 12, 1998 that "the domain name is granted on the principle of anteriority, thus limiting the principle of speciality, which allows concurrent use of a trade name by other companies. The Court also stated that registration of a domain name did not confer on the registrant any intellectual property right, but it foreclosed use of the name to all the other companies. In holding that registration of the domain name on the basis of the "First come first served" principle foreclosed the possibility of the older company, and holder of the trade mark, of using its trade name on the internet, the court ordered that the domain name alice be relinquished in favour of the plaintiff.66

The problems regarding domain name has since been sorted out. One cannot register a domain name from an existing registered company or business. Important dispute resolution cases on domain names have set clear guidelines and principles of registering a domain name.⁶⁷

Partly because of ineffective regulation, some individuals and companies engage in cyber squatting-registering and subsequently selling domain names at a premium. 68 The US Government has enacted the Anti-cyber Squatting Consumer Protection Act⁶⁹ to address some of the concerns. The Internet Corporation for Assigned Names and Numbers (ICANN) has promulgated rules to implement the law.⁷⁰

A domain name is very important in e-commerce as it serves as the address by which consumers have access to the producers or service producers. Popular e-commerce domain names like amazon.com attract millions of customers every year.

⁶⁶ I *M Europe, France -Court Judges on the "First come, First Served Principle of Domain Name Assignment available at http://158.169.50.95:10080/legal/en/news/9808/chapter 10.html (visited April 14, 2001). Ben Sihanya, "Intellectual property confronts conterfeiting in Africa: protecting innovators and consumers in cybersociety," in Thomas Wilhelmsson, Salla Tuominen and Heli Tuomola, Consumer Law in the Information Society, Kluwer Law International, Cambridge Massachusettes.

Margaret Jane Radin, John A. Rothchild and Gregory M. Silverman (2002) Internet

⁶⁷ Commerce, op. cit

Cybersquatting (also known as domain squatting), according to the United States federal 68 law known as the Anticybersquatting Consumer Protection Act, is registering, trafficking in, or using a domain name with bad faith intent to profit from the goodwill of a trademark belonging to someone else. The cybersquatter then offers to sell the domain to the person or company who owns a trademark contained within the name at an inflated price.

⁶⁹ 15 USC & 1125 (d) (supp. 2000).

Uniform Domain Name Dispute Resolution Policy. This Uniform Domain Name Dispute Resolution Policy (the "Policy") has been adopted by the Internet Corporation for Assigned Names and Numbers ("ICANN"), is incorporated by reference into your Registration Agreement, and sets forth the terms and conditions in connection with a dispute between you and any party other than us (the registrar) over the registration and use of an Internet domain name registered by you.

In certain instances, the rights of a trade mark owner will prevail over the rights of a domain name holder as was seen in the case of Marks & Spencer v. One in a Million. 71 Marks & Spencer, sued a company, One In A Million, who had registered a number of domain names which reproduced well known trade marks such as Marks & Spencer, Sainsburys, Virgin and Cellnet. These domain names had been registered with a view to selling them to their "owners." The court ordered One In A Million to assign the domain names to the trade mark holders. One In A Million had unsuccessfully argued that the domain name registrations were, in effect, "first come first served" and accordingly the trade mark owners had no rights.⁷²

The registration of a name the subject of trade mark to which, off the web, the registrant would have no entitlement is forbidden by the laws of most countries.

6.5 E-commerce and copyright

Below I discuss copyright law and practice in Kenya in the context of e-commerce.

6.5.1 Copyright law in Kenya

Copyright is protectable and enforceable where the work is original, and expressed in a tangible or fixed form. Under the Kenyan Copyright Act, 2001 copyright subsists in a literary, musical and artistic work if "sufficient effort has been expended on making the work to give it an original character" and "the work has been written down, recorded or otherwise reduced to material form."⁷³ Copyright law exists to protect and promote the expression of ideas (information, facts, knowledge or concepts) reduced into tangible form. It protects the intellectual standing and economic livelihood of creators and publishers of literary, dramatic, artistic, musical, electronic and audio-visual works 74

Copyright law works under various principles or doctrines. First, it seeks to enhance creativity and provides incentives for it. Second, it seeks to achieve a balance for creativity and rewards on the one hand, and for securing freedom of expression and public interest on the other.⁷⁵

⁷¹ CH 1997 M.5403.

See Paul Robinson, "In the matter of DNS usage: first come, first served," available at http://www.ops.ietf.org/lists/namedroppers/namedroppers.199x/msg01089.html (last accessed on 19/01/09).

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S. 22(3) Copyright Act, 2001.
Paul Goldstein, (1989) "Copyright Law and Policy, in P. Newberg (ed) 2 New Directions in Telecommunications Policy" vol 2 (Duke University Press.)

⁷⁵ Paul Golstein (2001) International Copyright: Principles, Law and Practice, Oxford

Copyright subsists automatically immediately the work is reduced into a tangible form, for example a book (literary), sculpture (artistic) or music. The Kenyan Copyright Act, 2001 provides for the following categories of copyrightable works: (a) literary work, (b) musical works, (c) artistic works, (d) audio visual works, (e) sound recordings; and broadcasts.⁷⁶

The subject matter of copyright branding consists of primary and secondary works

Primary or "original" works; comprise literary, artistic and musical works. It is instructive to note that a dramatic work such as a skit falls under performance when staged⁷⁷ whereas published play is a literary works. Original works also include audio-visual works and photographs, sound recordings and broadcasts.

Secondary (or derivative) works. Derivative works are developed or derived from other works especially, primary work. They may also be derived from other derivative works. They include audio-visual works, films, broadcasts and cable casts. Derivative is more of an American term. These works are granted rights known as related, allied or neighbouring rights which are separate from traditional copyright.

It is instructive that the conventional distinction between primary or original rights and related or neighbouring works is breaking down because of at least two reasons. First, many secondary works are "original"; many additional works are original components and are not derived from primary works. Second, in Kenya, USA and even in Europe (where the distinction used to be rigid) the two sets of works are governed by a single Copyright Act.

Broadly, copyright confers two forms of rights: economic or material rights, and moral rights. Moral rights consist of four categories, namely, the right to be named (or the right to paternity); the right to integrity; the freedom from false attribution and the right to privacy.⁷⁸

Economic rights are associated with copyright (or the right to a copy). It is also an entrepreneur's right to secure economic and financial benefits from investing in a work. It relates to innovation in the second sense; that is marketing the work and benefiting from it as opposed to creating the work in the first instance.⁷⁹

University Press New York

⁷⁶ Section 22, Copyright Act, 2001.

⁷⁷ Kenya law focuses on the first two. See Section 30 of the Copyright Act of 2001.

⁷⁸

⁷⁹ Ben Sihanya; Intellectual Property and Innovation (forthcoming 2009)

Economic rights constitute a critical aspect of contracts relating to the exploitation of copyright, folklore, and rights in performances. Economic rights protect an author of a book from having their work sold, copied, etc. without permission or a contractual license.⁸⁰

Economic rights seek to secure the material or financial benefits from innovation or creativity. These include the right to: 81

- 1. Reproduce a work (copy by hand, photocopy, scan, print...)
- 2. Communicate to the public
- 3. Broadcast a work or distribute it (lend, rent, sell, offer for sale...)
- 4. Develop a derivative or adapted work from an original work.

Economic rights are transferable. They may be assigned or licensed. They survive the author and benefit his or her estate, unlike moral rights that live and die with the author.

6.5.2 Copyright in musical works

S. 2 of the Kenya Copyright Act,82 defines musical work as

"any musical work, irrespective of musical quality, and includes works composed for musical accompaniment."83

This definition is not very helpful, and underscores the complexity of musical copyright. Copyright in musical works relates to the lyrics or musical composition and sound recording. Lyrics are protectable as literary works. Art 2(1) of the Berne Convention for the Protection of Literary and Artistic Works 1886 provides copyright for protection for musical composition with or without words. This encompasses music in the widest sense.⁸⁴

Relatedly, a sound recording is defined in s. 2 of the Kenya Copyright Act, as

"any exclusively aural fixation of the sounds of a performance or of other sounds, or of a representation of sounds, regardless of the method by which the sounds are fixed or the medium in which the sounds are embodied but does not include a fixation of sounds and images, such as the sound track of an audiovisual work."

⁸⁰ Ben Sihanya (2005/2007) "Copyright law, teaching and research in Kenya," East African Law Journal, Nairobi, pp. 28-62.

⁸¹ Section 26, Copyright Act, 2001.

⁸² Act No. 12 of 2001.

⁸³ Section 2, Copyright Act, 2001.

Paul Goldstein (2001) International Copyright: Principles, Laws and Practice, Oxford University Press, New York.

Like other categories of copyrightable works, a musical work is not eligible for copyright unless sufficient effort is expended in creating the work to make it original and it is reduced to tangible or material form.85

A copyright owner of a sound recording has the exclusive right to do the following:

- 1. Direct or indirect reproduction;
- 2. Distribution of copies to the public by sale, rental, lease, hire, loan;
- 3. Importation into Kenya; 86
- 4. Communication to the public or broadcast; or
- 5. Creation of derivative works from the original. 87

The copyright in a musical work expires after 50 years after the life of the author, creator or musician.88 Where the lyric writer and composer are not the same person, the two copyrights can expire on different dates.

6.6 Music in e-commerce

E-commerce affects both the economic and moral rights of the copyright owners. The ease, with which music can be produced, published transmitted and copied over the Internet and other computer networks has created massive challenges in copyright protection and promotion. Many legitimate websites offer music for sale through e-commerce. Music services available include purchase of physical music CDs and DVDs which are delivered to the owner. Other websites enable consumers to download music at a fee. Others allow customers to compile their own CDs from online music and then deliver the CDs via traditional mail. Some websites allow the listener to create his or her own playing list or a personal juke box. Other websites allow music to be combined with information on artists, composers and chats.89

Often, however, musicians and copyright owners do not benefit economically from their works due to mass infringement and piracy perpetrated over the

⁸⁵ Section 22, Copyright Act, 2001.

The copyright holder's right to control importation of copyrighted works is created under the complex rules on parallel importation or exhaustion of copyright. Parallel importation occurs when an importer finds a cheaper price of a good or equivalent good on the world market and imports the good instead of paying higher local prices.

See s. 28 of the Kenya Copyright Act, Act No. 12. Section 23, Copyright Act, 2001. 87

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M. William Krasilovsky, Sidney Shemel, John Gross (2000) This Business of Music: The Definitive Guide to the Music Industry, Billboard Books, Michigan

Internet. Millions of copies of music are sold or downloaded for free from the Internet, without the consent of the copyright owners. ⁹⁰

6.6.1 Music and the Internet

Digital material including literary, artistic, audio and audio-visual works are easily stored and distributed over the Internet. Once loaded onto the Internet, the material can be transmitted numerous times without loss of quality. Today a lot of music is available and easily accessible via the Internet. Users can access a vast variety of music available on the internet by using a modem with an Internet Service Provider (ISP). The music and lyrics can be accessed, viewed, retrieved, printed and downloaded. Page 1972

Technologies for accessing music on the web include streaming and downloading. Streaming refers to listening to music on the Internet on a real time basis, similar to listening to a radio. Through streaming technologies the listener cannot copy or retain the music and listen to it later. Some websites that use streaming are more interactive, and allow the listener to select the music he or she wishes to hear. To download is to copy the music to the web user's hard drive or computer. Initially music was downloaded in the MP3 format that had no measure to prevent unauthorized distribution. Newer technologies have copyright protection tools.

Numerous artists sell their music CDs and albums through www.amazon. com. Music by famous Africans on sale at Amazon include Miriam Makeba and Lucky Dube. Kenyan music include Samba Mapangala, Them Mushrooms, Sam Chege, Safari Sound Band, among others.⁹⁶

Two leading points that must stand out in this discussion is that musical works that are protected by copyright do not lose the copyright status by appearing on the Internet. However, because of the borderless and international nature of the Internet, it poses serious challenges to copyright protection and enforcement. No one controls the Internet, and this has broad legal implications as copyright enforcement is essentially nature territorial.

⁹⁰ M. William Krasilovsky, Sidney Shemel, John Gross (2000) This Business of Music: The Definitive Guide to the Music Industry .ibid

⁹¹ David Bainbridge (2002) Intellectual Property, Pearson Longman, Harlow, David Bainbridge (2007)

⁹² Ibid

⁹³ J. Dianne Brinson & Mark F. Radcliffe (2000) Internet Law and Business Handbook, the Roberts Group, California, at pp.333

⁹⁴ Ibid.

⁹⁵ Ibid.

⁹⁶ See www.amazon.com (last accessed on 15.01.09).

Some of the major copyright challenges being experienced in the music industry include:

- 1. Electronic copying and transmission of music
- 2. Unauthorized transferring digital music into CDs, digital versatile discs (DVDs)

Illegitimate uploading of music on websites without the consent of the copyright owner. Here, the infringer may copy from a traditional source like CD, DVD; or transfer from another Internet site. This amounts to primary infringement by copying. A leading American decision on copyright; A&M Records, Inc. v. Napster, Inc., 97 deals with music on the Internet. The Napster case is a significant decision to the music industry as it addresses the application of copyright law to peer-to-peer file sharing. The court found Napster liable for contributory infringement as its website allowed users to upload and download music in digital format.⁹⁸ The defendant, Napster, was a company started in 1999 by Shawn Fanning, then an 18-year old freshman computer-science student at Boston's Northeastern University. It provided a platform for users to upload and download music files in a compressed digital format. The plaintiffs were major record companies who saw the potential for this technology to impact their sales, and quickly filed suit against Napster as a "contributory and vicarious copyright infringer." The United States District Court found that Napster had contributed to the infringement of copyrights owned by the plaintiffs, and issued an injunction, from which Napster appealed.

In order for Napster to be liable for contributory infringement, the users of the service had to be infringing directly. Napster asserted that this was not the case, but that a substantial number of its users were in fact engaged in three kinds of fair use: sampling, where users make temporary copies of a work before purchasing; space-shifting, where users access a sound recording through the Napster system that they already own in audio CD format; and permissive distribution of recordings by both new and established artists

The issue presented for appeal was whether the asserted uses were in fact "fair use." The court was also confronted with the question of a solution for the alleged infringement, to which Napster had proposed a compulsory license.

The court found that "Napster users infringe at least two of the copyright holders' exclusive rights: the rights of reproduction and distribution. With

⁹⁷ A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001).

at http://www.law.cornell.edu/copyright/cases/239_F3d_1004.htm (last accessed on April 7,2009).

respect to the fair use arguments, the court sharply distinguished the facts presented from "the Betamax case", *Sony Corp. of America v. Universal City Studios, Inc.*⁹⁹ where the manufacturers of VCRs had no control over how people used them after they were purchased. By contrast, the court found that the owners of Napster could control the infringing behavior of users, and therefore had a duty to do so. Sampling was deemed not be a fair use, because the "samples" were in fact permanent and complete copies of the desired media. Furthermore, the space-shifting argument did not avail the defendant, because the shift to a digital format was not a personal storage use, but was accompanied by sharing the file with the rest of the world.

The court also rejected Napster's proposed compulsory royalty, calling that an "easy out" for Napster, and contending that the imposition of such a device would destroy the plaintiffs' ability to control their intellectual property. This "Napster Ruling" has henceforth frequently been cited as legal precedent imposing threat on website authors for merely hyper linking to copyrighted content. Napster was made to forfeit 20 million dollars on settlement with the record companies involved

6.6.2 Distribution of music via the Internet

The Internet has affected traditional models of doing business in the music industry. Music once sold in retail stores is now sold online on the Internet and mobile phones. According to an OECD report on the digital music industry

"online music distribution is set to grow significantly over the next few years, forcing industry to reconsider their business models and posing regulatory challenges to governments..."¹⁰⁰

The increase in online music sales has broad implications for different stakeholders including artists, consumers, the record industry, and new digital intermediaries. There is vast potential of digital distribution as a business model.

Music downloading and sale of digital music has had a major impact on the sale and physical distribution of physical CDs worldwide. Generally, sale of CDs continues to decline while digital music sales continue to rise. Artists and recording companies are contending with the challenge. Some are wondering

^{99 464} U.S. 417 (1984),

¹⁰⁰ Organisation for Economic Co-operation and Development (2005) "Online music distribution providing both challenges and opportunities according to OECD report," available at http://www.oecd.org/document/24/0,2340,en_2649_201185_34995480_1_1_1 1,00.html (last accessed on 27/11/2008).

whether to forget CDs and physical distribution and adopt digital release, as the main source of revenue. There are pros and cons to embracing digital music distribution ¹⁰¹

6.6.2.1 Advantages of digital music distribution

First, digital distribution keeps the costs down. Online distribution eliminates the expenses related to pressing and artwork printing. The artist only requires a website to distribute the music. Second, the artist can make more money from online distribution as he or she does not have to share the revenue sales. In traditional distribution systems, the artist shares profits with physical distributors and store selling the music. If the artist sells the music on his own website, he shares profits with no one. If he sells through an online music distributor website, he shares a small percentage with an online distributor.¹⁰²

Third, the sale of online music is often cheaper than traditional CDs. The artist can sell the online music cheaper since expenses are lower, and he doesn't share the earnings with distributors. 103

6.6.2.2 Disadvantages of digital music distribution

Disadvantages associated with online distribution of music include the hardship in promoting the music via the Internet. For new musicians particularly it is hard to promote music online. ¹⁰⁴ There is stiff competition in promoting and selling music through the Internet. The sheer number of websites selling or distributing music on the Internet is overwhelming. Thus it is difficult to get noticed on the Internet. ¹⁰⁵

When an artist uses online distribution, he lacks the support of physical distributors and music store staff to promote and sell the music. Thus, there are fewer people working to promote and sell the music. 106

Heather McDonald, "Music downloading: should I go for an internet release only," available at http://musicians.about.com/od/musiciansfaq/f/digitalalbum.htm (last accessed on 27/11/2008).

¹⁰² Lawrence Lessig (2001) The Future of Ideas: the Fate of Commons in a Connected World, Random House.

¹⁰³ Ibid.

¹⁰⁴ Andrew Sparrow (2006) Music Distribution and the Internet, Gower House, Aldershot, UK; Michael Einhorn (2004) Media, Technology and Copyright: Integrating *Law and Economics*, Edward Elgar Publishing Cheltenham, UK.

¹⁰⁵ Ibid.

Organisation for Economic Co-operation and Development (2005) "Online music distribution providing both challenges and opportunities according to OECD report," available at http://www.oecd.org/document/24/0,2340,en_2649_201185_34995480_1_1_1_1_1_00.html (last accessed on 27/11/2008).

There is a need for policies which balance the interests of suppliers and users, in the protection and promotion of intellectual property rights and digital rights management, without disadvantaging innovative e-business models and new technologies.¹⁰⁷

6.7 The music industry in Kenya

According to Dr Marisella Ouma, it is difficult to give the exact value of the Kenyan music industry. This is partly because according to her estimates, more than 99% of music sold in Kenya is pirated. A total of 10-32 million albums are sold yearly in Kenya of which only 3 to 9.6 million copies consist of local music. The exact cost of Kenyan music sold abroad is also unavailable due to the fragmented nature of the industry. 108

The Kenyan music industry is diverse and vibrant. There are over forty two (42) native languages in Kenya. Music features in each of these communities, as it is a core element of the Kenyan culture. Apart from the entertainment value, Kenyan music is a means of sharing information and conveying the history of the people. Consequently, there are many genres of Kenyan music including benga, ohangla, kapuka, genge, mugithi, taarab, among others. ¹⁰⁹ Kenyan music has been influenced by lingala, and rhumba. Famous Kenyan musicians include artists like:

- 1. Suzanna Owiyo and Eric Wainana (Afro-jazz)
- 2. Nameless, Jua Cali, Nonini (genge and kapuka)
- 3. Tony Nyadundo and Osogo Winyo (Ohangla)
- 4. Owino Misiani, Kakai Kilonzo and Sukuma Bin Ongaro (benga)
- 5. Hadija Ali, Malika and Zuhura Swaleh (taarab)

The Kenyan music industry has come a long way. In the 90s economic benefits in investing in the music industry was limited. Few musicians could even break even as there was little appreciation of local music by Kenyans. Today, however, the Kenyan hip hop (genge and kapuka) is appreciated by many, especially the youth. Various ethnic and regional FM radio stations have

¹⁰⁷ Ibid.

¹⁰⁸ Marisella Ouma (2008) Enforcement of Copyright in the Music Industry: a Critical Analysis of the Legal and Infrastructural Framework of Enforcement in Sub Saharan Africa, PhD Dissertation submitted to Queen Mary University of London.

¹⁰⁹ Carole Croella (2007) "On the beat: tapping the potential of Kenya's music industry," WIPO Magazine, WIPO, Geneva, available at http://www.wipo.int/edocs/mdocs/copyright/en/wipo_cr_ec_mnl_01/wipo_cr_ec_mnl_01_7.pdf (last accessed on July 4, 2008).

created avenues for traditional music. These stations include Ramogi (Luo), Imeme, Inooro, Kameme, Curu (Kikuyu), Kass, Egese, Mulembe(Luhya) FM stations, among others.¹¹⁰

Obstacles to the growth and development of the music industry in Kenya include lack of a proper networking and fragmentation of the industry; inadequate Government policies; poor enforcement of copyright; ineffective administration; and ignorance or lack of information by musicians. Rose Ng'ang'a sets out the problems facing the Kenyan music industry in the article, "Economy: why Kenya's entertainment industry has failed" in which she says:

"...piracy has continued to wreck havoc on the sector. Piracy has been and continues to be a thorn in many musicians' flesh and the sector's contribution to the growth of the country's economy is close to none. ...under-investment, ineffective management of intellectual property rights, and rampant piracy have prevented the industry from realizing its economic potential and left its artists struggling to earn a living."

Besides the above challenges, she goes on to say that:

"The language diversity of the Kenyan people has fragmented the market and this poses a key challenge to the development of a sustainable industry. The lack of investment in production has also stunted the industry's growth. Training and rehearsing facilities are few and inadequate, recording studios are technically obsolete and CD plants are virtually [where does this quotation mark end?"

6.7.1 The River Road Music Industry

Many musicians, artists and movie makers are embracing the entertainment industry based at River Road, Nairobi. ¹¹²River Road is the centre for production and distribution of many Kenyan films and music. Though often considered the centre for piracy, it offers an avenue for cheaper production options and better distribution networks. ¹¹³

Music pirates copy CDs the moment they are released and sell them on the streets. There is rampant piracy in the music industry and most musicians do not profit sufficiently from the sales of their recordings.¹¹⁴

¹¹⁰ Alfred Mutua, "Print and electronic media in Kenya," available at http://www.communication.go.ke/media.asp?id=46 (last accessed on 14/01/09).

¹¹¹ Marisella Ouma (2008) Enforcement of Copyright in the Music Industry..., Ibid.

¹¹² At http://wangui.instablogs.com/entry/economy-why-kenya-s-entertainment-industry-has-failed/ (last assessed on April 7, 2009).

¹¹³ Rose Ng'ang'a, ibid.

¹¹⁴ Ibid.

6.8 Legal dimensions of online music

Internet music promotion, sale and distribution that does not have important legal dimensions. The Internet allows music to be copied without loss of quality, downloaded without the knowledge of the copyright owner and transmitted around the world. 115 Other than the intellectual property

Transacting business over the Internet requires formation of legally binding contracts 116

6.8.1 International initiatives to promote copyright protection in the digital era

There has been a lot of activity in the international, regional and national regimes to secure reforms in ICT and e-commerce. These include GATS (WTO) instruments on e-commerce, WTO and WIPO joint regulations on IP in e-commerce, the UN Centre for International Trade Law (UNCITRAL) Model Law on E-Commerce of 1996, 117 US Digital Millennium Copyright Act of 1998, 118 the UK Copyright, Design and Patent Act of 1988, the UK Computer Misuse Act of 1990, the UK Data Protection Act of 1998, the Indian Electronic Commerce Law Act of 2000; the Mauritius Information Technology (Miscellaneous Provisions) Act of 1998, and the Kenyan Computer Misuse Bill of 1994. The "I Love You" bug jolted the Philippines into relevant legislation. African countries do not need to wait for such a catastrophe. 119

WIPO has addressed some of these issues through the WIPO Copyright Treaty (WCT) and the WIPO Performance and Phonograms Treaty (WPPT). The WIPO Digital Agenda provides guidelines and practical solutions to the challenges posed by the new challenges. 120 The WIPO digital agenda addresses pertinent issues in copyright protection in the digital era. The WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT) were concluded in 1996 at the WIPO Diplomatic Conference 121

¹¹⁵ Andrew Sparrow, Music Distribution and the Internet, op. cit.

¹¹⁶ *Ibid*.

Model Law on Electronic Commerce Adopted by the United Nations Commission on 117 International Trade Law, G.A. Res, 162, U.N. GAOR, 51st Sess, 85th mtg, U.N.Doc. A/ Pub.L.No 105-304,112 Stat.2860 (1998) (codified at 17 U.S.C \$ 1201-05 (Su See David Bainbridge Intellectual Property 2017)

¹²⁰ Marisella Ouma, "Enforcement of copyright in the music industry..." op. cit.

¹²¹ Ibid.

The WCT provides for the distribution, rental, right of communication to the public, limitations and exceptions as well as technological protection measures and rights management information. 122 It addresses copyright protection in the light of technological developments like the internet. The exclusive right of making available of copies of performances fixed in phonograms and the phonograms is provided under WPPT. 123 The WPPT provides for technological protection measures and electronic rights management systems. It makes the circumvention of technological measures illegal. 124 Kenya as a member of the World Intellectual Property Organization, is a signatory to the both WCT and WPPT.

6.8.2 The law of contract in Kenya

These are governed by the common law of contract, as provided for under the Law of Contract Act, Cap.23. The basic requirements for a contract to be enforceable are:125

- 1. There must be an offer and acceptance,
- 2. There must be consideration,
- 3. The terms of the contract must be certain,
- 4. The parties must have legal capacity to enter into contract (minors and persons of unsound mind have no legal capacity to enter into contract).
- 5. The contract must be legal. This means that a contract for illegal purposes such as copyright infringement or drug trafficking is null and void for illegality.

Generally, parties are bound by the terms of the contract and the courts, in most cases, enforce the contract as intended by the parties to the contract. Challenges posed by e-commerce and transactions conducted via the internet are various. For instance, how are contracts with consumers concluded over the internet? And, what laws govern the sale of physical products to online music buyers?¹²⁶ The Kenya Communications (Amendments) Act has addressed this issue; it stipulates that an offer and acceptance of an offer may be expressed by means of electronic messages and where an electronic message is used in the formation of a contract, the contract shall not be

¹²² Articles 6-12 of .WCT. 123 Articles 8 and 12 WPPT.

¹²⁴ Articles 18 and 19 WPPT.

¹²⁵ Ben Sihanya, "Intellectual property and innovation in Kenya: legal and regulatory issues in business incubation," op. cit.

¹²⁶ Andrew Sparrow, Music Distribution and the Internet, op. cit.

denied validity or enforceability solely on the ground that an electronic message was used for the purpose. 127 Further, most music is downloaded, accessed through streaming, "shared" or sold illegally. Thus, whereas some of these transactions constitute binding contracts, the contracts are created as a result of copyright infringement.

6.9 Challenges to the music industry in Kenya and the Implementation of the Copyright Laws.]

E-commerce and the Internet, in particular, offer challenges to copyright enforcement. Despite the introduction of stricter penalties and civil remedies for infringement in the Copyright Act, 2001, Kenya still faces various obstacles in the enforcement of copyright.¹²⁸

The attitude of the Government is one such. For a long time, copyright has been considered by the Government and especially prosecutorial agencies as a personal and private affair to be pursued by the copyright owners. The main agency charged with the prosecution of copyright infringement, the police, regard copyright infringement less serious than other crimes such as murder, theft, battery etc as "nobody is bleeding" or has "lost anything" that they consider being tangible. 129

Further, there is general ignorance, literal or technical regarding copyright and the meaning of infringement. To many enforcement officials, it makes no sense for a copyright owner to complain when their book is photocopied and yet their book is still in the shop.

Insufficient human, technical and financial resources in the Kenya Copyright Board and in Kenya generally further hamper the enforcement of copyright in Kenya. The Kenya Copyright Board which is vested with the powers to regulate copyright in Kenya lacks complete autonomy and is forced to rely upon the Attorney General Office for financial resources. The Board is also understaffed making management and enforcement of copyright difficult. It

The widespread ignorance amongst the legal fraternity in Kenya on copyright matters only makes the situation worse. The magistrates and judges charged with the responsibility of deciding on copyright disputes exhibit limited knowledge. As such, the need to train the fraternity in the area cannot be

¹²⁷ Section 92 of the Kenya Communications (Amendment) Act of 2008.

¹²⁸ Ben Sihanya, Intellectual Property and Innovation in Kenya and Africa ... op. cit.

¹²⁹ Ibid

¹³⁰ Sec 16 of the 2001 Act.

¹³¹ Ben Sihanya, "Copyright teaching and research in Kenya," op. cit

overstated. Similarly, the police should also be trained to ensure that they are fully conversant with the technicalities and importance of copyright.¹³²

Most copyright infringement cases are pursed by aggrieved parties as civil rather than criminal cases in Kenya. The sanctions provided for copyright prosecutions are limited and some offenders may view the sanctions as incidental transaction costs rather than penalties. Therefore, as stated, more needs to be done in training prosecutorial agencies and the general public on the rights that accrue to copyright holders and on copyright prosecution. ¹³³

In many situations, answers to the foregoing questions turn on how various jurisdictions address ICT and ICT products; that is, are they goods, services, or technologies? And what aspects of IP apply? Some of the solutions that have been pursued or proposed worldwide to deal with these challenges include encryption and license management technologies.

These challenges can be confronted by adequate copyright enforcement. The Kenya Copyright Act, 2001 provides civil and criminal remedies for copyright infringement.

6.10 Copyright enforcement in Kenya

The development of Kenyan copyright law beginning with the Copyright Act, 1966 essentially illustrates the (post-) colonial impact on the construction of Kenya's copyright law. This process is discernible in the amendments of 1975, 1982, 1989, 1995, and 2000, and the supersession in 2001. The current Copyright Act, 2001, received presidential assent on December 31, 2001, and came into force on February 1, 2003. It was drafted mainly to meet the standards established under the TRIPs Agreement of 1994 and the WIPO Internet Treaties, 1996. The Copyright Act of 2001 is the main statute in Kenya governing copyright enforcement. The 2001 Act defines "copy" as:

"Copy means a reproduction of a work in any manner or form and includes any sound or visual recording of a work and any permanent or transient storage of a work in any medium, by computer technology or any other electronic

¹³² Marisella Ouma, (2008) Enforcement of Copyright in the Music Industry: a Critical Analysis of the Legal and Infrastructural Framework of Enforcement in Sub Saharan Africa, PhD thesis submitted to Queen Mary University of London.

¹³³ Ben Sihanya, "Copyright, teaching and research in Kenya," op. cit.

¹³⁴ Ibid.

[&]quot;WIPO Internet Treaties" is the agreed expression for WIPO Copyright Treaty (WCT), 1996 and WIPO Performances and Phonogrammes Treaty (WPPT), 1996. The Kenya Copyright Bill went through various drafts in 1999, 2000 and 2001. See Ben Sihanya, "Copyright, teaching and research in Kenya," op. cit; Ben Sihanya (2003) Constructing Copyright and Creativity in Kenya, doctoral dissertation, Stanford, op. cit

means "136

It is instructive that the definition covers "any...transient storage of a work in any medium." This is intended to cover the new reproduction and transmission technologies relating to the production and distribution of literary and other copyrightable works. The Act underscores non-material and non-tangible forms of reproduction as well. It emphasizes the difference between communication to the public and broadcasting. ¹³⁷ The Act defines "broadcast" to mean:

"The transmission by wire or wireless means, of sounds or images or both or the representation thereof, in such manner as to cause such images or sound to be received by the public and include transmission by satellite." ¹³⁸

On the other hand, communication to the public is defined in s. 2 as:

- "(a) A live performance; or
- (b) Transmission to the public, other than a broadcast, of the images or sound or both, of a work, performances or sound recording."

Thus the latter covers situations where the subject matter is transmitted by any other means except through broadcasting. These issues are critical given that many musical works are communicated to the public through radio programmes. Excluded from this category are programs such as the Kenya Broadcasting Corporation's (KBC's) Broadcast to Schools or Radio Teacher, and Books and Bookmen. The doctrinal and practical distinction between broadcasting and communication to the public is, however, being eroded by Internet and related technologies such as web casting (or Internet radio).

The Act also specifically referred to rights or activities that seem to have been ignored or excluded before: translation, adaptation, arrangement or other transformation of a work, and public performance of the work.

The Act has clarified instances of fair dealing with respect to each subject matter. For instance, copyright does not control reproduction, translation, or adaptation, distribution, or communication to the public "by way of fair dealing for the purposes of scientific research, private use, criticism or review, or the reporting of current events subject to acknowledgement of the source." Fair dealing is further clarified under s. 26(1) (a), (d), (e), (f), (g),

¹³⁶ S. 2 of the Copyright Act 2001.

¹³⁷ Ibid

¹³⁸ See Goldstein, International Copyright, op. cit,. at 315-6.

¹³⁹ S 26(1) of the 2001 Copyright Act. Berne refers to the concept as "fair practice;" the US as "fair use;" and the UK and Kenya as "fair dealing." The three are not coterminous. I discuss fair dealing systematically and in detail in Chapter 8 of my doctoral dissertation: Ben Sihanya, Constructing Copyright and Creativity n Kenya, op. cit.

(h), (j), and (l). Some of these issues help construct the scope of copyright and were at the core of the North-South debate leading to the Stockholm Protocol or the Special Provisions Regarding Developing Countries. 140 We discuss these below.¹⁴¹

S. 26(6) of the 2001 Act provides that copies made pursuant to the fair dealing provisions (s. 26-29) must be destroyed when the person's possession of the computer program ceases to be lawful. 142

The law regulates digital rights management systems (DRMs) and prohibits anti-circumvention measures so that technological means employed to protect works are protected under copyright law. 143 Circumvention of such systems is criminal under s. 36. This provision has been enacted pursuant to Art 11 of the WCT 1996.144

6.10.1 Implementing the copyright law in Kenya

The Kenya Government has established machinery in motion to implement the copyright law in Kenya. The Attorney-General appointed members of the Copyright Board on May 16, 2003.

The Kenya Copyright Board is established as a statutory body under the Copyright Act No. 12 of 2001. The Board is mandated to administer and enforce copyright and related rights in Kenya. It is composed of 17 members drawn from both the public and private sectors. This includes representatives from the software industry, producers of sound recordings, writers, publishers, film distributors, performers, broadcasting stations and audio

¹⁴⁰ Article II on the Limitations on the Right of Translation,, Article III on the Limitation on the Right of Reproduction and Article V on Alternative Possibility for Limitation of the Right of Translation

Ben Sihanya, "Copyright teaching and research in Kenya," op. cit.
See s 24(a), (5) and (6) of the Copyright Act 2001. This is discussed in Chapter 10.3 of my doctoral dissertation, supra note 102.

¹⁴³ See sec.. 2 and 35(3) (c) of the Copyright Act 2001; Paul Goldstein (2003) "The answer to the machine is in the machine," in Paul Goldstein (2003) Copyright Highway: From Gutenberg to the Celestial Jukebox, Stanford University Press, California, Chapter 6, pp. 163-186.(2nd ed.)

¹⁴⁴ See Jessica Litman,(2001) Digital Copyright, (Prometheus Books, Amherst,), pp. 122-150; See also MJ Radin, JA Rothchild & GM Silverman, Internet Commerce: The Emerging Legal Framework, op.cit, pp. 799-876; Pamelle Samuelson, 'Technological Protection for Copyrighted Works,' 45 Emory Law Journal (1997); P Samuelson, "Intellectual property and the digital economy: why the anti-circumvention regulations need to be revised," 14 Berkeley Technology Law Journal (1999), p. 519; Mark Lemley, et al, Software and Internet Law (Aspen Law & Business, New York 2000), pp.891-902. This has been implemented under the US Digital Millennium Copyright Act, 1998 (the DMCA), and Art. 6 of the EU Copyright Directive, 2001. The Directive is reproduced in H. Norman, (2004) Intellectual Property Law Statutes 2004/2005, Sweet and Maxwell, London, pp. 555-570; P Goldstein (2002) International Legal Materials on Intellectual Property New York: Foundation Press.

visual industry. The Board has four experts on copyright and related rights¹⁴⁵ and five representatives from various Government agencies or offices. The Board is responsible for registering copyright works and licensing collective management organizations in Kenya among other functions.¹⁴⁶ The Board for purposes of enforcing the Act shall appoint inspectors who shall be responsible for ascertaining whether there is contravention of the Act.¹⁴⁷

6.10.2 Copyright infringement and enforcement in the digital era

Enforcement is important in all systems of intellectual property, including copyright because while definitions, procedure of registration and duration of protection are important, these can only be said to be useful when and if they are built upon a foundation of enforcement. ¹⁴⁸

Copyright enforcement of musical works in the digital era faces numerous challenges. First, digital audiotapes, digital broadcasting, optical character recognition (OCR) scanners, recordable compact discs (CDs), electronic cameras, the Internet and high quality photocopiers have made piracy cheaper, faster, simpler and more rewarding. Tedious and repetitive tasks are now easily accomplished through computer-aided design (CAD) and computer-aided manufacturing (CAM), processes which are more productive and easier to copy than the Fordist, industrial revolution technologies.¹⁴⁹

Second, it is also possible to reproduce copies of legitimate products like audio and audio visual works in a matter of seconds by downloading the same from the Internet. Such copies are identical to, and sometimes even better than, the originals. This makes it hard to differentiate clones from the legitimate products, especially in less sophisticated societies.

Third, piraters are already developing technologies that are specifically designed to facilitate copyright infringement. In the US two manufacturers' associations, the Recording Industry Association of America (RIAA) and the Alliance of Artists and Recording Companies (AARC), have in response sought an injunction to stop a US company from producing a portable music

¹⁴⁵ The author of this chapter was appointed and re-appointed to the Kenya Copyright Board as an expert.

¹⁴⁶ See section 6 of the 2001 Act; Marisella Ouma, (2008) Enforcement of Copyright in the Music Industry: a Critical Analysis of the Legal and Infrastructural Framework of Enforcement in Sub Saharan Africa, Queen Mary University of London.

¹⁴⁷ Section 39 of the Copyright Act and sec. 41.

¹⁴⁸ Ben Sihanya, Intellectual Property in Kenya and Africa... op. cit.

See M. Bernard; (1994) "Post-Fordism, transnational production, and the changing global political economy," in R. Stubbs and G. R. D. Underhill (eds.) Political Economy and the Changing Global Order, Macmillan, London, pp. 216–229. The relevant design, production and distribution technologies, including CAD/CAM are discussed in E. Rhodes and D. Wield (eds) (1994) Implementing New Technologies: Innovation and the Management of Technology, NCC Blackwell, Oxford.

player which enables copying and downloading of music from the Internet. The associations argued that the player would encourage counterfeiting and IP infringement over the Internet. A study by the US Copyright Office, a Government agency, entitled Sketching the Future of Copyright in a Networked World, showed on-line auctions to be the leading source of Internet fraud. On-line auctions are used to market counterfeit products and though most e-bidders believe that what they see is what they will get, the website may feature the legitimate product but the actual product sold may be a fake 151

Fourth, ICT, especially the Internet, has facilitated the fragmentation of corporate production and distribution activities, thereby enhancing distribution and bringing legitimate products and services closer to the consumer. On the other hand, pirates and counterfeiters have also benefited from the availability of these technologies. Diffusion of products and related technologies is faster and more extensive in the information society, which is characterised by e-commerce contracts, mobile commerce, e-mail and related Internet transactions. Under these circumstances pirates are becoming anonymous. Many do not need to give a physical or geographical address in order to transact business; electronic addresses and digital signatures many times suffice. Counterfeiters thus market products over the Internet and when the sale is concluded and the money or other consideration is supplied, all trace of the transaction is erased. This makes tracing traders difficult and, in addition, makes it hard for consumers, innovators and regulators to gather evidence to support anti-counterfeiting suits.

The fifth set of challenges brought about by ICT developments include who the defendant would be and enforcement in the context of trade in pirated and

150 See The Kenya Publisher (Nairobi), a quarterly newletter of the Kenya Publishers Association (KPA), Nov/Dec-Jan 2000, pp 1-2.

The study can be found at the US Copyright Office Home Page, at http://lcweb.loc.gov/copyright/cpypub/thardy.pdf See also Michael Blakeney, "Interfacing trade marks and domain names": E-Law — Murdoch University Electronic Journal of Law [1999] Vol. 6, n. 1, p.14.

¹⁵² Before the advent of ICT and trade liberalisation, most production functions were located in the metropoles. Products like books and sound recordings of music were largely standard and availability of finished products, and the production technologies, was precarious. In a way, limited skills transfer served to control reverse engineering, decompilation, infringement, piracy and counterfeiting. Now these products are largely customised (by pirates, too).

¹⁵³ The study can be found at the US Copyright Office Home Page, at http://lcweb.loc.gov/copyright/cpypub/thardy.pdf See also Michael Blakeney, "Interfacing trade marks and domain names": E-Law — Murdoch University Electronic Journal of Law [1999] Vol. 6, n. 1, p.14. The study can be found at the US Copyright Office Home Page, at http://lcweb.loc.gov/copyright/cpypub/thardy.pdf See also Michael Blakeney, "Interfacing trade marks and domain names": E-Law — Murdoch University Electronic Journal of Law [1999] Vol. 6, n. 1, p.14.v

counterfeit products like e-books and sound recordings. For example, if a pirate domiciled in Kenya downloads music from a website registered in the US and owned by a Senegalese citizen, which of these countries has jurisdiction and which law should be applied? Should the website owner and the ISP be held liable for aiding and facilitating counterfeiting since they provide the medium used to make the copies? Some of these issues have arisen in the context of (illegitimate) cyberporn.

6.10.3 Remedies for copyright infringement in Kenya

Infringement refers to the dealing with copyrighted material in a manner inconsistent with the copyright owner's interests. It occurs where the defendant does any of the activities protected or restricted by copyright without right holder's licence. 154 Copyright infringement is both a civil wrong and a criminal offence and it attracts both civil and criminal remedies and sanctions.

6.10.3.1 Civil remedies

The following civil remedies are available under the Kenya copyright Act: injunctions, damages, account of profits and delivery up. 155

(a) Injunctions

An injunction is the most popular relief and may be the most effective. This is partly because most of the copyright works, such as pop music, have a very short shelf life. Moreover, new technologies have made copying so fast that waiting for damages, account of profits or related remedies may occasion greater damage to the innovator.

(b) Damages

Damages are largely compensatory. They are intended to restore the plaintiff to the position in which she would have been had infringement not occurred. Additional or punitive damages may be awarded where the defendant's conduct is flagrant or scandalous or where the defendant had benefited from the infringement. Copying or publishing someone's diary or intimate photographs may provide cause for additional damages. 156 Another is where a (sole) licensee abuses the copyright. In

¹⁵⁴ S. 15 of the Kenyan Copyright Act, 1966-1995 as amended over the years and s. 35 of the 2001 Act; s. 13 of the Tanzanian Copyright Act and ss. 4 and 8 of the Zimbabwean Copyright Act.

<sup>Sec. 35(4) of the Copyright Act of 2001.
See</sup> *Williams v. Settle [1960] WLR 1072*; Bainbridge (2007) Intellectual Property, op. cit Cf. s. 15 (4) of the 2001 Act and s. 35(5) of the Copyright Bill, 2000; Sec 15(4) of the 1966 Act.

Kenya damages are largely governed by general English common law principles received in Kenya and elsewhere in Africa under the reception clauses.

(c) Account of profits

Sometimes account of profits is considered an alternative to damages. The former is considered very important in copyright law, as damages may be insufficient. This remedy stops unjust enrichment or situations where it would be more lucrative to infringe copyright and pay (limited) damages later. Right holders often view damages and financial penalties as insufficient to deter infringers. In fact they think that in context, damages are just another "incidental cost of doing business" as far as infringement is concerned. Where the quality of the infringing items is widely different from that of the protected (literary, artistic, or musical) items keeping accounts by the infringer is also not sufficient.¹⁵⁷

(d) Delivery up and search and seizure

The defendant may be ordered to deliver up either the infringing copies or any material used to make them. And an order permitting search and seizure may be granted where the plaintiff fears the defendant may abscond, or destroy or dispose of the evidence so as to defeat the cause of justice. Microsoft benefited from this relief in 2000 in its case against Microskills, a Kenyan software corporation, although judges have generally been reluctant to grant such orders. According to a source close to Microsoft, one of the features in this case was that the judge could not reportedly follow the basis of the application: what is software copyright infringement where it is copied into CD ROMs? ¹⁵⁸

6.10.3.2 Criminal sanctions

Part of the rationale for providing criminal sanctions for copyright infringement is that the state wishes to protect creators, innovators, copyright entrepreneurs and consumers by bringing these matters into the purview of pubic law. This also epitomises the Kenyan Government's interest in maintaining the revenue stream from taxes paid by producers and consumers of legitimate copyright materials.

Criminal sanctions are also a recognition that individuals or corporations may not have sufficient human and financial resources to address copyright infringement and piracy. Moreover, it is an acknowledgement that copyright is as much a public good as it is a private good. In certain situations private

¹⁵⁷ See, for example, Sapra Studio v. Tip Top Clothing [1971] EA 489, at 492 (a decision on a case arising from Kenya).

¹⁵⁸ See Ben Sihanya, Intellectual Property and Innovation in Kenya and Africa... op. cit.

individuals and corporations may not have sufficient incentives to address the social costs of infringement, which may include loss of tax revenue and the reduction of incentives for innovation as piracy decreases the prospects of investment.¹⁵⁹

In Kenya the 1966 Act (now repealed) provided for a maximum imprisonment penalty for a period not exceeding five years and a maximum fine of 200 000. In addition or alternative, the courts might impose a fine not exceeding KShs. 200,000. Authors, creators and special interest groups like the Kenya Publishers Association (KPA), Music Copyright Society of Kenya the (MCSK) the Business Software Alliance (BSA), and Kenya Films Licensing Board have argued that the penalties are inadequate. ¹⁶⁰

In response the Kenya Copyright Act 2001 provides that a person who makes for sale or hire; imports into Kenya otherwise for his private and domestic use or makes any infringing copy, or has in his possession any contrivance used or intended to be used for the purpose of making infringing copies shall be liable to a fine not exceeding Kshs 400,000/- or imprisonment for a term not exceeding 10 years or to both. Aperson who sells or lets for hire or by way of trade exposes or offers for sale any infringing or possesses otherwise than for his private domestic use, any infringing copy, shall be liable to a fine not exceeding Kshs 100,000/- exceeding 2 years or to both.

Seeking the above civil remedies and criminal sanctions for copyright infringement carried out over the Internet and other computer networks would be difficult for individual copyright owners. The rights of copyright owners may be pursued collectively by a collective management organisation (CMO).

6.11 Collective Management Organisations (CMOs) in Kenya

The exclusive right of authors to exploit their works or otherwise authorise others to do so is a basic element of copyright. In the framework of collective management organisations (CMOs), copyright owners authorise CMOs to monitor the use of their works, negotiate with prospective users, give them licenses against appropriate conditions, collect remuneration (royalties) and distribute them among the copyright owners. ¹⁶²

¹⁵⁹ See the definition of "public good" in Graham Bancock, et al, (eds) (1996) Dictionary of Economics,; Robert Pindyck & Daniel Rubinfeld, (2004) Microeconomics, Prentice Hall, New Jersey, 6th Edition.

¹⁶⁰ See The Kenya Publisher (Nairobi), a quarterly newsletter of the Kenya Publishers Association (KPA), Nairobi, Nov/Dec 1999-Jan 2000 ,pp.1-2.

¹⁶¹ S. 38 (4) of the 2001 Act.

¹⁶² Dr Mihaly Fiscor (2002) Collective Management of Copyright and Related Rights, World Intellectual Property Organisation, WIPO Geneva.

CMOs simplify the negotiation process with copyright users, monitor uses and collect fees at low transaction costs since copyright users deal with the CMO rather than individual copyright owners. CMOs play a major role in collecting royalties on behalf of their creative members, and distributing the royalties to them. In the context of increasing copyright infringement in Kenya CMOs have been proposed by copyright owners to try and secure their interests.

To qualify as a CMO under s. 46 of the Copyright Act, the agency must first be incorporated as a company limited by guarantee (in the companies Registry based in the Attorney-General's office); it should also be registered (or licensed) by the Kenya Copyright Board so as to have the authority of collecting and distributing royalties.

Once they qualify for registration and are sufficiently enabled, such organizations can perform certain functions such as:

- 1. Monitoring copyright transactions and act as watchdogs on copyright use and infringement or piracy;
- 2. Training their members on their copyright and remedies for infringement
- 3. Collecting and storing copyright products; and
- 4. Collecting and distributing royalties on behalf of copyright owners.

Most copyright organizations in Kenya, are faced with the following challenges:

- 1. Lack of a firm constitutional foundation in a normative and institutional sense.
- 2. Most of them are established under Government ministries and thus lack autonomy and independence. 163
- 3. Limited financial and technical capacity.
- 4. Inadequate copyright expertise among the managers and members of the organizations.

Several copyright owners whose music is being exploited without permission may instruct a CMO to enforce their rights. In Kenya, the Music Copyright Society of Kenya (MCSK), seeks to protect authors, composers, publishers

¹⁶³ Sihanya, How Can We Constitutionalise Innovation, Technology and Intellectual Property in Kenya, op. cit.

of music, and musicians. MCSK is a registered Collecting Society. MCSK currently has 680 members; it has a repertoire of over 20,000 musical works. The major objective of MCSK is to collect royalties for and on behalf of its members as well as for members with whom the Society has reciprocal agreements. The other primary mandate of MCSK is to issue licenses for public performance and broadcasting of "musical artistic" works of composers, authors and publishers in Kenya. The other primary mandate of MCSK is to issue licenses for public performance and broadcasting of "musical artistic" works of composers, authors and publishers in Kenya.

6.12 Conclusion

E-commerce refers to business transactions conducted over electronic means. The internet has revolutionaised e-commerce technology and opened markets for traders as well as increased variety for consumers. The concept is slowly taking root in Kenya with several e-commerce websites fully operational. Though e-commerce offers exciting opportunities in the development, distribution and use of products and services it creates significant challenges to intellectual property protection and promotion. In relation to music, e-commerce has made it easier for pirates to copy, distribute and sell illegally copied musical works. Kenya's music industry is diverse and vibrant but crippled with the high rates of piracy. The Kenya Copyright Act, 2001 has adequate provisions for the protection and promotion of copyright protected works; however, enforcement is still a great challenge. It is necessary for the Government, Kenya Copyright Board, collecting societies, and stakeholders in the music industry to undertake practical measures to tackle these challenges, in order to protect and promote copyright in Kenya. Copyright law without effective enforcement is of little use to those it seeks to protect. For a law to be effective, there have to be corresponding institutional structures. The main problem for copyright holders in Kenya and Africa generally is not so much in written law but in enforcement or lack thereof. That is the major challenge the music industry faces, and especially in the digital era.

¹⁶⁴ http://timeinmoments.wordpress.com/2008/04/30/the-music-copyright-society-of-kenyacelebrates-first-year/ (last accessed on 11/05/2009)

Examples include: the Copyright Society of Malawi (COMOSA), BMI International and Southern African Music Rights Organisation (SAMRO)

See Music Copyright Society of Kenya, "MCSK, the society", available at http://www.mcsk.or.ke/about.htm (last accessed on 09/11/2007).

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Chapter Seven

Intellectual Property Rights in Sports: A Case for Kenyan Football By Hezekiel Oira

7.0 Introduction

port is an activity that is governed by a set of rules or customs and often engaged competitively. Sports commonly refer to activities where the physical capabilities of the competitor are the sole or primary determinant of the outcome (winning or losing), but the term is also used to include activities such as mind sports (a common name for some card games and board games with little to no element of chance) and motor sports where mental acuity or equipment quality are major factors. Some of the physical sports include football, basketball, skating, polo and baseball.

The word sport comes from the old French *desport* which means leisure. However, the word has since disappeared from the modern French vocabulary and in its place the word "sport" has been assimilated.

Apart from sports being a leisure activity, it is now a global industry accounting for more than 3% of the world trade creating directly and indirectly more than two million jobs. It is not only a business, but also a product and an important marketing communications, public relations and corporate hospitality medium.² There are several types of sports but this paper focuses on football in Kenya.

^{1 &}lt;a href="http://en">http://en. Wikipedia.org/wiki/sports (Accessed June, 24 2008).

http://www.stats.com/ (Accessed January, 24 2009).

7.1 Historical background

There are artifacts and structures that suggest that the Chinese engaged in sporting activities as early as 4000 BC.³ Gymnastics appear to have been a popular sport in China's ancient past. Monuments to the pharaohs indicate that a number of sports, including swimming and fishing were well-developed and regulated several thousands of years ago in ancient Egypt.⁴ Other Egyptian Sports included javelin throwing, high jump and wrestling. The ancient Persian sports such as the traditional martial art of zourkhaneh had a close nexus to the warfare skills. Among other sports that originated from Persia are polo and jousting.

A wide range of sports were already established by the time of Ancient Greece and Military Culture and the development of sports in Greece influenced one another considerably. Sports became such a prominent part of their culture that the Greeks created the Olympic Games which in ancient times were held every four years in a small village in the Peloponnesus called Olympia.⁵

The origin of football predates the recorded history. Documented evidence, a manual of Chinese military during the Han Dynasty in about 2nd century BC, describes an organized activity resembling football.⁶ There are other claims that suggest ball games were played earlier in Ancient China as early as 2500 BCE. The game was called Tsu Chu. Tsu Chu was part of the physical education programme used to train soldiers at the time. Tsu Chu literally means football as Tsu may be translated to "kicking the ball with the feet" and Chu meaning a ball made of leather and stuffed.⁷

Legend has it that slightly later than the Chinese, the Japanese started playing football game called "Kemari". A recently discovered text states that there was a game between Chinese Tsu Chu players and Japanese Kemari players in approximately 50 CE.⁸

In Ancient Greece, it is claimed that the game of Episkyro was practised as long ago as 800 BCE and one of the basic rules permitted the use of hands which suggests that it was closer to rugby than football.

³ http://ww.itv.com/sport, History of China 2008 (Accessed June, 24 2008).

⁴ Ahmed Touny, History of Sports in Ancient Egypt, 10C Journal, (2008).

⁵ Martin Polley, Sports History: a practical guide, Palgrave (2007).

⁶ http://www.athleticscholarships.net/history-of-soccer.htm (accessed February, 20 2009)

⁷ Ibid

^{8 &}lt;u>http://www.surfindia.com/football/introduction.html</u> (accessed February 24, 2009).

Another Greek ball game was Harpastron and considering the fact that Harpastron is the Greek word for handball and not football one would argue that the ball game had greater bearing on rugby than football.

When the Romans conquered Greece in 146 BCE, they embraced the ball game of Harpastron but called it Harpastum. Harpastum was still a rugby style game (you could use your hands and feet) and was used by Julius Caesar and his generals as a form of military training to improve the physical fitness of the Roman army.

The history of modern football began during the 19th century in England when a soccer player, frustrated at using only his feet to manipulate the ball, decided to simply pick it up and run with it. Although it was clearly against the rules of soccer, other players soon found the new way of playing soccer appealing and thus the sport of rugby was born.⁹

The new sport soon became a world-wide success that found its way into America by the mid 1800s. Played by many north-eastern colleges, it was not long before Harvard University and Yale University met in Massachussets in 1876 to formalize the rules of rugby that were similar to those in England. To finalize the meeting an organization called the Intercollegiate Football Association (IFA) was formed to preside over the Americanized Sport. Football was still basically American rugby, much different from the popular sport known today. Over the course of years starting 1880, a Yale player, Walter Camp eventually convinced the IFA to change a series of rules in football to create a game that is very similar to the one we know today. For his efforts, Walter Camp is considered by historians as the father of modern football.¹⁰

7.2 Development of modern football

The advent of industrialization has increasingly brought forth increased leisure time to the citizens of developed and developing countries leading to more time for citizens to attend and follow spectator sports. Technological revolution, coupled with globalization has made accessibility of sporting events easier world-wide by the use of global communication technology. Professionalism in the production, transmission and commercial exploitation of sports has become prevalent¹¹

^{9 &}lt;u>http://www.articlesbase.com/soccer-articles/american-football-history-and-origin-49286.</u> <u>html</u>(accessed February, 20 2009.

¹⁰ http://www.football.com/history (accessed January, 17 2009).

¹¹ Marcus Joha, "Cultural contradictions of sports", Internal Journal of Cultural Studies, Vola, No.1, Pg 83

Sports and football in particular have increasingly become big business. The increase in salaries and transfer fee of professional sportsmen as well as the rise in the value of television rights are phenomenal. For instance, in Europe alone in 1992 broadcasters paid \$434 million for the television rights of the English Premier League for five seasons. In 2000, they paid \$2.6 billion for only three seasons. 12

As a result of the breathtaking economic growth in sports-related activities many football clubs especially European Football clubs have been transformed into companies listed in stock exchange and managed like industrial organizations. Take for instance, Real Madrid and Manchester United football clubs which have been corporate bodies with elaborate commercial structures.¹³

The phenomenal growth has been largely driven by liberalization of the access by private operators to create media channels. Also, the technological development of media has equally contributed to the growth. New forms of programme delivery have been created. These include cable and satellite programme transmission, internet and mobile phones. Furthermore, digitization of broadcasting technology has opened new horizons and possibilities to create multimedia channels and pay-tv services. Multi-Channel services can host several football matches broadcast live simultaneously by one broadcaster ¹⁴

Netcasting otherwise called webcasting has created yet another model or platform of "en direct" football delivery on-line at places and time individually chosen by the viewer. Technology has also made it possible to watch pay-tv football matches not only on personal computers but also on personal mobile sets otherwise called digital mobile television services.¹⁵

7.3 Characteristics of Sports on Media Coverage

Media in the context used here includes the following; 16

- 1. <u>Broadcasting</u>, in the narrow sense, for <u>radio</u> and <u>television</u>.
- 2. Various types of <u>discs</u> or <u>tapes</u>.

¹² Tarben Toft, "Broadcasting competition Law," Brussels, 15 January, 2003. (Paper presented to the European Commission Meeting in 2003 on TV Rights of Sports Events).

¹³ Ibid

¹⁴ Susanne Nikoltchev, Sport as Reflected in European Media Law, Legal Observations of the European Audiovisual Observatory, Strasbourg (March 2004).

¹⁵ Ibid

¹⁶ Mass Media, http://en.wikipedia.org/wiki/Mass media, accessed 3rd March 2009.

- 3. Film, most often used for entertainment, but also for documentaries.
- 4. <u>Internet</u>, which has many uses and presents both opportunities and challenges
- 5. <u>Mobile phones</u>, often called the 7th Mass Media,¹⁷ used for rapid breaking news, short clips of entertainment like jokes, horoscopes, alerts, games, music, and advertising
- 6. <u>Publishing</u>, in the narrow sense, meaning on paper, mainly via <u>books</u>, <u>magazines</u>, and <u>newspapers</u>.

7. Video games

Media coverage of football events play an important role in the development of the media rights, markets and general development of various rights that exist in football. Media rights for very popular sports such as football have become subject of highly competitive bidding wars between various channels resulting in unprecedented price increases for the benefit of sport federations and clubs.

Sports coverage on the media especially television coverage has certain particular characteristics which underlies the development of certain intellectual property rights.¹⁸

First, sport and by extension football is an ephemeral product. Viewers are mainly, if not only, interested in live broadcasts. Consequently, the commercial value of live football broadcast is higher than that of a deferred one. In other words, there is no significant investment in a rebroadcast or repeat broadcast of a football match.¹⁹ This is not to say however, that later materials originating from a football match cannot attract intellectual property rights.

Second, substitution for the even is difficult. A viewer who wants to watch a given sporting event is unlikely to be satisfied with coverage of another event. In other words, if a viewer wanted to watch a EURO match on television and instead he/she has a match between two local football teams, the utility derived from the latter match may not be the same as that he/she

^{17 7}th mass media http://en.wikipedia.org/wiki/Seven mass media, accessed 3rd March 2009.

¹⁸ Ibid footnote 12

¹⁹ Professor Conrad Visser, 2000, Rights of broadcasters, the South African perspective, paper presented in Cotonou at a Regional African roundtable on the rights of broadcasting organizations organized by the World Intellectual Property Organization.

would have derived from the former because one could not substitute the other 20

Third and finally the concentration of rights in the hands of sports federation reduces the number of rights available. Moreover, availability of rights is reduced further by an increasing number of media rights contracts being concluded on an exclusive basis for a long duration or coverage of a large number of events. This strengthens the market position of the most important broadcasters because they are the only operators who are able to bid for all the media rights sold in large packages.²¹ In Kenya for example, DSTV SuperSport channel has currently acquired exclusive 'pay –TV' rights to televise live matches of the English Barclays Premier League.²²

7.4 Intellectual Property Rights in Football in Kenya

Intellectual property rights (IPRs) are important in business generally and in football business in particular. They have a value and importance in their own right and also as a marketing tool. The branding of sports, sports events, sports clubs and teams, through the application and commercialization of distinctive marks and logos, is a marketing phenomenon which in the last 20 years or so has led to a new lucrative global business of sport marketing.²³

It is noteworthy, that in Kenya like in England, there are no legally recognized 'property' rights in a football event.²⁴ In *Victoria Park Racing and Recreation Grounds Co Ltd v Taylor and Others*,²⁵ Latham CJ ruled that it is difficult to attach any property in a sporting spectacle. In this case it had been argued that by the expenditure of money the plaintiff created a spectacle which is a quasi-property hence protected by law.

In United States, the position is different. In *Pittsburgh Athletic Co v KQV Broadcasting Co*²⁶ the defendant operated a Pittsburgh radio broadcasting station from which it had in the past broadcast by radio play-by-play descriptions of the games played by the 'pirates' at Pittsburgh. Judge Schoonmaker held that that amounted to unfair competition and is a violation of the property rights of the plaintiffs. He argued that Pittsburgh by reasons

²⁰ Ibid footnote 12.

Mr. Stephen Isaboke, General Manager Multichoice (K) Limited talking about English Premier League rights war between Super Sports Limited and GTV Limited in Kenya.

²² Daily Nation of February 4, 2009, reported by Sammy Kitula.

²³ Verow R, Cleve L, Peter M, Sports Business Law, Jordan Publishing Ltd (2005).

This is personal opinion derived from the fact that English law in many ways influence Kenyan law and upon critical reading of Kenyan law, no such a right is envisaged.

^{25 (1937) 58} CLR 479.

^{26 (1937) 24} F Supp 490

of its creation of the game, its control of the park, and its restriction of the dissemination of news therefrom, has a property right in such news, and the right to control the use therefrom, has a property right in the news, and the right to control the use thereof for a reasonable time following the games.

Despite the fact that a sporting event is not recognized as property in Kenya, there are several rights that emanate from the football event which have been protected by law as shall be discussed later in this paper. If indeed there are rights and they are protected by law, the question is; who owns these property rights?

The management of football in Kenya is the responsibility of the Kenya Football Limited (KFL), working in collaboration with the Confederation of Africa Football (CAF) and *Fédération Internationale de Football Association* known by its acronym FIFA. FIFA has created confederations which oversee football in the different continents and regions of the world²⁷. Besides confederations, FIFA has also caused the creation of National federations to oversee football at municipal levels, like KFL. The continental confederations are provided for in FIFA's by-laws. National federations must claim membership to both FIFA and the continental and regional confederation in which their nation is geographically resident for their teams to quality for entry into FIFA's competitions.

In total, FIFA recognizes 208 national federations and their associated men's national teams as well as 129 women's national teams. Kenya is affiliated to FIFA through the Kenya Football Limited and is bound thereto by the FIFA Statutes.²⁸

Kenya Football Limited was incorporated, recently, in line with the FIFA statute to take up the roles of Kenya Football Federation (KFF). FIFA and the Kenyan government have recognized KFL as the football governing body in Kenya²⁹.

FIFA frequently takes active roles in the running of the sport and developing the game around the world through either national federations or continental confederations. One of its unique policies is to suspend teams and associated members from international competition when a government interferes in the running of FIFA'S associate member organizations or if the associate is

²⁷ In Africa we have the Confederations of Africa Football (CAF).

http://en. Wikipedia.org/wiki/FIFA pg. 4 2/7/2008 accessed February, 24 2009). There has been a dispute whether KFL has taken over KFF functions or not. FKL, under the chairmanship of Mohammed Hatimy, and KFF, under the chairmanship of Sam Nyamweya, have been involved in a protracted tussle for control of football in the country.

http://www.kenyafootball.com/index.php?doc=story&id=3406&categ=1&PHPSESSID=d 4e5f8e555f37e21dd3cbbb23f5703d6 (accessed February, 24 2009).

not functioning properly. Kenya Football Federation was recently suspended from the membership of FIFA for not running football in Kenya properly.³⁰

The exploitation of sporting rights in Kenya is therefore guided by FIFA, CAF and KFL through various instruments. Article 72 of the FIFA statute states that FIFA, its Members and the Confederations are the original owners of all of the rights emanating from competitions and other events coming under the respective jurisdiction, without any restrictions as to content, time, place and law. These rights include among others, every kind of financial rights, audiovisual and radio recording, reproduction and broadcasting rights, multimedia rights, marketing and promotional rights and incorporated rights such as emblems and any rights arising under Copyright Law.

The Executive Committee of FIFA shall decide how and to what extent these rights are utilized and draw up special regulations to this end. The Executive Committee shall alone decide whether these rights shall be utilized exclusively, or jointly with a third party or entirely through a third party.³¹

The said FIFA article applies to all FIFA members and confederations. To that end, it also applies to Kenya Football Limited that oversees football management in Kenya. Article 77 of Kenya Football Limited Statute is also worded in the same breath as article 72 of FIFA statute. "*FKL and its Members are exclusively responsible for authorizing the distribution of image and sound and other data carriers of football matches and events coming under their respective jurisdiction, without any restrictions as to content, time, place and technical and legal aspects*³²". Article 1(8) of the KFL statute states quite expressly that FKL brand and other key names and marks are protected as intellectual property rights, including copyright and where appropriate, as registered trademarks or designs. This means therefore that whatever intellectual property rights and other rights that obtain in the province of football are informed by the above article and other relevant Laws of Kenya. ³³ These laws include Copyright Act ³⁴ and Trade Marks Act³⁵

What follows is a discussion of the various intellectual property rights and other related rights that subsist in Kenya. These rights include copyright rights, trade mark rights or service marks, patents and other related rights.

³⁰ http://en. Wikipedia.org/wiki/FIFA/Kenya (accessed, 24 2009).

³¹ Article 74(2) of the FIFA Statute.

³² Article 78 of FKL.

³³ Article 1 of the KFL statute states that KFL shall be governed by the Laws of Kenya and its statutes.

³⁴ Act no. 12 of 2001.

³⁵ Cap 506 Laws of Kenya

7.5 Trade marks or service marks in football

A Trade Mark or service mark is a sign which serves to distinguish goods or services (respectively) of an industrial or a commercial enterprise or a group of such enterprises. The sign may consist of one or more distinctive words, letters, numbers, drawings or pictures, monograms, signatures, colours or combination of colours etc. The sign may consist also of combinations of any of the said elements. A Trade Mark can be a word, a symbol, a design, or a combination of these, used to distinguish the goods or services of one person or organization from those of others in the market place. The Trademarks Act (Cap 506 Laws of Kenya) describes a mark as a distinguishing guise, slogan, device, brand, heading, label, ticket, name, signature, word, letter or numeral or any combination thereof whether rendered in two-dimensional or three-dimensional form.³⁶

The requirement for registration of a trade mark in Kenya is its distinctiveness. Distinctiveness means adapted, in relation to the goods in respect of which a trade mark is registered or proposed to be registered, to distinguish goods with which the proprietor of the trade mark is or may be connected in the course of trade from goods in the case of which no such connection subsists.³⁷

In order to individualize a product or a service for the consumer, the trademark or service mark must indicate its source. This does not mean that it must inform the consumer of the actual person who has manufactured the product or created the service or even the one who is trading in it. It is sufficient that the consumer can trust in a given enterprise not necessarily known to him, being responsible for the product or service sold under the trademark or service mark.³⁸

Trade marks are territorial in nature in the sense that they are granted for a specific geographical territory, like Kenya. If not registered in a certain territory then generally speaking may not legally be protected from infringers in that other territory.

It is however, possible to register a mark internationally and will be recognized and earn protection in several countries. Under the Madrid system, a trademark owner has the possibility to have his trademark protected in several countries by simply filing one application directly with his own national or regional trademark office. An international mark so registered

^{36 &}lt;a href="http://www.tradeandindustry.go.ke/kipi/trademarks/abouttm.htm">http://www.tradeandindustry.go.ke/kipi/trademarks/abouttm.htm. A Kenya Intellectual Property Institute website (accessed February, 24 2009).

³⁷ Ibid

WIPO, Intellectual Property: Reading material, WIPO, Geneva 1998, Second Edition, Pg 60

is equivalent to an application or a registration of the same mark effected directly in each of the countries designated by the applicant. If the trademark office of a designated country does not refuse protection within a specified period, the protection of the mark is the same as if it had been registered by that Office. The Madrid system also simplifies greatly the subsequent management of the mark, since it is possible to record subsequent changes or to renew the registration through a single procedural step. Further countries may be designated subsequently.³⁹

In the context of football the trademarks and service marks include any domain names, two globes emblem, foreign translations and any permutations thereof, official mascot, the official title of the federation confederations of FIFA.

The ownership of the trademark or service mark relating to football in Kenya depends on who the organizer of the event is. Ordinarily a KFL-organized event featuring Kenyan football clubs should feature the service marks of either KFL or its affiliated members depending on the extent of involvement. The service marks shall remain the property of the organizer regardless of which broadcaster acquires and actually broadcasts the event.⁴⁰

In case the events organized by the *Confédération Africaine de Football* (CAF) trademark or service marks vest in the confederation unless otherwise a different arrangement is entered into. The same thing applies to FIFA in case of FIFA-organized football events like World Cup.

Another category of trademark or service mark rightholders are broadcasters of football or event sponsors who embody their service logos or products or trademarks into the event upon being broadcast. In principle, the individual players may also have their names registered as trade marks. The Broadcasters affix their service marks on the right or left corner of the television screen during the live or deferred transmission of the match or sporting event.⁴¹

The above rights are reserved for and withheld by their respective holders regardless of any form of downstream exploitation of the event or match.

Trademark can be exploited in football-related products like T-shirts, scarves and hats if such products are labeled or inscribed with club names with their logos, badges etc which have been registered as trademarks. Whereas this sort of football-relating merchandising has not gained foothold in Kenya perhaps because of lack of football professionalism as well as absence of

^{39 &}lt;a href="http://www.wipo.int/madrid/en/">http://www.wipo.int/madrid/en/ Accessed February, 24 2009.

⁴⁰ Refer to article 1(8), 77 and 78 of the KFL statute.

⁴¹ Simon Gardiner, Sports Law, Cavendish Publishing, 2nd Edition.

football clubs with corporate character, in Europe and elsewhere in the world this merchandising is prevalent.

The case of *Arsenal Football Club plc vs. Reed*⁴² summarizes the principle of football merchandise and trade mark infringement. Without authority from Arsenal Football club, Mr. Reeds an Arsenal fan manufactured and sold goods bearing the Arsenal names and logos from a stall in Highbury. Although Reeds did not indicate that the goods were Arsenal-originated, the court ruled that he was liable for trademark infringement as he had jeopardized the origin of Arsenal's trademarks.

7.6 Patent in football

A patent is an exclusive right granted for an **invention**, which is a **product** or a **process** that provides, in general, a new way of doing something, or offers a new technical solution to a problem. In order to be patentable, the invention must fulfill certain conditions.⁴³ These conditions include;

- 1. Novelty. The invention must be new. An invention is **new** if it is not anticipated by prior art.
- 2. Must involve an inventive step. An invention is considered as involving an **inventive step** if, having regard to the prior art relevant to the application claiming the invention, it would not have been obvious to a person skilled in the art to which the invention pertains on the date of the filing of the application or, if priority is claimed, on the priority date validly claimed in respect thereof.
- 3. Must be capable of industrial application. An invention is considered **industrially applicable** if, according to its nature, it can be made or used in any kind of industry, including agriculture, medicine, fishery and other services.

Unlike trademarks and copyright, patents, generally speaking, are of limited application and importance in the sports arena. There are however, circumstances where patent applications are relevant and obtaining. Depending on the facts and provided the legal requirements for patentability are satisfied, it may be possible to obtain a patent for certain items of sports equipment. For example, a new design of golf club, a new way of

^{42 2003} EWCA Civ 96

http://www.wipo.int/patentscope/en/patents_faq.html#patent (accessed February, 24 2009).

manufacturing golf balls, building and operations of new sports installations and facilities etc.⁴⁴

7.7 Copyright law in football

Copyright has been defined as the right to copy something in which a person has rights over. A field of rights related to copyright has rapidly developed over the last 50 years. 45 These related rights grew up around copyrighted works, and provide similar, although often more limited and of shorter duration, rights to:

- 1. Performing artists (such as actors and musicians) in their performances;
- 2. Producers of sound recordings (for example, cassette recordings and compact discs) in their recordings;
- 3. Broadcasting organizations in their radio and television programs.

The original creators of works protected by copyright, and their heirs, have certain basic rights. They hold the exclusive right to use or authorize others to use the work on agreed terms. The creator of a work can prohibit or authorize:

- 1. Its reproduction in various forms, such as printed publication or sound recording;
- 2. Its public performance, as in a play or musical work;
- 3. Recordings of it, for example, in the form of compact discs, cassettes or videotapes;
- 4. Its broadcasting, by radio, cable or satellite;
- 5. Its translation into other languages, or its adaptation, such as a novel into a screenplay.

Many creative works protected by copyright require mass distribution, communication and financial investment for their dissemination (for example, publications, sound recordings and films); hence, creators often sell the rights to their works to individuals or companies best able to market

⁴⁴ Simon Gardiner, Ibid

^{45 &}lt;a href="http://en.wikipedia.org/wiki/Copyrights">http://en.wikipedia.org/wiki/Copyrights (accessed on February, 25 2009).

the works in return for payment. These payments are often made dependent on the actual use of the work, and are then referred to as royalties.⁴⁶

These economic rights have a time limit of 50 years after the creator's death. National law may establish longer time-limits. This limit enables both creators and their heirs to benefit financially for a reasonable period of time. In Kenya Section 23 of Copyright Act provides for the following durations depending on the type of copyright involved:

- 1. Literary, musical or artistic work other than photographs-fifty years after the end of the year in which the author dies.
- 2. Audio-visual works and photographs-fifty years from the end of the year in which the work was either made, first made available to the public, or first published, whichever date is latest.
- 3. Sound recordings-fifty years after the end of the year in which the recording was made.
- 4. Broadcasts-fifty years after the end of the year in which the broadcast took place.

Copyright protection also includes moral rights, which involve the right to claim authorship of a work, and the right to oppose changes to it that could harm the creator's reputation.⁴⁷

The creator or the owner of the copyright in a work can enforce rights administratively and in the courts, by inspection of premises for evidence of production or possession of illegally made ("pirated") goods related to protected works. The owner may obtain court orders to stop such activities, as well as seek damages for loss of financial rewards and recognition.⁴⁸

Copyright protection extends only to expressions and not to ideas, procedures, and methods of operation or mathematical concepts as such. This principle has been confirmed by the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement of the World Trade Organization (WTO) as well as the WIPO Copyright Treaty.⁴⁹

Copyright underpins the enormous industry that surrounds the creation of and broadcast of audio-visual images of football events, driving subscription

^{46 &}lt;u>http://www.wipo.int/copyright/en/faq/faqs.htm#protect</u> (accessed on the 24th February 2009).

⁴⁷ Ibid

⁴⁸ Ibid

⁴⁹ Article 9(2) of TRIPs and Article 2 of WIPO Copyright Treaty.

to pay-TV channels, attracting traffic to websites and generating spin-off products such as videos and computer games.

Copyright and its related rights are essential to human creativity, by giving creators incentives in the form of recognition and fair economic rewards. Under this system of rights, creators are assured that their works can be disseminated without fear of unauthorized copying or piracy. This in turn helps increase access to and enhances the enjoyment of culture, knowledge, and entertainment all over the world.

Sports events, particularly those involving the national football teams whether in domestic or in international competition, are among the most popular things in the broadcaster's schedule. The legal position relating to copyright is that there is no copyright in a football game.⁵⁰ This is simply because there is no author and intellectual creation. Under Kenyan Law eligibility for copyright protection shall be hinged upon two conditions:⁵¹

- 1. Sufficient effort has been expended on making the work to give it an original character and
- 2. The work has been written, down recorded or otherwise reduced to material form.

Justice A. Ochieng sitting in Nairobi ruled that in order for copyright to subsist the author must expend substantial skills and efforts in obtaining the photographs and various design elements in issue so as to give them a completely original character.⁵²

In *LadBroke (Football) Ltd vs. William Hill (football) Ltd*⁵³, the court defined the word original and said it requires only that the work should not be copied but should originate from the author.

Information itself, such as football results, is not subject to copyright, but the way the information is expressed may be copyrightable. In *Football League Ltd v. Littlewoods Pools Ltd*⁵⁴ the House of Lords held that copyright subsisted in the league's fixture list because;

1. It was not possible to separate the arrangement of the fixtures from the mere making of the chronological list of fixtures

⁵⁰ Tom Rivers, Ownership, Acquisition, Clearance and Enforcement of Rights, European Broadcasting Union 1998, Pg 43

⁵¹ S. 22 Of Copyright Act, 2001

⁵² Alternative Media Limited -vs- Safaricom Limited, HCCC No. 263 of 2004 at Nairobi

^{53 [1964] 1} WLR 273

^{54 (1959) 2} AllER 546

2. Even if it had been possible, the preparation of the chronological list itself involved sufficient labour, skills and expertise to justify copyright protection.

Based on the foregoing cases which set out the criteria for copyrightability, one can argue that there is no creativity in a football match and therefore the game itself is not a subject of copyright. So the clubs or the national association cannot authorize or prohibit the making of an audiovisual recording or a television broadcast of a game. What happens in Kenya as elsewhere the clubs or the national association or confederation of football as the case may be can refuse to admit the broadcaster's outside broadcast crew to the ground. In doing so the rights exercised are the rights of the owner of the land to exclude the uninvited and not intellectual property rights.

It follows, therefore, that sports grounds that are overlooked by neighbouring buildings cannot prevent broadcasters from using long camera lens camera to film from adjacent property. Certain sporting events otherwise than football because of their very nature are particularly difficult to protect: marathons and long distance bicycle races, because they happen on public highways.

Luckily on the part of football, modern stadia are enclosed all the way round with high perimeter walls or fences with designated places for spectators. This makes it easy to control entrants and the number of broadcasters who are admitted to the ground and provided with facilities to cover the events.

The control and licensing of broadcasters to cover and transmit the matches are done within the framework of Media Rights Agreements. Such media rights can be exclusive or non-exclusive. They can relate to the one country, continent or sub-continent as the licensor and licensee my mutually agree. Different platforms of exploitation are licensed independently. For instance Kenya Broadcasting Corporation can be granted rights to broadcast a football match being played at Kasarani stadium on a terrestrial free-to-air basis, yet Multichoice (K) Limited otherwise called DSTV can be authorized to broadcast the same event in Kenya by way signal-encryption and pay-TV basis. Another person can be licensed to broadcast the same on either mobile television, internet or cable television.

Copyright in the context of football comes into play once broadcasters embody the events into tangible media for the purposes of either live broadcasting or otherwise. This kind of embodiment and subsequent broadcasting qualifies the broadcaster involved as an author in terms of the Kenya Copyright Act (2001)⁵⁵ and therefore entitled to copyright protection.

The philosophical basis for copyrightability of broadcasters is premised on the fact that when coverage of sporting events is done then a broadcaster has engaged the creativity of a camera man. The camera man has to creatively get the correct camera angling and capture the entire event including the replays and highlights. The images have then to be synchronized with sound in form of commentaries and then fixed into a signal with proper colour mixing before actual broadcasting. The whole of that process calls of applications of sufficient skills, creativity and judgment and therefore merits copyrightability.

It should be clearly understood that in football it is broadcasters who enjoy copyright protection upon fixation of a football event. The exclusive rights enjoyable by broadcasters as set forth by the Copyright Act⁵⁶ include:

- 1. The right to prohibit or authorize the fixation of a broadcast into any tangible medium
- 2. The right to prohibit or authorize the reproduction of any fixed broadcasts by any means
- 3. The right to prohibit or authorize then communication to the public of a broadcast by any device
- 4. The right to authorize or prohibit the taking of still photographs of a television broadcast

Although there are no typical cases on copyrightability of broadcasts in Kenya, the United Kingdom case of *British Broadcasting Corporation* vs. *British Satellite Broadcasting Limited*⁵⁷ gives a clear exposition of the matter.

The claimant broadcaster had paid a substantial sum for the right to broadcast of the 1990 World Cup played in Italy. It owned copyright in the broadcasts it transmitted of those matches. The defendant used a number of the clips from the footage in its news broadcasts on its satellite sports channel. Although the court held that BBC had copyright in the broadcasts, the defendant was not held liable for infringement because the clips were used for reporting news which fell within the exceptions and limitations in the UK Copyright Law

Although the Kenya Copyright Act gives copyright to broadcasters, the scope thereof is limited, given the technological advancement in the field

⁵⁶ Kenya Copyright Act, S. 29

^{57 {1992}} Ch.141

of broadcasting. Consequently, the scope should be broadened to cover internet, satellite broadcasting and digital mobile broadcasting.

According to the Kenya Copyright Act, copyright subsists in sound recording, films, broadcasts and cable programmes. Sound recordings will include player interviews, audio files and tapes of radio broadcasts. Films are defined as recordings on a medium from which moving images may by any means be produced, which obviously encompasses audio-visual footage of football events as well as the news conferences, training sessions and player interviews that surround them, interspersed with coverage of pundits in a studio or otherwise. Therefore, while there may not be any copyright inherent in a sporting performance per se, if that performance is recorded on audio and video-tape, that recording and its subsequent broadcast will be protected by copyright.

Copyright also protects literary works that emanate from football like news articles, magazines and books. It also subsists in a vast amount of original written material generated about sports, including rules and regulations, match reports, newspaper and magazine articles, event programmes, calendar of events, fixtures lists and database of statistical information.

Copyright subsist in artistic works and dramatic works also. Artistic works include photographic works and graphic works of any of any nature, irrespective of artistic quality. Photographic images of sport are used not only to illustrate match reports and other printed material relating to sport, but also to convey messages and illuminate themes of other news articles especially in the marketing of a broad range of products and services. Copyright subsists in venue designs (such as football courses and stadia) and other artwork relating to sports like team and event logos, mascots, livery of team kits, badges, posters and flags. These artworks form the basis for sponsorship and sports merchandising and licensing programmes.

A dramatic work is one that is capable of being performed, such as by acting or dancing. Football events do not generally qualify as dramatic works because a football spectacle is by nature not scripted but improvised, indeed, uncertainty of outcome is its very essence. Therefore, while copyright may subsist in the footage recorded of a sport event, it does not subsist in the sports event itself. To the extent that aspects of a sporting performance are scripted, then arguments can be made that copyright subsists in them.

7.8 Copyrightability of Football Formations and Strategy

7.8.1 Formations

A formation in football is the way the players in a team are positioned on the pitch. ⁵⁸ Different formations can be used depending on whether a team wishes to play more in attacking or in defending. A certain football formation would determine how excellent the game is played. It is noteworthy, however, that mere formations do not obviously determine a good outcome. The skills and discipline of players is also needed to effectively carry out a given formation in professional football. ⁵⁹ So any successful formations need to be chosen with the players skills and discipline in mind.

Various kinds of formations may be employed in a football match. What follows is an outline of some of these formations.⁶⁰

7.9 The WM

The WM system was created in the mid-1920s by Herbert Chapman of Arsenal to counter a change in the offside law in 1925. The change had reduced the number of opposition players that attackers needed between themselves and the goal-line from three to two. This led to the introduction of a centre-back to stop the opposing centre-forward, and tried to balance defensive and offensive playing.

4-2-4 (Four Two Four)

The 4-2-4 formation attempts to combine a strong attack with a strong defence, and was conceived as a reaction to WM's stiffness. The 4-2-4 was the first formation to be described using numbers.

While the initial developments leading to the 4-2-4 were devised by Márton Bukovi, the credit for creating the 4-2-4 lies with two different people: Flávio Costa, the Brazilian national coach in the early 1950s, as well as another Hungarian Béla Guttman.

4-3-3 (Four Three Three) Formation

The 4-3-3 was a development of the 4-2-4, and was played by the Brazilian national team in the 1962 World Cup. The extra player in midfield allows a stronger defence, and the midfield could be staggered for different effects. The three midfielders normally play closely together to protect the defence,

⁵⁸ http://en.wikipedia.org/wiki/Formation (football). (Accessed 13, March 2009)

⁵⁹ Ibid

⁶⁰ Murphy, Brenden, From Sheffield with Love, Sports Books Limited. pp. 83.

and move laterally across the field as a coordinated unit. The three forwards split across the field to spread the attack, and may be expected to tackle back. When used from the start of a game, this formation is widely regarded as encouraging defensive play.

4-4-2 (Four Four Two) Formation

This adaptable formation is the most common in football today, so well known that it has even inspired a magazine title, FourFourTwo.⁶¹ The midfielders are required to work hard to support both the defence and the attack. Typically one of the central midfielders is expected to go upfield as often as possible to support the forward pair while the other will play a "holding role" to shield the defence. The two wide midfield players must move up the flanks to the goal line in attacks and yet also protect the fullback wide defenders.

4-5-1 (Four Five One) Formation

The 4-5-1 is fundamentally defensive, but can be tweaked to provide more of an offensive threat. The essential qualities of the 4-5-1 are a three-man central midfield and a lone striker, typically a target man. By packing the midfield, a technically strong passing side will come unstuck and provide opportunities for counter-attacking football. When on the attack, the 4-5-1 is heavily dependent on the wingers supporting the lone striker.

5-3-2 (Five Three Two) Formation

In theory, the 5-3-2 is a purely defensive-minded line-up. The three central defenders provide extra resoluteness, while the three in midfield are all located around the centre circle. There is also a notable gap between midfield and attack, and the wing-play is the sole responsibility of the fullbacks.

4-3-2-1 (the 'Christmas Tree' formation)

The 4-3-2-1 commonly described as the 'Christmas Tree' formation. Another forward is brought on for a midfielder to play 'in the hole', so leaving two forwards slightly behind the most forward striker.

The Christmas Tree formation is considered a relatively narrow formation and depends on full-backs to provide presence in wide areas. The formation is also relatively fluid. During open play, one of the side central midfielders may drift to the flank to add additional presence.

^{61 &}lt;a href="http://en.wikipedia.org/wiki/FourFourTwo">http://en.wikipedia.org/wiki/FourFourTwo. (Accessed 13, March 2009)

3-4-3 (Three Four Three) Formation

Using a 3-4-3 the midfielders expected to split their time between attacking and defending. Having only three dedicated defenders means that if the opposing team breaks through the midfield, they will have a greater chance to score than with a more conventional defensive configuration, such as 4-5-1 or 4-4-2. However, the three forwards allow for a greater concentration on attack. This formation is used by more offensive-minded teams.

Incomplete Formations

When a player is sent-off (after being shown a red card), the teams generally fall back to defensive formations such as 4-4-1 or 5-3-1. Only when a draw is not an option (e.g. in a playoff or knockout match) will a team with ten players play in a risky attacking formation such as 4-3-2 or even 4-2-3. When more than one player is missing from the team the common formations are generally disbanded in favour of either maximum concentration on defence, or maximum concentration on attack.⁶² **4-3-2** is an attacking formation that is ideal when a team is playing with only 10 players.

The key question in this discussion is whether these formations are copyrightable? The answer is negative.

Formations are just mere ideas that cannot be protected. Expressions of these ideas, however, can be copyrightable if they meet the following criteria; there is originality and that the same has been expressed on a medium. The creator of such an expression would possess the copyright and anyone wishing to use the medium on which the idea is expressed must obtain rights from him or her

It is important to emphasize that what is protectable under copyright is not the idea but the expression of the idea. Copyright applies only to an author's original expression, not ideas, since ideas belong to the public and may not be monopolized. The idea-expression distinction explains why an original text on plane geometry may be copyrighted, though earlier copyrighted works presented identical ideas. Similarly, anyone can freely use data from a copyrighted book listing melting points of chemical compounds, since empirical data are considered ideas. Unauthorized photocopying of pages from the same book might be copyright infringement because it appropriates the author's selection and organization of data, and the layout of pages and

⁶² http://dualformations.com/. (Accessed 14, March 2009).

^{63 &}lt;u>https://www.cu.edu/techtransfer/investigators/faq_copyright.html.</u> (Accessed 13, March 2009).

headings, all of which might be original expression. So a formation is an idea that cannot be copyrightable but the expression of it is copyrightable.

7.10 Strategies

Football is a game of complex strategy and tactics. The basic strategy that each football team devises for a game is called a game plan. Each team may have up to hundreds of diagramed plays and strategies that are worked out ahead of time for pre-determined situations. During the game and at half time these strategies are worked on altered to adjust for the other team's strategies. Often how well these adjustments are made will determine the outcome of the game.⁶⁴

There maybe team strategy and individual strategy. Individual players may also employ and develop very distinctive tactics. These tactics and strategies are ideas which cannot be copyrightable but if expressed on a medium with a sense of originality, then the work is copyrightable.

7.11 Other sui generis rights

Data rights

Data right is a new species of intellectual property which protects investment in obtaining, verifying and presenting the contents of a database as distinct from the intellectual effort in creating it. Such intellectual effort continues to be protected by copyright. Thus, database right subsists independently of but complementary to copyright. A database is defined as a collection of independent works, data or other materials which are arranged in a systematic or methodical way, and are individually accessible by electronic or other means. It further refers to any collection of works, data or other materials, separable from one another without the value of their contents being affected, including a method or system of some sort for the retrieval of each of its constituent materials. Database right can subsist in a database regardless of whether copyright also subsists. 66

Examples of data rights that may subsist in football relate to fixture list for a football league, live scores, next matches, leading footballers etc. In

^{64 &}lt;u>http://www.humankinetics.com/products/showProduct.cfm?isbn=0736001395</u>. (Accessed 13, March 2009).

⁶⁵ Deacon R, Database Rights, Lincoln's Inn London WC2A 3TG. http://www.forfas.ie/media/090116_LES_Intellectual_%20Property_Lecture_Series.pdf (accessed February 26 2009).

⁶⁶ http://www.ipit-update.com/dbr.htm(accessed February, 20 2009

British Horseracing Board and Others v William Hill Organization Ltd,⁶⁷ the European Court held that database right is intended to protect either investment in the resources used to seek out existing independent materials and collect them in the database or in those used, with a view to ensuring the reliability of the information contained in that database, to monitor the accuracy of the materials collected when the database was created and during its operation.

It does not protect either the resources used for the creation of materials which make up the contents of a database or those used for verification during the stage of creation of materials which are subsequently collected in a database do not fall within that definition. On the specific issue that had been referred to the Court, namely whether resources used to draw up a list of horses in a race and to carry out checks in that connection constituted investment in obtaining and verification of the contents of a database, the Court held that it did not.

Database, like copyright, subsists automatically as soon as the database is made. There is no registration or other formalities. However, it is important to note that the qualification for database right is much narrower than for copyright. ⁶⁸

Database right is enforced by civil action in the High Court and the remedies available are the same as for copyright infringement.

In the Kenyan law, the data rights have not been fully conceptualized. These rights may however, be argued to be part of copyright rights in the Kenya context. The Kenyan courts have also not been faced with a case to decide on any existence of data rights.

7.12 Advertising rights

Advertising is a form of communication that typically attempts to persuade potential customers to purchase or to consume more of a particular brand of product or service.⁶⁹

Many advertisements are designed to generate increased consumption of those products and services through the creation and reinvention of the

^{67 [2004]} ECR

Daly, M, Looking After your Database Rights, Partner & Head of Technology & Intellectual Property, LICENSING EXECUTIVES SOCIETY & FORFÁS, 16th January 2009.

⁶⁹ Macrury I, Advertising, Taylor and Francis E-Library(2008)

"brand image". For these purposes, advertisements sometimes embed their persuasive message with factual information.

Performances, exhibitions, concerts, conventions and most other events can hardly take place without sponsoring. The increasing lack of public funding or support makes the sports and cultural events dependent on private business. Thus, sports and culture are put into the service of sales promotion. Wherever sponsors finance publicly born arts and culture they buy the service of attraction. Footballers are graded and paid according to their fame and skills for commercial purposes. Corporations promote renowned sportsmen and women, therefore getting exclusive rights in global advertising campaigns.⁷⁰

In football, advertisement generates a lot of money as companies want to associate their products with the football event or the football players. These rights of advertisement impute the right to publicity especially for footballers. Advertisement rights are closely related to the right of publicity.

The right of publicity is the right of every human being to control the unauthorized use of his or her name, likeness, or other index of personal identity for purposes of trade. The truth is that celebrity images in audio, video, or text are compact and nuanced symbols that can represent combinations of complex qualities.⁷¹

Publicity right is also defined as the right to reap and control the commercial value of one's identity for advertising and other commercial purposes, and the related right to stop others from exploiting the same.⁷²

The rationale underlying recognition of a right of publicity is generally less compelling than those that justify rights in trademarks or trade secrets. The commercial value of a person's identity often results from success in endeavors such as entertainment or sports that offer their own substantial rewards. Any additional incentive attributable to the right of publicity may have only marginal significance. In other cases, the commercial value acquired by a person's identity is largely fortuitous or otherwise unrelated to any investment made by the individual, thus diminishing the weight of the property and unjust enrichment rationales for protection. In addition, the public interest in avoiding false suggestions of endorsement or sponsorship can be pursued through the cause of action for deceptive marketing. Thus,

⁷⁰ Ibid

Finhorn, Michael A. advertising, Publicity rights, and Economic Reasoning. Available at SSRN: http://ssrn.com/abstract=1014800

⁷² Melville B. Nimmer, The Right of Publicity, 19 LAW & CONTEMP. PROBS. 203, 215-18 (1954).

courts may be properly reluctant to adopt a broad construction of the publicity right.⁷³

In Kenya, these rights have not been utilized in the sport of football as much as it has been utilized in athletics. Kenya has had several athletes' images being used in various advertisements, especially in the drinks industry.

7.13 Merchandising rights

Merchandising refers to the commercial exploitation of the fame which can be attached to fictitious characters or real persons like celebrities or their names, titles of the works in which they appear, marketing slogans and well-known trademarks and names of the well-known companies. Fame is usually generated by enormous investments on marketing the particular character, person, trademark or other merchandising object. Fame and its commercial value can be exploited by the merchandiser in various ways in his own production or the merchandising object can be licensed to other producers. Basically it's all about the exploitation of the certain positive images in all the possible ways.

The image can be understood in various economic contexts as a product or a trademark or as a marketing device which aims to generate more sales. Nowadays it can be seen that the economic symbols are products themselves and this is especially true in the context of merchandising.⁷⁵

Merchandising as a business is based on the fame and value of the particular merchandising object. The purpose of the legal protection is therefore in this context to protect the economic interests of the merchandiser who usually has some traditional IPRs like copyright and trademark rights to the merchandising object. The concept of the merchandising right can therefore refer to these overlapping IPRs. In that case the concept is used as a unifying legal concept without any real independent legal content.

All the economic interests of the merchandisers may not be protected by copyright or trademark rights. First step to expand the scope of the legal protection is to apply other kind of legal remedies, like unfair competition law (or passing off) and general civil law and principles. At the same time this means that the nature, aims and concepts of legal protection change.⁷⁶

⁷³ Zacchini v. Scripps-Howard Broadcasting Company, 433 U.S. 562 (1977).

⁷⁴ Wall A, Merchandising, Macmillan, 1918.

⁷⁵ Petteri Korhonen, Intellectual Property beyond Intellectual Property Rights? - Merchandising Rights Beyond IPRs? Hanasaari, Espoo, 24.-26.10.2004 University of Helsinki.

⁷⁶ Macrury I, Ibid.

Character merchandising involves mainly at least two parties: the creator of a fictional character or celebrity and the merchandiser who will organize the merchandising activity. Therefore the rights vesting in the character will be the subject of contracts (transfer of rights agreements, licensing agreements, endorsement agreements etc.).

Successful, well-organized and well-managed sports events generate commercial value not simply through selling access to the event itself (by admission tickets, television broadcasting, betting etc) but also by creating sponsorship and licensing programmes that exploit the enormous goodwill generated in the event among its fans and the broader public. Merchandisers exploit that goodwill directly, by selling event-branded products, sponsors and endorsees exploit it indirectly by associating their goods and services with the event's brand values.

Merchandising is an integral part of the sports marketing mix. It is commonplace throughout the entertainment business to manufacture and sell merchandise. This helps rightsowner to do something that they cannot easily do themselves which is to fully exploit the rights in various 'properties' such as films, television programmes, books or various items.

The business of football is as much concerned with exploiting its rights as the rest of the entertainment business and lends itself conveniently to merchandising activities. The sale of merchandising in sports may be conducted by governing bodies, clubs or participating individuals, although it is more usual for a right owner to appoint a third party to exploit its rights. It is also possible for a right owner to grant a merchandising right to a sponsor as part of a grant to sponsorship or endorsement right.

Could include T-shirts, foodstuffs, play kits etc. Such rights are in the basis of an agreement which stipulates the period, mode of payment, quality and others.

7.14 Sponsorship rights.

To sponsor something is to support an event, activity, person, or organization financially or through the provision of products or services. A sponsor is the individual or group that provides the support, similar to a benefactor.⁷⁷

Sponsorship may be an arrangement to exchange advertising for the responsibility of funding a popular event or entity. For example, a corporate entity may provide equipment for a famous athlete or sports team in exchange for brand recognition. The sponsor earns popularity this way while

⁷⁷ Masterman G, Sponsorship for a Return of Investment, Butterworth Heinemann (2007)

the sponsored can earn a lot of money. This type of sponsorship, known as cause-related, is prominent in the sports, arts, media and charity sectors.

Many times a company's motives for sponsorship are altruistic in order to create goodwill in the community which increases their good reputation. However, sponsorship is more commonly used to derive benefit from the associations created for a company's brand(s) or image as a result of the sponsorship. In several companies sponsor football to enjoy the benefits discussed above.⁷⁸

7.15 Footballers Transfer Rights

A transfer is the action taken whenever a player moves between clubs. It refers to the transferring of a player's registration from one club to another. The transfer of a footballer from one club to the next is regulated by the FIFA Regulations for the Status and Transfer of Players and the contract between the player and the current club with which he plays.

When a footballer is under contract with a club, he can only leave if the club agrees to terminate this contract. As a way of compensation, the club to whom the player is transferring will usually pay a capital sum. This is known as the 'transfer fee'. As part of the transfer deal, a proportion of the fee may go to the player himself and any agents involved in the deal. Again, the exact percentage is subject to the regulations of the relevant governing body. The amount of capital payable depends on a number of factors but the most outstanding ones are the status of the footballer, the clubs involved and FIFA guidelines.

On the face of it, transfer fees in football infringe the right of players to free movement as employees of their clubs. That is the contention of the European Commission, which has asked FIFA, football's world governing body, to get rid of the transfer fees system. However, the Commission's case arises from a confusion between a game and real life. The point about football is not that it is more important than real life; but that it is a sport and teams are not ordinary employers.⁸¹

It has been argued in favour of transfer fees that if transfer fees were abolished across the European Union, the viability of many smaller clubs

⁷⁸ Ibid

⁷⁹ http://en.wikipedia.org/wiki/Transfer (football). (accessed 12, March 2009)

^{80 &}lt;u>http://www.fifa.com/aboutfifa/federation/administration/playersagents/regulationstatustransfertsplayers.html.</u> (accessed 13, March 2009)

^{81 &}lt;a href="http://www.independent.co.uk/opinion/leading-articles/why-a-free-labour-market-in-football-is-a-bad-idea-637715.html">http://www.independent.co.uk/opinion/leading-articles/why-a-free-labour-market-infootball-is-a-bad-idea-637715.html. (Accessed 13, March 2009)

would be threatened, and they are vital to the support structure for football at Premiership level. There are many clubs, such as Wimbledon, Crewe and Norwich City, which have traditionally made money by discovering, nurturing and selling on talented young players. If Premiership clubs were able to cream off the best players without compensating smaller clubs for their investment, that might be in the short-term interest of individual players who would be able to pocket money that would otherwise go in transfer fees, but it would not be in their long-term collective interest of the sport as a whole.⁸²

This is an example of a larger principle, which is that the relationships between teams have to be regulated by the laws of sport as well as by those of the market. This applies most of all to sports that are strongly commercial. It is not in the interest of football as mass entertainment that rich clubs such as Manchester United should accumulate wealth out of all proportion to their sporting rivals.⁸³

This is the reason why the transfer markets in American football and baseball are heavily regulated, to balance the purchasing power of teams in an attempt to ensure that the sport remains competitive, and therefore entertaining.

In Kenya transfers from club to club are very minimal and whenever they occur they are done clandestinely and with meager transfer fees.

7.16 Conclusion

Football in Kenya is still at its formative stages and is entangled in several wrangles and politics. Due to this, Kenya has not clearly and vibrantly developed the football industry. In fact, most local fans prefer watching foreign football even when the local teams are playing.

Football in Kenya therefore does not attract many interests as it does in developed countries. Intellectual property rights are not sufficiently protected. Even if protected, they do not have any envious economic benefit as it does in western and European countries.

⁸² Belgian FA v Bosman [1996] All ER [EC] 97

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Chapter Eight

Combating Counterfeit Trade in Kenya¹

Ben Sihanya, PhD (Stanford)²

8.0 Preface

roduct counterfeiting and trade in counterfeit products, labels and packaging involve imitation of genuine products that are marketed under brand names.³ Counterfeit products are becoming a major problem to consumers, innovators and traders in Kenya and globally. Such imitations are usually clones or falsified products, labels and packaging designed to look like those of genuine products. The aim is to confuse or deceive consumers as to their quality, source, origin or legitimacy. Counterfeits are manufactured, processed or supplied by

This chapter is part of our on going research on anti-counterfeiting which has been partly captured in Ben Sihanya "Intellectual property confronts counterfeiting in Africa: protecting innovators and consumers in the cyber society," Chapter 19, in Prof Thomas Wilhemsson, et al. (Eds.) (2001) Consumer Law in the Information Society Kluwer Law International, London, pp. 329-364; and Ben Sihanya (forthcoming 2009) Intellectual Property and Innovation in Kenya and Africa: Transferring Technology for Sustainable Development, Innovative Lawyering, Sihanya MentoringSM & ©Africa, Nairobi.

PhD (Stanford); Senior Lecturer in Intellectual Property; Dean and former Chair of the Department of Commercial Law, University of Nairobi School of Law; Attorney, CPS (K). I am grateful for the excellent research support from Lorraine Ogombe, LLB, Intellectual Property Strategist; Joyce Chepng'etich, LLB, Programme Manager, Intellectual Property and Innovation Programme; and Angela Waweru, LLB, Programme Manager, Education, Mentoring and Research Law, all of Innovative Lawyering and ©Africa; sihanya@innovativelawyering.com.

We will use the term "product" here to denote goods, services and technologies. Significantly, the latter two have neither been sufficiently conceptualised in the literature, or dealt with in legal instruments and in practice.

unscrupulous traders who infringe and unlawfully apply other corporations' or individuals' innovations and intellectual property (IP).⁴

The basic thesis in this Chapter is that although there are short-term gains to consumers and the Kenyan economy from counterfeiting, the medium and long-term losses are massive. This Chapter adopts a three-pronged strategy on combating counterfeiting in Kenya. First, I evaluate the nature and extent of counterfeit trade in Kenya in the context of trade liberalization and the development of an information society. I also assess the effects of counterfeit trade on the various economic players including consumers, innovators, traders, investors, and the Kenyan Government. Second, I evaluate the intellectual property regime in Kenya and how IP can combat counterfeiting. I then carefully examine the anti-counterfeiting law and enforcement mechanisms in Kenya, including their effectiveness in addressing the problem. Third, I explore how that law can be reformed to ensure sustainable development by protecting innovators, consumers and other stakeholders.

8.1 The nature of counterfeit trade

Pirated products are commonly referred to as counterfeits, contrabands, fakes or clones. Trade in these is counterfeit trade. Counterfeit trade should not be confused with parallel importation or trade. Parallel or grey market products are geuine or legitimate products imported into markets where the manufacturers would not wish them to be made available.⁵

Counterfeit trade is the production and sale of goods, technologies and related services that are similar, or substantially identical, to legitimate products without the authorisation of the owner or licensee of the IP which undergirds the legitimate product.⁶

Ben Sihanya, "Intellectual property confronts counterfeiting in Africa..." op. cit.

Parallel imports are the result of artificial territorial division of markets, especially the up-market or branded products such as jeans (Levi Strauss), sun glasses, (silhouette, etc) toys, medicinal drugs, etc. See Ben Sihanya (2005) "Patents, parallel importation and compulsory licensing of HIV/AIDS drugs in Kenya," in Peter Gallagher, Patrick Low, and Andrew L. Stoler (eds) *Managing the Challenges of WTO Participation*, Cambridge University Press, London, Chapter 19, a study under the auspices of the World Trade Organization (WTO) and Adelaide University; Lorraine Ogombe (2006) *Parallel Importation and the Law in Kenya*, LLB Dissertation, University of Nairobi.

⁶ Ben Sihanya, "Intellectual property confronts counterfeiting in Africa..." op. cit; Marisella Ouma, "Anti-counterfeiting strategies in Kenya," presentation at the Innovative Lawyering Anti-Counterfeiting Seminar on 20/09/06, Nairobi (available on file at Innovative Lawyering); Mike Mwangi (2009) "Pyramid scheme victims protest at probe team" *Daily Nation* (Nairobi), February 25, National news, p. 16.

Often consumers have no idea that the product is a counterfeit. On many occasions they discover this after paying for it. Some innovators, traders and consumer protectors therefore warn consumers to be careful when the deal is too good to be true or if the label does not read like the real thing. The problem is that many consumers do not know what the real thing looks like. For instance, a bag with the *Gucci* logo "G" may bear the name *Pucci*; or apparel may read "GAT" instead of "CAT," the Caterpillar label. The similarity between the fake and the genuine article is often striking and unless consumers know what the real label looks like, they can neasily be taken in.⁷ When Pfizer Inc. introduced its prescription anti–impotence drug Viagra, within days, herbal products named "Vaegra" and "Viagro" had hit the market. Counterfeit Viagra has led to losses of over USD 2 billion.⁸

Commodities often counterfeited include designer-labelled apparel, prescription drugs, books, chart-topping music and movies, design diagrams, computer software, watches, company programs, artistic works such as tapestries, paintings, posters and photographs, perfumes, cosmetics, patented medicines and automobile and aeroplane parts.⁹

Counterfeit trade takes three main forms. First, pirates counterfeit the product itself, as is the case in counterfeit medicines or machine spare parts. Second, they counterfeit the trade mark or service mark of legitimate products, the general presentation or get-up of the product, or a combination of these. The second category includes counterfeiting the packaging of the product and may include marks and any brand names or labels. The fourth may be a cocktail of any of the foregoing.¹⁰

Mark, label and packaging counterfeiting is more common than product counterfeiting because these are simpler and cheaper to effect than it is to produce a product. For, instance, a counterfeiter therefore finds it more economical to purchase generic medicines and market them through

See G. Turbak, "Fighting fakes: product counterfeiting is now a bona fide global racket," *The Rotarian*, November 1998, pp. 14–17, at 14.

⁸ Havoscope, "Counterfeit Viagra causes losses of \$ 2 billion," available at http://www.havocscope.com/news/2008/06/counterfeit-viagra-causes-losses-of-2-billion (last accessed on 14/11/2008).

Ibid. See also Pharmacia and Upjohn's advertisement, "Important notice relating to trade mark infringement and trade in counterfeit Metakelfin," East African Standard (Nairobi), 17 July 1997, p. 20; A. Mutamba-Lule, "Uganda moves against quacks to stem abuses," East African (Nairobi, Dar es Salaam, Kampala), 27 September–3 October 1999, p. 8 (discussing delivery of health services by bogus medics); International Intellectual Property Association (IIPA), "South Africa 301 99," A report on counterfeiting in South Africa, at www.iipa.com/htm//rbc_south_africa_301_99.html (last visited on September 22, 1999).

¹⁰ Ben Sihanya, "Intellectual property confronts counterfeiting in Africa..." *supra* note 1.

counterfeit packaging of the popular legitimate brand than to invest in the manufacture of counterfeit medicines. A number of capsules marketed or sold in many Kenyan or African bus stations, buses, catering establishments, through door-to-door sales or other informal outlets are counterfeit products. The hawkers claim the drugs can cure any ailment under the sun — a misrepresentation of the potency of a counterfeit!¹¹

Consumers also tend to rely on the label, brand names and packaging when purchasing and they pay less attention to the product itself. Justice Felix Frankfurter summed the situation up very well in the US case, *Mishawaka Rubber & Woolen Mfg. Co.* v. S.S. Kresge Co. 12 when he wrote,

"The protection of trade marks is the law's recognition of the psychological function of symbols. If it is true that we live by symbols, it is no less true that we purchase goods by them." 13

Many judges grant trade mark infringement claims partly on the basis that consumers do not critically study or compare products before buying them.

8.2 Contextualizing counterfeit trade in Kenya

Like the other East African countries, Kenya is facing an alarming increase in the trade in counterfeit products.¹⁴ During the first East African intellectual property rights conference, member states shared the impacts of counterfeit trade in their economies, where it was estimated that the region losses US\$ 20 million in taxes to counterfeiting and piracy.¹⁵

Kenya has the largest market in East Africa, and it serves as the major distribution point for surrounding countries like Uganda, Rwanda, and Ethiopia. Thus counterfeiting in Kenya does not only affect the Kenyan economy but has a ripple effect in the surrounding countries.¹⁶

- 11 Ben Sihanya, "Intellectual property confronts counterfeiting ..." op. cit.
- 12 316 US 203, 205 (1942) as cited in D. J. Goldstone and P. J. Toren, 'The criminalization of trademark counterfeiting', [1998] Vol. 31 Conn. L. Rev. 1.
- 13 Richard Ntiru, the Ugandan poet, supplies part of the justification for this practice: "Society is a market stall/And men goods on display/Where the label is more important than the labelled/And the price more fascinating than the value" see his poem, 'Introduction' in Jonathan Kariara and Ellen Kitonga (eds) (1976) *Introduction to East African Poetry*, Oxford University Press, Nairobi, pp. 1–2.
- 14 The East Africa Community (EAC) countries include Kenya, Uganda, Tanzania, Rwanda and Burundi.
- 15 International Chamber of Commerce (2007) "Counterfeiting cost East Africa \$20 million in lost taxes," available at http://www.icc-ccs.co.uk/bascap/article.php?articleid=731 (last accessed on 20/11/2008).
- International Intellectual Property Alliance, "International Intellectual Property Alliance 2003 special 301 report," *op. cit.*

Kenyan manufacturers lose an estimated Kshs 30 billion annually due to counterfeiting.¹⁷ Over 80% of popular trade marks in Kenya are being counterfeited.¹⁸ The music and movies industries are one of the worst affected industries with over 97% of music cassettes, CDs and DVDs being pirated. It is estimated by the World Bank that Kenya loses Kshs 1.3 – Kshs 4.8 billion in music alone.¹⁹

In Kenya, everything from electronics to bottled water continues to be counterfeited. Software piracy is also rampant in Kenya. Most computers are sold with "free" software. Even some Government offices use pirated software.²⁰

8.2.1 Impact of trade liberalization on counterfeit trade

The effect of globalization and trade liberalization on counterfeit trade has been massive. First, brand name products are now manufactured in numerous locations due to developments in ICT and globalization. Thus it is becoming increasingly difficult for consumers to know which products are genuine and which are counterfeits.²¹ Nor is it easy for providers to monitor counterfeiting and IP infringement. Second, trade liberalization, the creation of free trade areas (FTAs) and trading blocks continue to open up markets making it possible for counterfeit products to permeate different countries legally.²² Third, rapid advances in technology, particularly information and communication technology (ICT) have further made it easy to make perfect imitation of products and labels. The entertainment industry is one of the worst affected industries. Pirated digital material including literary, artistic, audio and audiovisual works are easily stored and distributed over the Internet. Once loaded

¹⁷ Kenya Association of Manufacturers (2008) "Anti-Counterfeit Bill: We Count on Legislators to Act Rightfully" at www.kam.co.ke/kam_downloads/download. php?file=Microsoft_Word_-_Anti_counterfeits_statement.pdf (last accessed 27.2.2008)

¹⁸ Ibid.

¹⁹ Sylvance Sange, "Intellectual property, piracy and counterfeiting in Kenya," presentation at Innovative Lawyering's *Anti-counterfeiting Workshop*, September 19-20, 2006, Nairobi.

²⁰ See Afrol News, "Software piracy increasing in Africa," available at http://www.afrol.com/News2002/afr014_sofware_piracy.htm (last accessed on 25/11/2008); Business Software Alliance, "Copyright office BSA fight piracy in Kenya," available at http://www.afrol.com/News2002/afr014_sofware_piracy.htm (last accessed on 25/11/2008).

²¹ Kwan Choi, "Mixed markets with counterfeit producers," in Kwan Choi and James Hartigan (eds) (2004) Handbook of International Trade, Vol 1, Blackwell Publishing, Oxford.

²² Ferdinand D. Tay, "Impact of counterfeiting on the Ghanaian consumer," presentation at the Consumer's Association of Ghana National Dialogue on Counterfeit Products, Alisa Hotel, Accra, 21st July 2008 available at http://www.bcacit.com/home/docs/WACCP_CAG.pdf (last accessed on 21/11/2008).

onto the Internet, the material can be transmitted numerous times without loss of quality.²³

ICT and trade liberalisation have been mutually reinforcing, especially as far as the confrontation between IP and counterfeiting is concerned. The opening up of territorial borders caused in part by deregulation, ICT and trade liberalisation has unleashed free markets. While these markets attract legitimate traders, counterfeiters are also drawn by the promise of increased sales and returns. Trade liberalisation promises enhanced competition among traders and innovators and improvement in product quality. It promises a reduction in prices courtesy of market forces. IP may also be used to increase or at least bar unfair competition among traders through innovation and creativity, so that the best wins.²⁴ The evidence shows that most liberalised economies also have the strongest IP regimes. However, before this phase is reached there is usually a transition period where some regulators encourage or suffer counterfeiting and IP infringement. Frank Emmert captures the issues thus:

"When domestic industrial development is only just beginning, a state will usually fare better if it allows liberal access to foreign IP and does not prohibit or sanction piracy. As domestic industries grow, they will generate more and more IP of their own — and they will increasingly lobby for protection. Eventually the state will reach the point where protection of IP becomes more beneficial to it than non-protection." ²⁵

In this context some argue that counterfeiting may assist in the development of the economies of African countries. There are at least four problems with this hypothesis. First, imitators may not have incentives to develop endogenous technological capability. And the Japanese reverse-engineering model, which is usually cited in support, is not on all fours with counterfeiting; it involves technological up-scaling. Second, effective protection of endogenous technologies and innovations assumes an IP culture, an issue that goes beyond law and government policy and which takes time to nurture. Counterfeiting foreign innovations or IPs does not easily change to respect for local IP once the latter begin to emerge. Third, the hypothesis assumes regulators and state bureaucrats and apparati are selfless and judicious. The principal-agent problem reveals rent-seeking and opportunistic conduct in many African states. Finally, the foreign/local dichotomy is always attacked

David Bainbridge (2007) *Intellectual Property*, Pearson Longman, Harlow.

Paul B. Stephan, Julie A. Roin and Don Wallace Jr., (1993) *International Business and Economics*, The Miche Company, Charlottesville, Virginia, pp. 491–559.

²⁵ Frank Emmert, "Intellectual property in the Uruguay Round — Negotiating strategies of the Western industrialised countries" *Michigan Journal of International Law* [1990] Vol. 11, pp. 1317–1399. Dr Andy Clark who taught me IP and International Regulation of Technology Transfer, introduced me to this study at Warwick Law School in 1994/5.

through national treatment in transnational law, or equivalent constitutional doctrines.²⁶ This chapter explores these issues.

8.3 Impact of counterfeit trade in Kenya

Counterfeits and counterfeit technologies, goods, and services are in most cases far inferior or deficient in terms of quality, quantity, potency, durability or other such characteristics when compared to the genuine products. Counterfeit trade has had dire effects to the Kenyan economy, the Government, consumers, traders and other stakeholders. In certain circumstances counterfeits have caused harmful effects to consumer health and even caused death

8.3.1 Serious health risks

Many developing countries including Kenya face numerous health challenges including HIV/AIDS, malaria, and tuberculosis (TB)²⁷ and now cancer too! Counterfeiters and counterfeit pharmaceutical products present serious (and sometimes fatal) health risks to consumers in addition to general dissatisfaction.²⁸ Counterfeits are not subjected to health inspection and many such manufacturers, processors or providers care little about health standards or consumer satisfaction.

There are four types of medicine counterfeiting: imitation of active ingredients and packaging; counterfeit drugs sold under recognized trade marks; counterfeit drugs that do not contain the active ingredient; and counterfeit drugs that contain harmful or poisonous substances.²⁹

Pharmaceutical products are a leading example of the dire effects of counterfeiting judging by the number of deaths reported worldwide. There are several reported cases from various African countries. In 1990, 100 children died in Nigeria for taking cough syrup mixed with a poisonous

See generally Ben Sihanya, "Negotiating intellectual property in Seattle and beyond: Strategies for protecting Southern trade and investment interests", Paper presented at the Southern Seminar on WTO, Arusha (Tanzania), 18–22 October 1999, published in *EcoNews Africa* (Nairobi) October 1999,pp. 6-8; Ben Sihanya, Intellectual Property in Africa, *supra note* 1.

²⁷ Ben Sihanya (2008) "How IMF policies constrain policy space in Kenya's health sector," in Ben Sihanya (ed) *The Impact of IMF Policies on Education, Health and Women's Rights in Kenya*, Action Aid International Kenya, Nairobi.

Gatonye Gathura (2009) "Alarm as 90% get wrong drugs: Alarm as 90% get wrong drugs: Lives of poor at risk as estate pharmacies they turn to also give incorrect dosages" *Daily Nation* (Nairobi) Wednesday, February 25, 2009.

²⁹ Ben Sihanya (2008) "How IMF policies constrain policy space in Kenya's education and health sector," *op. cit*.

solvent; in 1994, 20% of drug samples in Cameroon were found to be substandard; in 1995 meningitis drugs in Niger were found to contain water only; in 1998, malaria drugs imported to Kenya were found to be completely ineffective; in 2002 in Nigeria, 60% of the drugs were found to be substandard or expired.³⁰ These experiences are repeated all over Africa and other developing countries.³¹

News of fake drugs in the Kenyan market have been highlighted in recent times. In 2004, it was estimated that 30% of drugs imported to Kenya were counterfeits. These include anti-biotics, anti-malaria, anti-inflammatories, anti-retroviral drugs (ARVs) (for HIV/AIDS), painkillers, vaccines, among others. Some of the drugs tested by the Drug Inspectorate Unit in Nyanza proved to be composed of ordinary chalk. In Nyamira District, veterinary medicine was being sold as anti-malaria drugs. The Food, Drugs and Chemical Substances Act, Cap 254 was amended in 2002 to provide stiffer penalties (Kshs 700,000) for trading in counterfeit medicine. There are many more reported and unreported cases of trade in counterfeit drugs in Kenya.

Relatedly, counterfeits in building materials have caused expensive loses and health risks to home owners and real estate developers in Kenya. The use of counterfeit and substandard cables and power lines which cannot carry the required voltage has led to various tragedies and death. In 2006, aluminum cables coated with copper were discovered in the market. Aluminum conductors are dangerous because they are weak and corrode over time. To deal with this problem, the East African Cables company initiated consumer campaigns entitled "spark your life safely," warning the public against substandard products.³⁵

³⁰ Global Health Pharma Fund, "Counterfeit medicine – an unscrupulous business," available at http://www.gphf.org (last accessed on September 2, 2008).

African Medical Research Foundation (AMREF) (1994), *Towards the 21st Centre: Meeting Africa's Health Challenges*, African Medical Research Foundation, Nairobi; World Health Organisation (2007), "*The African Regional Health Report*: the health of the African people," available at www.who.int, (last accessed on March 5, 2008).

Zachary Ochieng (2007) "Counterfeit drugs continue to flood markets," available at http://www.newsfromafrica.org/newsfromafrica/articles/art_10823.html (last accessed on 25/11/2008).

Dagi Kimani (2004) "Illegally imported fake drugs flood Kenya," available at http://www.omnia-verlag.de/weltimwandel/php/start.php?flag=popup&id=2998&bc=-955-1158-1386-2997-2998 (last accessed on 25/11/2008).

³⁴ Section 36 (1) of the Food, Drugs and Chemical Substances Act, Cap 254.

Daily Nation, "Dear price to pay for buying cheap fake products," *Daily Nation* (Nairobi), 06/09/2006.

8.3.2 Economic losses

Counterfeit trade impacts society and the economy adversely. Innovators and legitimate investors lose a lot of income. Significantly, other linkages within the economy are also disrupted. This is mainly because since counterfeiters and pirates incur limited production or processing costs, they can afford to sell cheaply and thus undercut or undersell and crowd out genuine providers. Indeed, they may also respond to market signals, such as a surge in demand, much faster. This way, the Kenyan Government, who need all the money and jobs they can secure, lose a lot of income tax, duty, and related opportunities.

Thus the Kenya Association of Manufacturers (KAM's) anti counterfeits Committee Chairman Anthony Mburu emphasized that,

"Counterfeits pose a major problem to Kenya's business community resulting in the loss of billions of shillings in terms of revenue annually. On one hand industries lose Ksh 50 billion in terms of sales revenues, on the other hand the government incurs a total loss of Ksh 19 billion in tax revenue." ³⁶

Specific industry stakeholders have reported massive losses. The Eveready East Africa's Managing Director declared in 2006 that his company loses Kshs 500 million annually to illegal dumping of dry cell batteries in the Kenyan market. He said the majority of these batteries are imported from China, Indonesia and the Phillipines. According to him, "Counterfeiting was a nuisance that can only be dealt with through concerted efforts from all stakeholders."³⁷

Due to the competitive nature of the market, an entrepreneur has to be innovative and creative so as to measure up to or outdo the competition. To this extent entrepreneurs expend a lot of time, money and energy in R&D so as to carve out a niche by establishing a good reputation with consumers. Counterfeiters (who are essentially followers and imitators) take advantage of this goodwill and name recognition without suffering any of the costs incurred by innovators and original investors (who are the leaders). Thus a counterfeiter not only infringes the innovator's IP but also cheats a legitimate trader out of deserved sales revenue and brand recognition.³⁸

In some cases, counterfeit trade has been held to be more than 50% of the total trade.³⁹ Legitimate traders in such sectors end up losing over 50% of

Kenya Association of Manufacturers, "KAM presents amendments to Anti Counterfeit Bill," available at http://www.kam.co.ke/?itemId=17&newsId=134 (last accessed on 25/11/2008).

Peter Mutai, "Eveready loses Kshs 500 million to counterfeit batteries," *The Standard (Nairobi)*, 11/07/2006.

³⁸ Ben Sihanya, "IP confronts counterfeiting..." op. cit.

³⁹ See A. Campos, "Trade-Bolivia; Government takes action against pirates," *Interpress*

potential sales. Some companies have reported losses amounting to millions of dollars. In 1999 the Kenya (Book) Publishers Association (KPA) estimated their annual loss at Kshs 300,000.⁴⁰ By 2008, the annual losses had risen to an estimated Kshs. 10 million.⁴¹ And it is estimated that Kenya loses Kshs 500 million annually to trade in counterfeit medicine alone.⁴²

8.3.3 Loss of reputation

Where counterfeits are of lower quality than genuine products, and they usually are, an entrepreneur's reputation is tarnished and this in turn affects future sales. ⁴³ Some investors have lost market share, ⁴⁴ and could be forced to close shop. In case counterfeit products harm consumers, a legitimate trader or IP owner may have to compensate them and in some cases may be called upon to refund the purchase price. Many innovators and traders, such as franchisors, would pay compensation if only to support the genuine products and protect the brand name in the long term.

8.3.4 Strained international relations

Counterfeiting can also lead to strained trade relationships among technology suppliers (IP owners) and importers (or counterfeiters) in the transnational level. Technology transfer between nations is often considered a sensitive issue especially where one country feels that IP belonging to its nationals or corporations organized under its laws are being violated.⁴⁵

- *Service* of 27 May 1999 which indicates that seven of every ten pairs of jeans sold in Bolivia were imitations of Wrangler, Lee and Calvin Klein.
- 40 See "Book pirates must be brought to heel" *Daily Nation* (Nairobi) 18 September 1999, p. 6: and K. Waihenya, "Publishers given tips to counter book piracy" *Daily Nation* (Nairobi) 20 September 1999, p. 19. 1 USD = Kshs. 79.70 approximately (as at 27th February 2009).
- 41 Muchemi Wachira, "Publishers losing millions," *Daily Nation (Nairobi)*, 01/04/2008. Jama Makan, "Kenya: piracy nightmare for book dealers," *Daily Nation (Nairobi)*, 05/10/2008.
- Dagi Kimani, "Illegally imported fake drugs flood Kenya," *Daily Nation* (Nairobi), May 10, 2004. See also the foregoing discussions.
- Consequently, this activity in one stroke infringes the innovator's material or economic rights (loss of revenue streams) and moral rights (reputation).
- See M. wa Kyendo, "Street vendors have a field day selling contraband cigarettes", *Daily Nation* (Nairobi), 21 September 1999, p. BW10.
- See references Marshall Leaffer, "Protecting United States intellectual property abroad: Toward a new multilateralism" [1991] 76 Iowa Law Review 273, op. cit; Paul B. Stephan et al, International Business and Economics: Law and Policy, op. cit.; John H. Barton (2001) "The economics of TRIPs: international trade in information-intensive products" 33 George Washington International Law Review, pp. 473-501; cf. John H. Barton (2007) New trends in technology transfer International Centre for Trade and Sustainable Development, Intellectual Property and Sustainable Development Series, Issue Paper, No. 18.

In 1988 the US enacted the Omnibus Trade and Competitiveness Act, which amended the Trade Act, 1974. Section 301, also referred to as super 301, empowered (nay, obligated) the Executive, especially through the US Trade Representative (USTR) to take a number of measures against states which imperilled US trade, for instance through non or weak protection or enforcement of IP. Under s. 301 (a) (1) the USTR may pursue mandatory action " if (the USTR) determines ... that - the rights of the [US] under any trade agreement are being denied; or an act, policy or practice of a foreign country — (i) violates or is inconsistent with, the provisions of, or otherwise denies benefits to the [US] under any trade agreement, or (ii) is unjustifiable and burdens or restricts [US] commerce... " ⁴⁶ It created a watch list and a priority watch list, depending on the nature and extent of the alleged infraction of US commercial and IP interests. ⁴⁷

In the past, the US has applied super 301 to threaten or impose sanctions on several countries, including China, Bolivia, Brazil, Paraguay, Egypt and South Africa, which it considered to condone violation of US IP. South Africa was placed on the Watch List in 1995 and removed in April 1996 when it was placed in the observations category. The 2007 International Intellectual Property Alliance (IIPA) special 301 Report mentions South Africa as a special case study because of increasing domestic piracy concerns, especially the proliferation of rampant downloading of works from the Internet and burning into CDs and DVDs, software, music and book piracy. A court decision in 2007 removing the Police's powers of arrest under the Counterfeit Goods Act is considered as a curtailment of efforts to enforce copyright. Other countries in the 2007 US Priority Watch List include Argentina, Egypt, Mexico, India, and China, among others. Countries on the Watch List include Brazil, Indonesia, Kuwait, and Nigeria, among others.

In 2003, the US threatened to place Kenya in the Watch List for not sufficiently protecting software.⁵⁰ Kenya's Attorney General launched the

⁴⁶ Reproduced in Paul B. Stephan, Julie A. Roin and Don Wallace Jr (1996) *Documents for International Business and Economics: Law and Policy*, The Michie Co., Charlottesville, Virginia, 2nd ed., pp. 714–715.

⁴⁷ See Marshall Leaffer, "Protecting United States intellectual property abroad: Toward a new multilateralism, *op. cit*" [1991] 76 *Iowa Law Review* 273, *op. cit*.

See International Intellectual Property Association, "South Africa 301 99" at www.iipa.com/html/rbc_south_africa_301_99.html (visited September 1999).

International Intellectual Property Alliance, "International Intellectual Property Alliance 2007 special 301report," available at http://www.iipa.com/2007_SPEC301_TOC.htm (last accessed on November 14, 2008).

⁵⁰ International Intellectual Property Alliance, "International Intellectual Property Alliance 2003 special 301 report: Kenya," available at http://www.iipa.com/rbc/2003/2003SPEC301KENYA.pdf (last accessed on November 14, 2008).

Kenya Copyright Board which had been established under the Copyright Act, 2001.⁵¹ And in 2006, the Kenyan Minister for Trade and Industry issued a statement denying that the Chinese Government was exporting counterfeited products to Kenya. This was in response to an earlier press statement claiming that Kenya had cancelled trade licenses for four foreign companies for engaging in counterfeit trade.⁵²

8.3.5 Defrauding consumers

Selling a counterfeit product amounts to defrauding a consumer who pays for merchandise, services or technologies of a brand whose quality, quantity, durability, potency, or other characteristics the consumer has come to rely on due to brand recognition. In return for the value given, the consumer gets a fake product.⁵³

8.3.6 Reduction of Government revenue

Counterfeiting poses a serious threat to the state in terms of trade and the political economy generally. Investors are less likely to venture into or stay in countries where counterfeiting is rampant, fearing their IP will be infringed. This is mainly because they are unlikely to recoup their investment or realise expected profits. A country therefore loses out on potential revenue in addition to that which it is already losing in terms of taxes and business rates not paid by counterfeiters. Moreover, legitimate traders who pay taxes are put out of business and jobs are lost. This leads to a further reduction in government revenue which may lead to greater poverty and social unrest. ⁵⁴

As indicated, the Kenya Association of Manufacturers (KAM) estimates that the Government incurs a total loss of Ksh 19 billion in tax revenue."55

8.3.7 Distortion of trade

Counterfeit trade is distortive of both international and domestic trade.⁵⁶ It distorts market forces by changing the legitimate expectations of various

⁵¹ Ibid.

David Strong, "Kenya denies China's involvement in counterfeits," available online at http://english.people.com (last accessed on 02/09/2006).

⁵³ Ben Sihanya, "Intellectual property confronts counterfeiting in Africa..." supra note 1

Paul Paradise (1999) *Trade Mark Counterfeiting, Product Piracy and the Billion Dollar Threat to the US Economy,* Quorum Books, London.

Kenya Association of Manufacturers, "KAM presents amendments to Anti Counterfeit Bill," available at http://www.kam.co.ke/?itemId=17&newsId=134 (last accessed on 25/11/2008), *op.cit*

⁵⁶ WTO has taken this approach in its attempts to fight counterfeit trade.

economy players and bringing about unpredictable changes which cause the market to be unreliable

8.4 Robin Hoods of modern times?

Some have argued that a growing economy needs counterfeiting so as to acquire technologies, goods and services which may otherwise be inaccessible or unaffordable. For instance, patented pharmaceutical products such as AIDS drugs are often too expensive and beyond the reach of the poor partly because of royalties that must be paid to patent holders.⁵⁷

For such reasons, counterfeiters have sometimes been called the Robin Hoods of modern times who steal from the IP have-gots and allegedly give to the IP have-nots. From Robin Hood is a medieval hero in English folklore. He was outlawed for poaching and killing one of the king's deer which was considered treason and an offence punishable by death. To avoid the death penalty, he disappeared into Sherwood Forest, where he made a living by stealing from rich travelers and distributing the loot among the poor. In the process of his escapades, he gained popularity and a band of followers known as his "Merry Men." Robin Hood is famous for robbing the rich to give to the poor and fighting against injustice and tyranny. Counterfeiters defend their position by arguing that they perform the function of modern day Robin Hoods: they steal from the IP have-gots (particularly transnational corporations (TNCs) and western industrialized countries) and give to the IP have-nots (mainly poor consumers in developing countries).

Many African, and indeed other developing countries, argue that they do not see why they should use their scarce resources to build strong IP regimes that would only benefit the North generally, and Northern TNCs, executives as well as shareholders in particular.⁶¹ In their opinion, the money, personnel

⁵⁷ Ben Sihanya (2005) "Patents, parallel importation and compulsory licensing of HIV/AIDS drugs in Kenya," in Peter Gallagher, Patrick Low, and Andrew L. Stoler (eds) *Managing the Challenges of WTO Participation*, Cambridge University Press, London, Chapter 19, a study under the auspices of the World Trade Organization (WTO) and Adelaide University, *op.cit*.

⁵⁸ See G. Turbak, "Fighting fakes ...," op. cit.

Howard Pyle (1886) *The Merry Adventures of Robin Hood*, Sterling Publishing Company, New York; *Richard Rutherford-Moore* (2002) *Robin Hood: On the Outlaw Trail*, *Capall Bann Publishing, Somerset; Stephen T. Knight* (1994) *Robin Hood: a Complete Study of the English Outlaw, Blackwell Publishers, Oxford;* Britain Express, "Myths and legends: Robin Hood," available at http://www.britainexpress.com/Myths/robin-hood.htm (last accessed on 22/11/2008); Allen Wright, "Robin Hood: A beginners guide," available at http://www.boldoutlaw.com/robbeg (last accessed on 22/11/2008).

But quite often the counterfeiters steal for themselves; and most are quite rich anyway.

⁶¹ Ben Sihanya, Intellectual Property and Innovation in Kenya and Africa: Transferring Technology for Sustainable Development, op. cit.

and related resources could be better utilised to provide basic needs such as food, health care, education, shelter, water, electricity, telecommunication systems, and other basic infrastructure or services. Some have even argued that counterfeiting enables a country to save on much-needed foreign exchange. The argument is that if a country can acquire technology, goods and services through trade in counterfeits, then it does not have to import the same from foreign producers.⁶² This view has attracted many supporters, especially due to the high value of IP-embodied imports; high exchange rates vis-à-vis hard currencies; and general forex volatility and exchange risks which often work against African consumers of imported products.⁶³

8.4.1 Robin Hood's defenders

Robin Hood's supporters argue that this perspective has been greatly emphasised by the West, or those who massage Western capitalism, so as to encourage or coerce IP protection and promotion and thereby compromise consumer interests in Kenya and Africa. According to some authorities, what is not usually disclosed is that counterfeit trade has more to recommend it than Robin Hood's accusers are willing to admit. They argue that counterfeit trade has played a big role in the progress of many developing countries and that industries, household economies and individual consumers have prospered because or in spite of inadequate IP protection and promotion. The growth of India's and Pakistan's pharmaceutical industries is commonly cited; it is argued that these industries might never have developed as fast as they did but for piracy. These countries actively support production and marketing of generic drugs, and so do not look favourably upon drug patents.

For any modern industry to grow there has to be R&D.. Alternatively or additionally, industry has to rely on transfer of technology from other more developed nations or sectors. Being a low technology continent Africa therefore relies greatly on technology imported from the West the East and elsewhere (Japan, Brazil, India, China...). However, this technology is not always easily available and is often expensive or inappropriate. Thus, the Kenya Industrial Property Institute (KIPI) for long regulated technology transfer contracts with a focus on the pricing of the technology, especially in light of scarce foreign exchange reserves. It thus denied registration of technology transfer transactions in certain cases. ⁶⁵

⁶² Ibid.

⁶³ Ben Sihanya, "Intellectual property confronts counterfeiting..." op. cit.

⁶⁴ Cf. William Lesser,(1991) *Equitable Patent Protection in Developing Countries*, Eubios Ethics Institute, Christchurch; Ben Sihanya, *Intellectual Property in Africa..., op. cit.*

⁶⁵ See section 92 of the Industrial Property Act (IPA), 1989 (now s. 69 IPA 2001). Pricing and especially currency conversion problems are dealt with in *International Greetings* v.

Some argue that counterfeiting has facilitated technology transfer and increased consumer choice and access to much needed technology at prices most consumers are willing and able to pay. They indicate that software piracy has enabled many African corporations and some consumers to enjoy state-of-the-art software which would otherwise be unavailable locally, or that it is in any event too expensive to import. According to this view consumers in Africa are able to maintain internationally competitive standards by accessing counterfeit goods, as well as fake services and technologies.⁶⁶

The same school posits that counterfeiters also offer competition to legitimate traders, which has the same effect as ordinary competition would have in a given economy. In this vein legitimate producers are forced to be creative and innovative leading to better products, so product improvements may be effected if only to make them stand out from the competition (and especially the counterfeits). Prices are also reduced as legitimate traders try to maintain their customers. In the process counterfeiters are also allowed to improve their skills and creativity, thereby developing products that are better suited for the local market.⁶⁷

According to Robin Hood's advocates, inasmuch as counterfeits have been known to cause harmful effects on consumers as already discussed above, some counterfeits have no ill effects and will serve the consumer just as legitimate products would. They emphasize that for this reason, many consumers have shown a reluctance to pay prices demanded for the legitimate products when they can get a counterfeit that will serve their purpose just as well but at a fraction of the price of the former.

However, the adverse effects of counterfeiting far outweigh these defences which raise Robin Hood defender's in support of counterfeiting. The long-term benefits outweigh any short-term, opportunistic benefit that a country, traders or consumers may realize from engaging in counterfeit trade. ⁶⁸ IP promotion and anti-counterfeiting is the better way to go. As this chapter shows, it is also wiser and better to develop a good anti-counterfeiting and IP regime at the beginning than to wait for endogenous IP growth; this assures a more efficient and sustainable learning curve.

Kenya Litho Ltd. (1982-1988) 1 Kenya Appeal Reports 902–905.

⁶⁶ Ben Sihanya, "Intellectual property confronts counterfeiting ..." op. cit.

⁶⁷ *Ibid.* Ben Sihanya, *Intellectual Property and Innovation in Kenya and Africa:* Transferring Technology for Sustainable Development, op. cit.

⁶⁸ Ibid.

8.5. Intellectual property law in Kenya

Intellectual property (IP) is part of the policy and legal infrastructure that countries may use to nurture innovation and technology transfer and development. IP recognizes, rewards, protects and promotes creativity - the product of the mind - and can also help the public to access the products of innovation and creativity.⁶⁹ Traditional subject matter of IP includes patent that protects and promotes scientific or inventive information; copyright, that protects and promotes original expressive information; and trade mark that protect and promotes symbolic information. Others include trade secret that protect and promotes commercially valuable confidential information and utility model that protect and promote s novel innovations which may not embody an inventive step.⁷⁰ All forms of products and services protected by intellectual property have been subjected to infringement, piracy or counterfeiting.

Kenya's IP system promises to protect all stakeholders in the political economy. Innovators and traders are protected by rewarding them for investing skill, judgment, time, money, and effort or labour in creating value for society. Consumers are protected through assurance that the products in the market are genuine. The pirate, imitator, or counterfeiter may be sued or prosecuted for deceit or for infracting standards. The government's exchequer is protected through guaranteed tax revenue from traders and consumers of legitimate products.⁷¹

8.6 Kenya's institutional profile in IP and innovation

In Kenya, intellectual property falls within the competence of four main institutions: Kenya Industrial Property Institute (KIPI), the Kenya Copyright Board and Kenya Plant Health Inspectorate (KEPHIS). First, the Kenya Industrial Property Institute (KIPI) is responsible for registering and

⁶⁹ Ben Sihanya (2007) "Intellectual property for innovation and industrialization in Kenya," chapter in Proceedings of the 2006 JKUAT Scientific Technological and Industrialisation Conference: Harnessing Scientific and Technological Synergies for Innovation and Rapid Industrialisation, Jomo Kenyatta University of Agriculture and Technology (JKUAT), Nairobi. A thoroughly reviewed version is published as Ben Sihanya (2008) "Intellectual Property for Innovation and Industrialisation in Kenya" *Convergence Journal*, Vol 4. No. 2, October 2008 pp. 185-213 (The Journal of the Section on Intellectual property, Communications, and Technology of the International Bar Association, London); Ben Sihanya "Intellectual property and mentoring for innovation and industrialization" *Law Society of Kenya (LSK) Journal*, forthcoming, June 2009.

⁷⁰ Ibid.

⁷¹ Ben Sihanya, Intellectual Property and Innovation in Kenya and Africa ... op. cit.

administrating industrial property.⁷² It was initially established by the Kenya Industrial Property Office (KIPO) under the Industrial Property Act (IPA), 1989 to grant patents and utility model certificates, as well as to register trade marks and technology transfer transactions.⁷³ KIPI works closely with the World Intellectual Property Organisation (WIPO), and the Harare based African Regional Intellectual Property Organisation (ARIPO), among others, in the administration of industrial property.⁷⁴

Second copyright is administered in Kenya by the Kenya Copyright Board. The Kenya Copyright Board is established as a statutory body under section 6 of the Copyright Act No. 12 of 2001. The Board is mandated to administer and enforce copyright and related rights in Kenya. It is composed of 16 members drawn from the public, private and voluntary sectors. This includes representatives from the software industry, producers of sound recordings, publishers, film distributors, performers, broadcasting stations and audio visual industry. The Board has four members who belong to the category of experts on copyright and related rights, and five representatives from various Government agencies or offices. The Board is mandated to register copyright works, and to license collective management organizations in Kenya.

Third, KEPHIS was established by the Kenya Plant Health Inspectorate Service Order, 1996 under the State Corporations Act (Cap 446). One of its responsibilities as provided for by the Act is to administer Plant Breeders Rights in Kenya and be in the liaison office for the International Union for the Protection of New Varieties of Plants (UPOV), and be the custodian of the Plant Breeders rights register.⁷⁸ Plant breeders' rights are private

⁷² Section 5 of the Industrial Property Act, 2001.

⁷³ See section 3 of the Industrial Property Act, 1989.

⁷⁴ Ben Sihanya (2007) "Patent law and practice in Kenya," in *International Review of Intellectual Property and Competition Law*, Vol 6/2007, Max Planck Institute for Intellectual Property, Competition and Tax Law, Munich.

⁷⁵ Ben Sihanya (2003) Constructing Copyright and Creativity in Kenya: Cultural Politics and the Political Economy of Transnational Intellectual Property, Doctoral Dissertation, Stanford Law School, op. cit.

Permanent Secretary (PS) in the Ministry of Finance or his representative, PS in the Ministry responsible for industrial property or his representative, PS in the Ministry responsible to Industrial Development or his representative, the secretary to the National Council for Science & Technology and the Attorney General or his representative.

⁷⁷ Marisella Ouma (2008) Enforcement of Copyright in the Music Industry: a Critical Analysis of the Legal and Infrastructural Framework of Enforcement in Sub Saharan Africa, Doctoral Dissertation, Queen Mary University of London.

See Kenya Plant Health Inspectorate Service (KEPHIS) website "Mandate of KEPHIS" at http://www.kephis.org/content/view/13/27/ (last accessed 2/3/09).

protection rights, which protect the intellectual property of a plant breeder. They consequently aim at promoting plant breeding as well as agricultural and horticultural progress.⁷⁹

8.7 IP doctrines relevant to counterfeiting

The IP doctrines which are most relevant to combating counterfeit trade include: patent, trade secrets, unfair competition, trade mark and copyright.

8.7.1 Patent⁸⁰

Patent law grants exclusive rights (not necessarily a monopoly) for a limited period of time in respect of an invention in return for disclosure of the details regarding the invention.⁸¹ A patent is a certificate granted to an inventor; it is also the right of exclusion. Patents may be granted for products or processes or both

Patents are awarded on the basis that an inventor has achieved three to five main standards, namely:

- 1. The invention is novel or new.82
- 2. The invention constitutes an inventive step. In America this requirement is known as "non-obviousness." This means that the invention should not be obvious to a Person Having Ordinary Skill In The Art (PHOSITA). An invention need not be complex for it to constitute an inventive step; it may be simple but not obvious.⁸³
- 3. (The invention must be industrially applicable (or useful). This is the doctrine of utility; unless the prototype or model or a pen can be (mass manufactured), it would have no or limited utility except perhaps as a museum piece or an object of intellectual curiosity.⁸⁴
- 4. It must be reproducible. This means that one should be able to reproduce the product or process so that many can use it. This requirement is related to the one on usefulness.
- 5. It is not excluded by statute. Certain kinds of invention may be

⁷⁹ Centre for the promotion of imports from developing countries "Intellectual property rights: Plant breeders" at http://www.cbi.eu/download/mid_preview/1766.pdf (last accessed 2/3/09).

The issues in this subpart are dealt with more comprehensively in Ben Sihanya, "Patent law and practice in Kenya," *op. cit.*.

⁸¹ Ben Sihanya, "Patent law and practice in Kenya," op. cit.

⁸² Sections 22 and 23 of IPA, 2001.

⁸³ Section 24 of IPA, 2001.

⁸⁴ Section 25 of the IPA, 2001.

excluded by Statute for reasons such as national security; for instance ballistics.

Patent deals with high-tech inventions rather than lower level innovations or discoveries. An invention embodies scientific intervention or a qualitative leap in technology. It involves substantial modification or improvement.⁸⁵ Counterfeiters imitate, produce and sell patented goods, technologies, and related services or products without the consent or license of the patent owner.⁸⁶

A patent can be owned by natural and/or corporate persons. It can also be owned by one individual or jointly by more than one individual.⁸⁷ David Bainbridge has argued; in his book, *Intellectual Property*, that joint ownership of a patent is equivalent to ownership as tenants in common; that is the co-owners are each entitled to an undivided share in the patent in the same way in which each tenant in common is entitled to an undivided share (equal or unequal) in the land. Thus, if one of the owners dies, her share passes under her will or by intestacy and does not automatically pass to the remaining owners.⁸⁸

A national or an alien may obtain a patent in Kenya.⁸⁹ However, an alien wishing to obtain a patent is invariably required to go through a patent agent.⁹⁰ Applicants usually use the services of a patent agent to secure patents because of the complexity and technicalitities associated with patent applications as well as the importance of correctly defining the scope of the patent and the extent of the claims.⁹¹

⁸⁵ See *Diamond, Commissioner of Patents and TradeMark* v *Chakrabarty*, 447 US 303 (1980) (Supreme Court of the US).

Ben Sihanya, "Intellectual property confronts counterfeiting in Africa..." *op. cit;* Marisella Ouma, "Anti-counterfeiting strategies in Kenya," presentation at the Innovative Lawyering Anti-Counterfeiting Seminar on 20/09/06, Nairobi (available on file at Innovative Lawyering and Sihanya Mentoring).

⁸⁷ Examples include, first the intended joint patent ownership rights between Oxford and Nairobi Universities on an alleged HIV/AIDS vaccine. Second is the patent on the Harvard Mouse granted to Prof Philip Leder and Prof Timothy Stewart. The Harvard Mouse patent was assigned to Harvard University. (Cf. section 30 IPA 2001).

David Bainbridge (2007) *Intellectual Property*, Pitman Publishing, 5th ed at p 377 (5th ed), *op.cit*.

⁸⁹ Gatonye Gathura (2009) "Controversy row as Maasai gene patented: Pastoralists' ability to drink lots of milk is at the centre of a scientific dispute," *Daily Nation* (Nairobi) National News, Monday March 2, p.2.

⁹⁰ Section 34 (2) of the IPA 2001.

⁹¹ David Bainbridge, Intellectual Property, op. cit., at 327.

Governments and other organizations may also be holders of patents by commissioning the research, 92 by way of assignment, or by compulsorily acquiring patents.93

The inventor's employer can also own a patent for the inventor/employee's invention. 94 However, the invention must have been made within the scope of the employee's employment or in execution of a commission or an employment contract the express object of which is research or the exercise of inventive activity by the employee. This must be clearly stipulated in the employment contract.95

Kenya's Industrial Property Act also provides for a novel (but little used) means of recognizing the input of an employee through technovation certificates. 96 A technovation is defined as a solution to a specific problem in the field of technology, proposed by an employee (the technovator) of an enterprise in Kenya for use by that enterprise, and which relates to the activities of the enterprise but which, on the date of the proposal, has not been used or actively considered for use by that enterprise. 97 A technovation certificate may be issued by the employer to the employee, 98 who is thereafter obliged to assist the enterprise, to the best of her ability, in any testing, development or use of the technovation. 99 The technovator is also obliged not to disclose the technovation to a third party. 100 In return, the technovator is entitled to remuneration where the enterprise uses the technovation or communicates it to a third person. 101 The amount and mode of payment is

For example, see section 12 (and the fourth schedule) of Kenya's Science & Technology 92 Act, 1977, Cap 250 which establishes the Kenya Medical Research Institute (KEMRI) and five other public research institutes. Where the researchers come up with inventions within the scope and in the course of their employment, the resulting patents would belong to the institutes and hence the Government. This is the effect of the controversial sec. 17 of the Act.

⁹³ Section 58 of the IPA, 2001.

⁹⁴ Cf. section 32 IPA 2001.

⁹⁵ For the UK, position on this question, see s. 39 of the UK Patents Act 1977, and Electrolux Ltd. v. Hudson (1977) FSR 12. See also Bainbridge's extensive discussion in Intellectual Property op. cit, at pp. 378-381. Cf. the American debates in Corynne McSherry (2001) Who Owns Academic Work? Battling for Control of Intellectual Property, Harvard University Press, Cambridge, Massachusettes.

⁹⁶ This is covered by Part XIV of the Act of 2001.

⁹⁷ See s. 94 (a) of IPA, 2001.

⁹⁸ s. 97 (1) of IPA, 2001.

⁹⁹ s. 98 (3) of IPA, 2001.

¹⁰⁰ s. 98 (5) of IPA, 2001.

s. 99 of IPA 2001.

¹⁰¹

fixed either by mutual agreement or by a collective bargaining agreement (CBA). 102

Assignees of innovations may also own patents. Assignment may be effected at various levels. First, in the process of research and development (R&D) the researcher may assign the invention and/or the ensuing patent. Second, this may happen in the process of applying for a patent to the patent office (KIPI). Third, a patentee may assign the patent after obtaining it. Assignment is governed by the relevant patent law, principles of the law of contract; law of succession; various common law doctrines, and the law of civil obligations in Francophone African states like Senegal. To be legally valid, all contracts of assignment must be in writing, and also duly executed by the parties to it. 103

In addition to the Industrial Property Act, four international patent law regimes regimes are applicable in Kenya. These include the World Intellectual Property Organisation's (WIPO's) Paris Convention of 1883 on the protection of Industrial Property; the World Trade Organisation's (WTO's) Agreement on the Trade Related aspects of Intellectual Property, (TRIPs) including Trade in Counterfeit Goods of 1994; and African Intellectual Property Organisation's (ARIPO) Harare Protocol on Patents and Industrial Designs of 1982.¹⁰⁴

Before TRIPs patents were usually granted for a fixed term subject to renewal. In Kenya the grant is now for twenty years. ¹⁰⁵ In Kenya the inventor must apply to the Kenya Industrial Property Institute (KIPI), and disclose the required information, subject to the relevant patent and trade secret law and practice.

8.7.2 Trade secret laws

Trade secrets are protected where they consist of confidential information with commercial value, (for example the secret Coca Cola formula has proved to be of immense value) and there is an obligation to keep the information secret. Secrets without commercial value may be covered under the laws on defamation, privacy and other doctrines. David Beckham's (SMSs) to

¹⁰² Technovations thus constitute an important point of convergence between the employee and the employer; between labour and intellectual property law.

¹⁰³ s. 41 IPA 1989 or s. 62 IPA 2001 (Kenya).

¹⁰⁴ Ben Sihanya, "Patent law and practice in Kenya," *op. cit;* Ben Sihanya, *Intellectual Property and Innovation in Kenya and in Africa, op. cit.*

¹⁰⁵ Section 60 IPA.

his girlfriends are secret¹⁰⁶ and have immense commercial value. So have Princess Diana's love letters.¹⁰⁷

The law recognises that products of the mind may not be effectively protected by patent, copyright, trade mark or any other traditional IP. Trade secrets are protected in order to guard technological know-how that may not be effectively protected under the other IP regimes.¹⁰⁸

Trade secrets have arisen from the law of unfair competition and tort. Breach of confidence is regarded as unfair competition and a tort. It is also associated with the other traditional IPs. For example, aspects of an invention may also be protected as a trade secret whereby not all the know-how is disclosed to a patent office (like KIPI) or patent licensee. The secret may be an individual secret, state secret or corporate secret.

The law of trade secrets is not very reliable because of a number of limitations. These include the fact that it may be very difficult to establish the right. The enforcement and protection of trade secrets is equally problematic. For instance, policy questions arise since the concept of confidentiality may be considered unacceptable for the exchange of information and technological progress which underscore the very basis of IP protection and promotion. ¹⁰⁹

8.7.3 Unfair competition

The Brussels Diplomatic Conference for the Revision of the Paris Convention in 1900 recognised protection against unfair trade practices (also known as unfair competition) as forming part of industrial property protection. This resulted in Art 10*bis* of Paris Convention. It is now felt that unfair trade practices may harm innovators, legitimate traders, consumers and

Mark Ward, "Experts talk up text security" available at http://news.bbc.co.uk/1/hi/technology/3610865.stm (last accessed on 20th February 2006).

[&]quot;Hewitt to sell Diana love letters" available at http://www.cnn.com/2003/US/01/09/diana.hewitt/index.html (last accessed on 20th February 2006).

¹⁰⁸ James J. Fialka (1997) *War by Other Means: Economic Espionage in America*, WW Norton & Company, New York.

¹⁰⁹ See the delicate balancing act in Art. 27(1) and (2) of Universal Declaration of Human Rights (UDHR), and Art. 1(8) (8) of the US Constitution, regarding the interests of the innovator in the protection of the Intellectual Property, vis-a-viz the interests of consumers in accessing the Innovation.

See generally Daniel Gervais (2003) The TRIPS Agreement: Drafting History and Analysis Sweet and Maxwell, London (2nd ed); United Nations Conference on Trade and Development (UNCTAD)-International Center for Trade and Sustainable Development (ICTSD) (2005) Resource Book on TRIPS and Development, Cambridge University Press, New York.

the Government who are regarded as some of the main beneficiaries of an efficient IP system. Competitive markets, on the other hand, may promote innovation and equity. This is true provided that such competition is fair.

In East African Breweries Limited (EABL) v. Castle Brewing (Kenya) Ltd (CBKL) ¹¹¹ it was evident that protection against unfair competition effectively supplements the protection of industrial property rights, such as patents and registered trade marks, and that there are no cases where an invention or a sign is not protected by such a right. ¹¹² The plaintiff's specific claim related to a brewing process which did not require malting and the resulting unmalted barley beer. This would make beer cheaper to process and sell because unmalted beer attracts less duty in Kenya. A major argument was that it would be unfair competition to allow CBKL to exploit EABL's trade secrets.

The unauthorized use of a trade mark that has not been registered is considered illegal on the basis of general principles that belong to the field of protection against unfair competition. Such unauthorised use is usually called "passing off." This principle was applied to secure protection for an unregistered trade mark in the case of *Saudi Arabian Corporation* v. *Saudi Kenya Enterprises Ltd.*¹¹³ Similarly, if an invention is not disclosed to the public and is considered to constitute a trade secret the unauthorised performance by third parties of certain acts in relation to that trade secret may be illegal.

8.7.4 Trade mark and brand development¹¹⁴

Trade mark (TM) largely deals with the second level of innovation, which consists of going to market. Trade mark more directly seeks to answer the question, "what is in a name, a symbol, a sign, a mark, logo etc..." TM is an IP right granted in order to distinguish the goods and services of one TM proprietor from those of her competitors.¹¹⁵

The cognate expression is service marks. For example, Windows is a service mark for Microsoft; University of Nairobi and Jomo Kenyatta University of Science and Technology are the service marks of the respective universities.

¹¹¹ East African Breweries Limited v. Castle Brewing Kenya Ltd High Court Civil Case (HCCC) No. 848 of 1998 (Nairobi).

¹¹² *Ibid*.

¹¹³ Civil Appeal No. 47 of 1984.

See generally, David Bainbridge, *Intellectual Property, op. cit*: Ben Sihanya, "Trade mark law," Teaching Materials in Intellectual Property, LLB IV, 1997-2008, University of Nairobi Law School.(on file at Innovative Lawyering and Sihanya Mentoring).

¹¹⁵ Ben Sihanya "Intellectual property for innovation and industrialization in Kenya," op. cit.

Safaricom is another example of a service mark of the most profitable company in East Africa.¹¹⁶ Trade marks serve four main purposes:

- 1. The main purpose is to identify, *indicate the source* or origin of the goods, services or technologies;
- 2. The second is to *protect the goodwill* or investment by trade mark proprietors, traders, or corporations;
- 3. The third is to *limit or eliminate confusion* of consumers;
- 4. And fourth, trade marks *confirm consumer expectations*.

Trade marks are registrable under two broad categories.

- 1. Those that are *distinctive*. The mark should not be descriptive of the product that bears it. A problematic illustration is the name "*quencher*" together with a half-cut orange as a trade mark for squash.¹¹⁷
- 2. Those which are *capable of distinguishing* the product or the mark from other products or marks. Examples are the Mercedes Benz or Toyota device marks or 504 for Peugeot....¹¹⁸

A trade mark does not have to be a name. *Olfactory* marks or scents, for example, Chanel No. 5, Poeme, JLO or Jadore; symbols, colours such as the colour orange for telephone companies in Kenya and Europe and *shapes* like the Coca Cola bottle are trademarked.¹¹⁹

A trade mark must be registered for it to be protected. Registration is critical. However, in Kenya even if a trade mark is not registered, passing off law may protect it.¹²⁰ Kenya's Trade mark Act protects and promotes well-known, famous or notorious marks. The Paris Convention also obliges member states to refuse registration or use of such marks.¹²¹ One of the reasons is that their use or registration would lead to unfair competition or unjust enrichment. It would also cause confusion. In effect this provision

¹¹⁶ See Michael Omondi, "Safaricom sets record for blue chips," *Business Daily* 27/05/2008, Nairobi available online at http://allafrica.com/stories/200805271102.html (last accessed on 22/11/2008).

¹¹⁷ Section 12 of the Trade Mark Act.; But *Quencher* may be protected on the basis that it has acquired a *secondary meaning*: it is recognized as a specific brand of juice from a specific company or source (ExcelChemicals Limited).

¹¹⁸ Section 13 of the Trade Mark Act.

¹¹⁹ Ben Sihanya, Intellectual Property and Innovation in Kenya and Africa... op. cit.

¹²⁰ S. 5 of the Trade Mark Act Cap 506 (Kenya).

¹²¹ In the same vein, sec. 15A of Kenya's Trade Mark Act and Art. 6bis of the Paris Convention protect well-known marks. These need not be registered to be protected.

protects a trade mark on the basis of its good will or reputation as opposed to its registration.¹²²

Once registered, or even if it is not registered, a trade mark must be used in a trade mark sense for it to be protected. Trade marks can exist infinitely (or, better, indeterminately, but one has to renew registration after a certain period of time; at least 7 years under TRIPs and every 10 years in Kenya 123

Trade marks constitute the interface between invention or product innovation and marketing. Trade mark law has developed from passing off and unfair competition law which seek to ensure that no business (person) passes off her or its goods, services or technologies as another's.

8.8 Trade mark counterfeiting

A counterfeit assimilates all or nearly all the features of a legitimate product, marks and labels included. This takes it into the realm of trade mark and service mark infringement. Counterfeiting is therefore the highest and most blatant form of trade mark infringement and passing off. While there can be innocent cases of trade mark infringement and passing off, counterfeiting connotes wilful infringement of existing IP. Even where it is available, innocence is not an absolute defence but may be relevant in awarding and mitigating damages. IP (in this case trade mark law) offers innovators remedies when they suffer from trade in counterfeit goods. The remedies include injunction, damages, account of profits expunction (from the register), and search and seizure. 124

8.8.2 Copyright and related laws¹²⁵

Copyright protects *original expressions* which are embodied in a tangible, material or fixed form or medium. Copyright does not protect ideas, or information, data or facts *per se* but rather the expression of the ideas.

A case in point is McDonald's in South Africa. The trade mark had not been used in South Africa (partly because McDonald's food companies were not operating in South Africa) but the trade mark was well known in the country perhaps due to publicity and advertising. It had become notorious. See Paul Goldstein (2001) *International Intellectual Property Law: Cases and Materials*, Foundation Press, New York; S. Russel, "Intellectual Property law up to scratch" *Business Day* (Johannesburg) September 18, 1996, p. 11.

¹²³ Section 23 of Kenya's Trade Marks Act.

¹²⁴ Trade Mark Act, Cap 506. Some of the remedies are available in case of patent, trade secret or copyright infringement too.

¹²⁵ This section is informed by my ongoing research: Ben Sihanya (2003) Constructing Copyright and Creativity in Kenya: Cultural Politics and the Political Economy of

Copyright subsists automatically upon the creation of the work. ¹²⁶ A creator must expend skill and judgment. ¹²⁷ For works to be copyrightable, the work must be original in the sense that it embodies skill and judgment; and it must be expressed in a material or tangible medium. In Kenya, copyright subsists for the life of the author plus 50 years. ¹²⁸

8.8.1.1 Subject matter of copyright

Copyright consists of primary or original works, and secondary (or derivative) works. Original works comprise literary, artistic and musical works. ¹²⁹ It is instructive to note that a drama in the form of a skit falls under a right in performances (under s. 30), whereas published play is a literary work under sec. 2's definitives of literary work. The secondary works include audiovisual works and photographs, sound recordings and broadcasts. ¹³⁰ There are also arguments that scientific and technological materials such as DNA may be copyrightable. ¹³¹

The primary works are important in at least two senses. First, they are regarded as the acme of creative activity. Indeed, they are called original as they embody skill and judgment and exhibit original creativity. Second, in Kenya and Africa generally, they are the most significant subject matter of copyright law economically, technologically, culturally, socially and politically. In traditional European nomenclature, only literary, artistic and musical works belong to original or primary works; the rest that have been cited in the text accompanying this footnote belong to neighbouring, related, allied, derivatures or adapted works. These distinctions are no longer that rigid. There are movies, which are performed from original scripts, and not derived from novels or published plays. Moreover, there are exclusive rights and forms of infringement or piracy that are similar, for instance, reproduction and distribution (by gift, sale or offering for sale

Transnational Intellectual Property, Doctoral Dissertation, Stanford Law School, *op. cit.* (forthcoming as a book).

¹²⁶ Article 5 of the Berne Convention on the Literary and Artistic Works (1886).

¹²⁷ In *Feist Publications* v. *Rural* (1991), the US Supreme Court unanimously ruled that the "sweat of the brow" and hence these were not copyrightable. No skill, judgement or creativity had been utilized.

¹²⁸ Section 23, Copyright Act Laws of Kenya.

¹²⁹ Section 22, of the Copyright Act.

¹³⁰ Ben Sihanya (2005) "Copyright law, teaching and research in Kenya," op. cit.

¹³¹ Ben Sihanya, Constructing Copyright and Cultural Creativity..., op. cit.

¹³² Ben Sihanya, Constructing Copyright and Cultural Creativity..., op. cit.

8.9 IP confronts counterfeit trade in Africa

Anumber of lawyers, regulators, consumer protectors and scholars now regard counterfeiting not merely as an aberration, but a serious institutionalised challenge to legitimate business, consumer protection, IP and the transfer of technology (ToT). Anne W. Hung-yuk's work, based on Hong Kong and China, is an authoritative statement on the counterfeiting problem. It largely reflects the problem as it manifests itself in Africa. 133

Hung-yuk's work confronts the received wisdom on counterfeit trade; the problem has been conceptualised largely in the context of trade marks and trade names (especially of high value branded goods). Second, she argues that consumer interests are best served through concerted anti-counterfeiting and IP protection campaigns. Generally, counterfeiting has been regarded by some as beneficial to consumers, or that it is none of a consumer lawyer's or activist's business. In the same vein, many have treated IP as the concern of Northern TNCs and IP lawyers or corporate attorneys keen on massaging Northern capitalism.¹³⁴

IP is serious business and affects consumers, innovators, traders, corporations, and states in fundamental ways. To be sure, it is significant that the influence of WIPO, the International Monetary Fund (IMF), the World Bank, ¹³⁵ the WTO, and bilateral trade and development partners is already manifested in IP legislation. Some of the concerns here include IP as a tradable commodity and the tendency to use IP regulatory instruments as weapons in transnational transactions. Kenya and Africa must thus take IP seriously.

Broadly, a triple typology characterises African IP protection, promotion and enforcement regimes: some states have no laws, or weak protection generally (for instance, Eritrea). States in this category also exhibit short duration of product or process patents and have historically had no legislation

¹³³ See A. W. Hung-yuk (1999) "Intellectual property and the consumer", in S. S. Rachagan (ed.) *Consumer Protection in the WTO Era*, International Association of Consumer Law (IACL), University de Catholique de Louvain, Louvain-la-Neuve, Belgium, pp. 223–232.

¹³⁴ During my graduate studies at Warwick Law School a neo-Marxist teacher wondered aloud to me why I (a "third" world student) was keen on studying IP and technology transfer rather than human rights (as popularly (conceived) and related subjects. Was I keen on oiling the wheels of capitalism? I keep overhearing such sentiments in the (anti-) IP and consumer movements.

¹³⁵ The Bank's imprimatur is, for instance, embodied in Edwin Mansfield (1989) *Protection of Intellectual Property Rights in Developing Countries*, Unpublished study for the World Bank, February 1989; W. E. Siebeck, (ed.) (1991) *Strengthening Protection of Intellectual Property Rights in Developing Countries: A Survey of the Literature* World Bank Discussion Papers, No. 1, The World Bank, Washington DC.

on matters pertaining to cybersociety, such as IP protection and promotion for computer software. States in the second typology have regulations whose effect compromises the efficacy of IP grants or protection, for instance, by allowing compulsory licensing and parallel importing on specious grounds. States in the third category deliberately suffer or encourage counterfeiting under the pretext of correcting perceived historical inequities such as slavery, colonialism, and an inequitable transnational techno-economic order. Some industrialised countries and TNCs are aware of these nuances and have been quite aggressive in protecting and promoting their IP and fighting counterfeits.¹³⁶

A number of the transnational aspects of counterfeit trade fall within the TRIPs Code's "border measures." These measures focus on goods, which is reflected in the title of the TRIPs Code, and may not avail consumers, innovators or traders who lose out because of fake services or technology. Moreover, the measures seem to deal with traditional IP infractions. Remarkably, border controls in Kenya are generally weak, and more so in relation to high technology surveillance. Such controls also presume the efficacy of transborder dispute settlement mechanisms, which constitute another weak link in Africa.

For our purposes here we will work with a three-pronged typology of IP; traditional (patent, copyright and trade mark); hybrid (such as trade secret, which cut across most categories of IP), and *sui generis* (such as mask works). We focus on the former and latter typologies and proceed to contextualise the problem in Africa mainly in relation to patent, copyright, and trade mark and in relation to goods, technologies and services.

8.9.1 Patent law confronts counterfeiting

Even though patent infringement (and counterfeiting of patended and branded products) is a criminal offence under many Kenyan patent laws, there are fundamental weaknesses in detecting, prosecuting and punishing the crime. Part of the problem lies in the attitude of many law enforcement officers who place a higher premium on offences pertaining to real and tangible personal property. Many do not see the reason for punishing infringers or

¹³⁶ See *Microsoft Corporation* v. *Microskills Kenya Ltd* HCCC No. 323 of 1999; Microsoft (1998) "Counterfeit OEM Windows 98 threatens legitimate OEMs, customers: Microsoft working to thwart counterfeiters, help system builders avoid getting duped" at windows. com./presspass/press/1998/Nov98/OEMWin98PR.htm.(last accessed 23.2.2009).

¹³⁷ See Section 4, Arts 51–60.

¹³⁸ Significantly, the subtitle of the TRIPs Agreement, "including trade in counterfeit goods," is not clearly captured in the discourse on TRIPs and is sometimes omitted in some reproductions or evaluation of the text.

counterfeiters because they "have not permanently deprived the IP owner of the property." Moreover, patent law and procedure are quite complex and not many lawyers, magistrates or judges have the capacity to handle the problems. In any event, there are no (sub) regional judicial tribunals to deal with cross-jurisdictional patent counterfeiting. ¹³⁹

8.9.2 Copyright law confronts counterfeiting

In cybersociety, one of the greatest challenges to transnational and African IP law is the protection of computer software from counterfeit trade. Some countries, including the UK, the US and Kenya, hold that copyright law is the proper or primary IP regime to govern computer programs. Other countries, such as Japan, Australia, US and Brazil, prefer to regulate software through patents.

In terms of procedure, copyright subsists automatically in Kenya; there is no grant or registration procedure. Unlike UCC, Berne excludes procedures and does not compel inclusion of copyright notation (©) or registration. This approach is reinforced by the TRIPs Agreement, which adopts the substantive provisions (Arts. 1–21) of Berne, but expressly excludes moral rights. Henya, like most African states, have historically belonged to the Berne rather than the Universal Copyright Convention (UCC) regime The benefit of no procedural requirement is not well known to most innovators. Nor does it of itself provide protection: in many instances innovators must confront counterfeiters through costly and time-consuming litigation. These problems are exacerbated by a weak institutional framework. For instance the Kenya Copyright Board still lacks adequate qualified personnel, institutional autonomy and finances to adequately enforce copyright in Kenya. Henya Lacks and the company of the control of the cont

Moreover, the Kenyan Government seems to focus more attention on industrial property. Thus in comparison to copyright administration the Kenya Industrial Property Institute (KIPI), enjoys relative autonomy, has more resources, and greater visibility.

In Nigeria, the Nigerian Copyright Commission (NCC) enjoys a high profile in the state system. It has copyright inspectors who have warrants to investigate copyright infringement or counterfeiting whenever it occurs.¹⁴²

¹³⁹ See B. Sihanya, Intellectual Property in Africa, supra note 1.

¹⁴⁰ See Art. 12 of the TRIPs Agreement, 1994, excluding Art. 6 bis of the Berne Convention.

¹⁴¹ Marisella Ouma (2008) Enforcement of Copyright in the Music Industry: a Critical Analysis of the Legal and Infrastructural Framework of Enforcement in Sub Saharan Africa, PhD Dissertation submitted to Queen Mary University of London, op cit.

¹⁴² See sec. 32A of the Copyright Act, 1988, as amended up to 1992; J. O. Asein, (1994) *The Nigerian Copyright Act with Introduction and Notes*, Nigeria Copyright Commission,

8.9.3 Trade mark law confronts counterfeiting

Counterfeiting closely relates to the common law tort of passing off. The law of passing off governs situations where a trader represents own products as those of another trader. Both counterfeiters and traders who pass off are joyriders of the goodwill and reputation earned and enjoyed by the legitimate IP owner, and therefore pose unfair competition. Lord Herschell, in *Reddaway* v. *Banham*, ¹⁴³ was of the view that

"[t]he name of a person, or words forming part of the common stock of language, may become so far associated with the goods of a particular maker that it is capable of proof that the use of them by themselves, without explanation or qualification by another manufacturer, would deceive a purchaser into the belief that he was getting the goods of A, when he was really getting the goods of B."

A counterfeit assimilates all or nearly all the features of a legitimate product, marks and labels included. This takes it into the realm of trade mark and service mark infringement. Counterfeiting is therefore the highest and most blatant form of trade mark infringement and passing off. While there can be innocent cases of trade mark infringement and passing off, counterfeiting connotes willful infringement of existing IP. Even where it is available, innocence is not an absolute defence but may be relevant in awarding and mitigating damages. The intentional character of counterfeiting, that it involves fraud on consumers and legitimate traders and that fakes bear forged marks, labels and packaging, transports counterfeiting into the criminal law arena.

Some illustrations of the problem are apposite. In the Ugandan case of *A. Jonkoping Vulcan I.* v. *EA Match Co.*¹⁴⁴ the defendant escaped liability after marketing matches under the trade name "The Steamship" despite the plaintiff's use of "The Ship" to market its matches. A related case is the Kenyan case of *Brooke Bond (Kenya) Ltd.* v. *Chai Ltd.*, ¹⁴⁵ where the defendant had represented their packaged tea in green packaging similar to that of the plaintiff. The defendant had also used the words "green label tea" just as the plaintiff had. The suit failed to meet the standard for trade mark infringement. The court considered the words used to be descriptive of the

Ibadan.

^[1896] AC 199 (HL). Cited in W. R. Cornish (ed.)(1996) Cases and Materials on Intellectual Property; Sweet & Maxwell, London, p. 422. See also Reckitt & Coleman Products v. Borden (1990) 1 All ER 873, Bollinger v. Costa Brava Wine Co. [1960] Ch. 262; Associated Newspapers (holdings) plc v. Insert Media Ltd. [1991] 1 WLR 571; W. V. H. Rodgers (1994) Winfield and Jolowicz on Tort; Sweet & Maxwell, London p. 564; R. Kuloba (1987) Principles of Injunctions, Oxford University Press, Nairobi, op. cit, pp. 124–152, reviews the appropriate English and African case law.

^{144 [1964]} EA 64.

^{145 [1971]} EA 10–6. Note: Chai is Kiswahili for tea.

type of tea. The defendant was, however, held liable for passing off because the general (trade) dress of the goods was similar to the plaintiff's.

Taking the foregoing cases into consideration, an innovator, manufacturer or trader has to play it safe and sue under various heads in order to secure compensation or any other relief for IP infringement. Even so, most of the remedies awarded in civil cases are inadequate and ineffective in preventing or compensating huge loses suffered by innovators. For instance, the test applied in awarding interlocutory injunctions often denies the complainant protection before the case is determined.¹⁴⁶

An interlocutory injunction, which is granted before the case has been fully decided, is given after weighing the pros and cons of granting it. Unless the applicant shows a prima facie likelihood of success, most courts will not grant the interlocutory injunction. This, coupled with the fact that damages and account of profits are considered adequate compensation, serves to deny complainants immediate justice. Stopping the manufacturer from manufacturing a product, even though a counterfeit or pirate, is often regarded as an extreme measure to take. This is partly because such an injunction may as well dispose of the entire matter. The case of British *America Tobacco* v. *Cut Tobacco* ¹⁴⁷ shows the attitude of some African judges that damages and an account of profits may be adequate compensation. Judges Moijo ole Keiwa and Richard Kuloba considered these issues and granted an interlocutory injunction partly because the respondent had hinted at the pecuniary loss they would suffer. Consequently, monetary damages could be available!¹⁴⁸ On Appeal, the Court of Appeal stayed the injunction pending appeal unconditionally.

In piracy cases denial of an injunction means the complainant suffers continued counterfeiting or piracy until the case is finally determined. The fact that Kenya like most African judicial systems, lacks expeditious processing of cases and is experiencing a back log of pending cases leads to counterfeiting victims suffering double jeopardy. And where *sui generis* anti-

¹⁴⁶ See Richard Kuloba (1987) *Principles of Injunctions*, OUP, Nairobi. Mr. (now retired High Court Judge) Kuloba addresses injunctions in the context of IP infringement at pp. 124–52.

¹⁴⁷ High Court Civil Case No. 354 of 1999 (Nairobi) (unreported). For a detailed discussion of this important manifestation of the "'tobacco wars" in Africa, see B. Sihanya. *Intellectual Property in Africa, supra* note 1.

¹⁴⁸ See also *East Africa Breweries* v. *Castle Brewery Kenya Ltd*. High Court Civil Case No. 848 of 1998. In the controlling East African authority on injunctions, the Ugandan case of *Aniello Giella* v. *Cassman Brown* [1973] EA 358, some of the conditions for granting an (interlocutory) injunction include: existence of a *prima facie* case; inadequacy of damages; and balance of convenience.

counterfeiting law does not exist, or is not enforced, innovators, traders and consumers have to resort to equally precarious strategies such as bringing or lobbying for actions for breach of standards, for instance weights and measures or infringement of patent, copyright or trade mark.

8.10 Anti-counterfeiting policies and regimes

We discuss international anti-counterfeiting strategies and then focus on Kenya and Africa.

8.10.1 International anti-counterfeiting regimes

Increasing awareness of the nature and adverse consequences of counterfeiting and trade in counterfeit products has already invoked several policy and institutional responses. A number of these measures are already evident, especially at the international level, through the work of the World Trade Organisation (WTO), the World Intellectual Property Organisation (WIPO), the Organisation for Economic Co-operation and Development (OECD), and related regimes.

One of the oldest regimes on anti-counterfeiting and anti-piracy is embodied in World Intellectual Property Organsiation (WIPO). WIPO has helped developing countries, including Kenya, with drafting legislation. WIPO also conducts its activities through regional and national workshops. The former are meant for a much wider audience. Both have raised awareness of IP in Kenya and other African countries. Nevertheless, WIPO, which for long dominated transnational IP and anti-counterfeiting policy, has been criticised for being weak and taking a narrow and traditional IP (infringement) view of counterfeit trade. Three main critiques have been advanced:

- 1. WIPO, like the UN system generally, has had limited resources. It has had to work on a limited budget and rely on limited technical personnel knowledgeable or competent and interested in addressing counterfeit trade. 149
- 2. On the second issue of a narrow perspective, it is debatable whether

In the WIPO IP Teaching Regional Workshop in Abuja, Nigeria, 9–10 September 1999, many IP teachers from African law schools indicated that the absence of appropriate materials is adversely affecting efficient delivery and the diffusion of IP. These sentiments were also expressed and addressed at the WIPO/WTO Colloquium for teachers of intellectual property in 2007. The author attended and presented a paper on IP teaching in both fora. See Ben Sihanya (2007) "Copyright law, teaching and research in Kenya," *East Africa Law Journal*, Nairobi; Ben Sihanya, "Copyright law in Kenya," forthcoming in *International Review of Intellectual Property and Competition Law*, Max Planck Institute for Intellectual Property, Munich.

the traditional WIPO regime would assist where the dominant form of IP in the technology, goods or services being infringed or counterfeited has expired. Examples include; first where a copyright expires in a book and individual or company changes the name of the author or publisher; second where a work in which copyright has expired is performed and the performance is bootlegged or the materials embodied in a database. 150

3. WIPO has been criticised for lacking institutional mechanisms to effect enforcement of traditional IP, let alone counterfeiting and new forms of infringement or piracy such as those related to e-commerce.¹⁵¹

For these reasons, from the early 1980s on, the US, EC and Japan led an onslaught on WIPO. They opined that WIPO was too traditional; it treated IP "in gross" rather than in a dynamic context.

However, to its credit WIPO has implemented a lot of reforms, especially in the 1990s and 2000s. It has promulgated a number of treaties such as the WIPO Copyright Treaty (WCT) (20 December 1996), the WIPO Performances and Phonograms Treaty (WPPT) (20 December 1996) and the WIPO Trademark Law Treaty (TLT) (27 October 1994). Moreover, on the strength of a co-operation treaty, WIPO is now working with WTO on e-commerce and related issues. WIPO has also launched development agenda to assist developing countries like Kenya

Another WIPO initiative is the Global Congress on Combating Counterfeiting. The First Global Congress on Combating Counterfeiting was organized in 2005 by the World Customs Organisation and Interpol, with the support of the WIPO. The purpose of the Congress was to develop a collective understanding of the extent of the counterfeit problem, as well as to identify effective anti-counterfeiting measures and to generate ideas for further co-operation. The Congress provided an opportunity for leaders from the public and private sectors to analyze the social and economic impact

¹⁵⁰ Cf William R. Cornish (1996) *Intellectual Property*, Sweet & Maxwell, London;, Cornish and David Bainbridge, *Intellectual Property*, 1996, *op. cit*. Bainbridge (2007) *Intellectual Property*, *op.cit*.

¹⁵¹ See M. A. Leaffer (1991) "Protecting United States intellectual property abroad: Toward a new multilateralism," *op. cit.* cf. Ben Sihanya *Intellectual Property and Innovation in Kenya and Africa* (forthcoming 2009): "Copyright infringement, defences and remedies," chapter 8.

¹⁵² See Agreement between the World Intellectual Property Organisation zand the World Trade Organisation, Geneva, 22 December 1995. See also Council for TRIPs, "Work Programme on Electronic Commerce: Draft Report to the General Council," 8 July 1999 which documents WIPO/WTO joint activities on copyright and related rights, trade mark, new technologies and access to technology, and enforcement.

of counterfeiting and shape future enforcement strategies and actions. Subsequent Global Congresses on Combating Counterfeiting have been held in 2006, 2007 and 2008. 154

Back in the 1980s the US and other Northern states approached transnational IP reform from various perspectives: through unilateral measures, through bilateral trade and aid relations with developing countries, through multilateralism, and through an appropriate cocktail of the foregoing.¹⁵⁵

The US, which led the onslaught against WIPO, used this four-pronged strategy to address the problem of counterfeiting in the context of a weak IP regime transnationally, and especially in developing countries. For instance, it had in 1988 enacted section 301 under the Trade Act, 1974 through the Omnibus Trade and Competitiveness Act, 1988. As we have seen, this law obliges the US Trade Representative (USTR) to use unilateral policy and institutional mechanisms to penalise states and corporations which are perceived to compromise US trade and IP interests.

US designs had always been on a multilateral regime to augment unilateral and bilateral initiatives on the IP and anti-counterfeiting crusade. The General Agreement on Trade and Tariffs(GATT) was thus a good candidate. University of Indiana law professor Marshall A. Leaffer has chronicled the development of IP and anti-counterfeiting regulations within GATT. We quote Leaffer *in extenso*: 156

"Whether the GATT could play a role in the protection of [IP] among nations has been discussed since the late 1970s. But only in the Uruguay Round of the GATT, possibly the most comprehensive round in its history, has the idea gained momentum. The role of the GATT in the protection of [IP] surfaced for the first time at the end of the Tokyo Round in the 1970s. These discussions, which concerned the counterfeiting of trademarks, launched a serious effort to integrate [IP] into the GATT. These talks focused on the proposed code to discourage trade in counterfeit of trademarked goods, the draft of which was prepared by the United States but was never submitted to the GATT. Beginning with this draft code, the US scope has broadened to include all forms of [IP] within the GATT framework."

AKJ Associates, "Combating global counterfeiting," available at http://www.anti-counterfeitcongress.org/wco2004/website.asp (last accessed on 25/11/2008).

See generally WIPO, "Fourth Global Congress on Combating Counterfeiting opens in Dubai," available at http://www.wipo.int/pressroom/en/articles/2008/article_0002.html (last accessed on 25/11/2008).

¹⁵⁵ See B. Sihanya, *Intellectual Property in Kenya and Africa... op. cit;* M. A. Leaffer, Protecting United States intellectual property abroad: Toward a new multilateralism". (1991), *op. cit.* P. B. Stephan *et. al.* (1996) *op. cit.*

¹⁵⁶ M. A. Leaffer 1991, op. cit.

In 1986 the Declaration of the GATT Ministerial Conference at Punta del Este (Uruguay) launched the Uruguay Round of GATT negotiations. ¹⁵⁷ The US, Japan and EC states had emphasised the link between IP and transnational trade, arguing that non- or weak protection of IP constitutes a non-tariff barrier to trade (NTB). There was also concern that the GATT regime should be made mandatory with binding sanctions, IP having been appropriately integrated.

The GATT had largely acted as a private, rich states club. It had been established as an institution, a discussion forum and a set of norms on trade in 1947 alongside IMF and the World Bank It shot to prominence partly because of the non-ratification of the International Trade Organisation (ITO) (the Havana Charter). The UN Conference on Trade and Development (UNCTAD), established in 1964, acted as a poor states' cushion, until WTO came along and eroded this role. For instance, it initiated discussions on the Draft International Code of Conduct on the Transfer of Technology which ended in a stalemate in 1985. The WTO (especially TRIPs) regime pays lip service to technology transfer.

In addition, these developments consolidated a policy shift instituted earlier by IMF, the World Bank and Africa's bilateral development partners in the early and mid 1980s: trade would augment or replace aid in a context of extensive economic restructuring. IP would also have to be strengthened by all states receiving or expecting Bretton Woods support.¹⁶⁰

Thus by the time the WTO Agreement (including TRIPs) was signed in Marrakesh, Morocco, on April 15, 1994, the impact of the emerging technological and trade order was already being felt in Africa.¹⁶¹

¹⁵⁷ See Dr Andy Clark, *Legal Aspects of International Technology Transfer*, LLM
Teaching Materials, University of Warwick Law School (UK), 1994/1995; John Barton,
"Technology as a business asset," Teaching Materials, Stanford Law School, 2001/02. On
file with the author at Innovative Lawyering and Sihanya Mentoring. I was a student in
both classes.

¹⁵⁸ See P. B. Stephan, et. al. 1996, op. cit. pp. 74-76

¹⁵⁹ Dr. Andy Clark, ibid.

¹⁶⁰ Cf. W. E. Siebeck, (ed.) "Strengthening Protection of Intellectual Property Rights in Developing Countries: A Survey of the Literature" World Bank Discussion Papers, No. 1, The World Bank, Washington, DC, op. cit.

¹⁶¹ In general, the result of these policies and institutions has been reduction or elimination of government subsidies; reduction of social services like health and food subventions; farmers have to pay the full market price of agricultural technologies. The policies have also attacked cost-sharing in education and strongly advocated retrenchment of government employees. These measures had the net effect of reducing consumers' disposable incomes. Cheap products thus have a market however and from wherever they are sourced.

However, historically, not much attention was focused on Africa. Part of the reason may be that the US and European strategic interests here were limited. Significantly, most foreign business and IP interests in Africa have had a neo-colonial flavour with most innovators, investors and trade partners being largely ex-colonialists: the UK, France, Germany, Belgium, Portugal, and Italy.

This has changed drastically since the 1980s for instance, lately Japan and now China have used aid to penetrate African markets while the US interests have largely replaced diminishing European domination and clamour for "spheres of influence." The US case has been for free (rather than paternalised, neo-colonial) trade and investment. In the premises the US had not been so exposed to counterfeiting in Africa as it was in Europe, Asia or Latin America.

However, recently the US has been targeting Africa as well. This is partly because of the US Government's and industry's interest in opening up Africa for trade, investment and good governance. The last is associated with US desire to ensure that Kenyan and African Governments are accountable to the Government¹⁶⁴ and also a desire to export its constitutional and democratic tenets and principles. This ambitious strategy is partly embodied in the African Growth and Opportunities Act, 2000.¹⁶⁵ Indeed, in March 1998 President Bill Clinton led a delegation of American political and business leaders on a six-nation Africa visit which took them to Uganda, Senegal, South Africa, Botswana and others.¹⁶⁶

¹⁶² Weekly Review (Nairobi) "Focus on Japanese technology: the most popular in Kenya today: increased trade and aid give Japan the edge" 6 September 1991, pp, 33–34; Paul Bennell (1995) British Manufacturing Investment in Sub-Saharan Africa: Corporate Responses During Structural Adjustment Working Paper No. 13, Institute of Development Studies, University of Sussex.

¹⁶³ See M. Fransman (ed.) (1982) *Industry and Accumulation in Africa*, Heinemann Educational Books, London.

¹⁶⁴ Constitutional Government and democratic accountability is expected to get a big boost through the election of president Barrack Hussein Obama on November 4, 2008 as the 44th US president. He has reorganised his father's birthplace-Alego, Siaya in Kenya and had a powerful good governance and anti-corruption speech at the University of Nairobi on 29th August 2006.

¹⁶⁵ The African Growth and Opportunity Act (AGOA) was signed into law on May 18, 2000 as Title 1 of The Trade and Development Act of 2000. The Act offers tangible incentives for African countries to continue their efforts to open their economies and build free markets; See the African Growth and Opportunity Act website at http://www.agoa.gov/(last accessed 3.3.2009).

¹⁶⁶ See B. Sihanya (1998) "Enhancing consumer representation and participation in Africa," op. cit. President Bush also visited African states like Rwanda, Tanzania, Liberia, Benin Ghana, in February 2008 and committed USD 15 Billion to HIV/AIDS, *op. cit*.

Lately, in the last quarter of 1999 South Africa has come under attack from the US and US TNCs because of the former's decision on compulsory licensing and parallel importing of HIV/AIDS drugs. Because of increased investment in post-apartheid South Africa, it has also attracted the attention of anti-counterfeiting campaigners. ¹⁶⁷ So has Kenya because of its significance as a hub in the Great Lakes (Eastern and Central African) region. ¹⁶⁸

Thus in Africa, there is evidence that the US is keen on all four strategies ranging from unilaterism to the cocktail. What varies is what is emphasised in what circumstances. Bilateral negotiations with trading partners embody a carrot-and-stick approach, while multilateralism has involved negotiating and coercing the reform of the transnational IP regime and anticounterfeiting. US allies have been keener on the bilateral and multilateral strategies in addressing IP, ToT and counterfeiting.

A related IP regime, the UN Educational, Scientific and Cultural Organisation (UNESCO), has historically administered the Universal Copyright Convention (UCC) of 1952. Significantly, National and foreign innovators and consumers have tended to largely rely on transnational IP regimes mainly because national IP and consumer protection regimes in Africa are weak. ¹⁶⁹

8.10.2 Anti- counterfeiting in Africa in context: (sub) regional and National regimes

Consumer law acts as a countervailing force in many countries against the violence of contraband and illegitimate parallel markets.¹⁷⁰ As already mentioned, consumer law is quite weak in most African states. The same

¹⁶⁷ See Ben Sihanya (2005) "Patents, parallel importation and compulsory licensing of HIV/ AIDS drugs in Kenya," in Peter Gallagher, Patrick Low, and Andrew L. Stoler (eds) *Managing the Challenges of WTO Participation*, Cambridge University Press, London, Chapter 19, a study under the auspices of the World Trade Organization (WTO) and Adelaide University, *op. cit;* J. Love, "Five common mistakes by reporters covering US/ South Africa disputes over compulsory licensing and parallel imports," 23 September 1999, at www.cptech.org/ip/health/sa/mistakes.html.(last accessed 23/2/2009). James Love, who works for Technology Project in the US was quite supportive of the South African "cause;" see also SA Department of Trade and Industry, "Joint understanding between the Governments of South Africa and the [US];" 17 September 1999, at www.polity.org.za/govdocs/pr/1999/pr 0917b.html. (last accessed on 23.2.2009).

¹⁶⁸ Kenya's significance explains the intervention by the UN, US in Kenya's post-election crisis of 2007/2008, some of whose clear characteristics still persist.

¹⁶⁹ On US reliance on international regimes for this reason, to protect its IP in developing states, in the pre-TRIPs dispensation, see M. A. Leaffer (1991) "Protecting United States intellectual property abroad: Toward a new multilateralism". *op. cit*.

¹⁷⁰ J.D. Forbes (1987) *The Consumer Interest: Dimensions and Policy Implications*, Routledge, New York.

applies to regulatory regimes. This is mainly so with respect to high technology products and transactions, to wit, ICT and IP. Consumer interests are merely incidental to the general policy and legal framework while consumer protective provisions are scattered in numerous statutes, if they exist at all.

What passes for consumer law in most African states must be teased from international legal instruments, especially those dealing with third generation rights such as the Universal Declaration of Human Rights 1948 (UDHR), the International Covenant on Economic, Social and Cultural Rights 1966 (ICESCR), and the African Charter on Human and Peoples Rights 1981 (ACHPR). More recently, the UN has promulgated two soft law instruments: the UN Guidelines on Consumer Protection, 1985, and the Extension to the UN Guidelines, 1995. Other sources include numerous national statutes; incoherent case law; and a body of largely arbitrary administrative determinations. There is also no clear linkage between consumer law and trade, innovation, or IP law.

Such factors render regulators and even trained lawyers *functus officio*. Significantly, most of the commercial and related laws do not focus on consumer and innovator interests.¹⁷³ To illustrate the problem and identify the opportunities, we approach the problem through a dual typology: in this part, we address pertinent policy and institutional dynamics. To be sure, only a few African states have *sui generis* legislation and enforcement regimes on counterfeiting. Below, I discuss four African countries' responses to the counterfeit problem.

South Africa's anti-counterfeiting strategy

South Africa enacted the Counterfeit Goods Act in 1997.¹⁷⁴ This law weaves IP with principles of transnational trade law to provide some protection to consumers and innovators. This Act is intended to bolster the existing IP regime on infringement and counterfeit trade. The traditional IP regimes in South Africa include the Copyright Act, 1978, the Patents Act, 1978, and

¹⁷¹ See Ben Sihanya (1997) *The State of Consumer Law in Kenya*, PLI, Nairobi, Ben Sihanya (1998) "Enhancing consumer participation and representation in Africa," Paper presented at *the 44th Annual Conference of American Council of Consumer Interests* (ACCI), Georgetown University Conference Center, Washington, DC.

¹⁷² Ibid; B. Sihanya, Intellectual Property in Kenya and Africa... op. cit.

¹⁷³ The Model Law for Consumer Protection in Africa confronted ICT and IP precisely for this reason, *ibid*.

See the South African Counterfeit Goods Act, 1997, available at http://www.info.gov.za/view/DownloadFileAction?id=70783 (last accessed on 20/11/2008). It came into force on January 1, 1998.

the Merchant Marks Act, 1941. These were amended by the Intellectual Property Laws Amendment Act, promulgated on October 1, 1997.¹⁷⁵

One of the objectives of the Counterfeit Goods Act is to:

"introduce measures aimed against the trade in counterfeit goods so as to further protect owners of trade marks, copyright and certain marks under the Merchant Marks Act, 1941, against the unlawful application, to goods, of the subject matter of their respective (IP) rights and against the release of goods of that nature (called 'counterfeit goods') into the channels of commerce..." 176

The Act prohibits counterfeiting and possession of counterfeits in certain circumstances. It also empowers the police to conduct searches and seizures with or without warrants. S. 1 of the Act comprehensively defines counterfeiting and related doctrines. It defines counterfeiting in terms of doing a number of things without the authority of the owner of the IP. These include:

"without the authority of the owner of any [IP] right subsisting in the Republic in respect of protected goods, manufacturing, producing or making, or applying to protected goods, whether in the Republic or elsewhere, the subject matter of that [IP] right, a colourable imitation thereof, so that the other goods are [substantially identical copies to the protected goods] or are calculated to be confused with or to be taken as being the protected goods of the said owner or any goods manufactured, produced or made under his licence..." 1177

Clearly, the Act has limited scope as it focuses on goods. It exhibits a service and a technology deficit and may not be available to innovators and consumers dealing with software, the Internet, e-commerce, and related ICT products and service concepts. In the ICT age, the distinction between goods and other innovations is never neat, especially in the context of counterfeiting.

8.10.2.2 Nigeria confronts counterfeiting

Remedies against counterfeiting in Nigeria are provided for under the Criminal Code Act; the Merchandising Marks Act; and the Counterfeit and Fake Drugs (Miscellaneous Provisions) Act. The Counterfeit and Fake Drugs (Miscellaneous Provisions) Act was passed in order fight counterfeit drugs.¹⁷⁸

¹⁷⁵ See IIPA, "South Africa 301 99" op. cit.

¹⁷⁶ See the preambular paragraph of the Counterfeit Goods Bill of 1997.

¹⁷⁷ S. 1(1)(iv)(b) of the Act. The interpolation is extracted from s. 1(1)(iv)(a).

¹⁷⁸ Hillary Nwokonko, "Counterfeiting in Nigeria: a growing menace," available at www.foakinrele.com/pdfs/intellprop/counterfeiting.pdf (last accessed on 21/11/2008); cf Ben Sihanya (forthcoming 2009) Intellectual Property and Innovations in Kenya and Africa, op. cit

8.10.2.3 Egypt in the contraband debate.

In Egypt, the fight against counterfeiting is pursued through various IP legislation which provide penalties for making or selling counterfeit goods. Further, anti-counterfeiting is specifically dealt with through consumer protection under the Consumer Protection Act. The Act establishes the Consumer Protection Agency and enables enforcement agencies and the police to act independently of IP owners when counterfeits are found. 179

8.10.2.4 Uganda's anti-counterfeiting strategy

In a bid to effectively fight counterfeiting, the Ugandan Government drafted the Counterfeit Goods Bill, 2007. The Bill seeks to is provide harsh penalties to dealers in counterfeit and substandard products. In August 2007, the Minister of State said that Bill was being discussed by the cabinet and would thereafter be tabled in Parliament for approval. Counterfeiting is dealt with in the current law, under the National Bureau of Standards Act of 1983 which provide inadequate penalties in light of the growing counterfeit trade in Uganda. 180

8.11 (Sub) regional and national anti-counterfeiting regimes in Africa

Anti-counterfeiting strategy can be bolstered through consumer protection laws. Significantly, the emerging policy and institutional measures have failed to appreciate, or have ignored, consumer protection especially in the fields of IP and cyber technologies. They have had a narrow, short-term view of the interests of consumers, innovators, investors, corporations and traders. Relatedly major critiques of IMF and World Bank's structural adjustment programmes (SAPs) and the Enhanced Structural Adjustment Facility (ESAF) is that they are neither homogenous nor are they sufficiently integrated into the national and regional strategies on economic, financial, technological or innovation management and compromise endogenous technological deepening. ¹⁸¹

Nermien Al Ali, Robert Mihail *et al*, "Egypt IP law: a new horizon," available at http://www.buildingipvalue.com/06MENA/280_283.htm (last accessed on 21/11/2008); Jaleen Maroney, "Consumer Protection Agency takes off in Egypt," available at http://www.usaideconomic.org.eg/Newsletter/July_September_issue/July%20September%20issue%20web%20files/5.%20Consumer%20Protection%20Agency%20Takes%20off%20in%20Egypt.pdf (last accessed on 21/11/2008); cf. Ben Sihanya, Intellectual Property and Innovations in Kenya and Africa, *op. cit*.

People's Daily Online (2007) "Uganda to enact tougher law to crack down on counterfeits," available at http://english.peopledaily.com.cn/90001/90777/6234912.html (last accessed on 21/11/2008).

¹⁸¹ See UNECA, African Alternative Framework to Structural Adjustment Programmes for Socio-Economic Recovery and Transformation UN Economic Commission for Africa, Addis Ababa, 1989.

This scenario is largely reflected in the emerging (sub)regional integration efforts in Africa. These regimes include the Common Market for Eastern and Southern Africa (COMESA), the Southern African Development Community (SADC), the Economic Community for West African States (ECOWAS), and the Agreement for East African Co-operation (EAC). These regimes have not integrated IP and technology transfer questions. They have not adequately dealt with consumer policy either. Significantly, EC law initially did not explicitly provide for IP or consumer protection but the EU is steadily coming to terms with these policy issues.

There is a misfit between the (sub) regional economic integration initiatives and the major IP regimes in Africa; both share noisy silence on consumer protection in the context of increasing counterfeiting. The IP regime is represented by the African Regional Intellectual Property Organisation (ARIPO), established by the Lusaka Agreement of 9 December 1976 and whose mandate has been changed over time. Its objectives include promoting, harmonising and developing the intellectual property system in the region, emphasis being placed on patent, industrial design and trade mark.

The Harare Protocol on Patents and Industrial Designs came into force on 25 April 1982, and the Banjul Protocol on Marks was adopted on 19 November 1993 and amended on 28 November 1997 and 26 May 1998. ARIPO brings together English-speaking African countries. Under this regime, industrial

The member states are as follows: COMESA (Angola, Botswana, Burundi, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, Seychelles, Somalia, Swaziland, Uganda, Zambia); Zimbabwe, SADC (Angola, Botswana, Malawi, Mozambique, Swaziland, Tanzania, Zambia and Zimbabwe); ECOWAS (Benin, Burkina Faso, Cote d'Ivoire, Mali, Mauritania, Niger, Senegal, Guinea, Liberia, Sierra Leone, Ghana, Nigeria, Togo, Guinea-Bissau, (The) Gambia and Cape Verde; and EAC (Kenya, Tanzania, Uganda, Rwanda and Burundi.). See the various treaties and Oliver Saasa (1991) . *Joining the Future: Economic Integration and Co-operation in Africa* ACTS Press, Nairobi,; S. A. Akintan (1977) *The Law of International Economic Institutions in Africa*, A. W. Sijthoff, the Netherlands. There are also discussions to merge, or at least strengthen collaboration between, COMESA and SADC. See Pamela Khandelwal (2004) "Comesa and SADC: prospects and challenges for regional trade integration," available at http://www.imf.org/external/pubind.htm (last accessed on 14/11/2008); Julius Barigaba, "East Africa: EAC, COMESA and SADC in free trade area," *The East Africa*, 26/10/2008, Nairobi.

¹⁸³ See Ben Sihanya (1999) "The model law for consumer protection in Africa" in S. S. Rachagan (ed.), *Consumer Protection in the WTO Era*, (International Association for Consumer Law, Louvain-la-Neuve, Belgium) pp. 53–71, *op. cit.* Ben Sihanya *Consumer Law Teaching Materials* 1997/8, Faculty of Law University of Nairobi.(on file at Innovative lawyering and Sihanya Mentoring).

¹⁸⁴ See E. Ozsunay, "Comparative advertising ...". Paper presented at 7th International Consumer Law Conference 20–22 May 1999 Helsinki, Finland; T. Bourgognie, "Consumer protection in the EU" *op. cit*.

property may be registered through ARIPO for protection in member states.¹⁸⁵ ARIPO provides a platform for collaboration on copyright.

Similarly, the Organisation Africaine Propriette Intellectuelle (OAPI) is a (neo-) colonial phenomena. It was established by the Libreville Agreement of 1962 and brings together Francophone Africa. It is based in Yaounde, Cameroon. ¹⁸⁶ There have been negotiations within the Organisation of African Unity (OAU) (now African Union (AU)) to merge these institutions for purposes of enhancing their capacity to strengthen IP and anti-counterfeiting measures, as well as to avoid turf wars and inefficient duplication. ¹⁸⁷

8.12 Anti-counterfeiting law and enforcement in Kenya

Consumers, innovators and regulators face two basic counterfeiting problems in the emerging information society in Africa: there is either no appropriate law, or very weak law to combat counterfeit trade. Second, there are credibility gaps among policy, law and enforcement. We discuss these problems, and the prospects for reform, in the context of criminal, civil, IP, and *sui generis* law perspectives *infra*.

8.12.1 Criminal law confronts counterfeit trade in Kenya

Anti-counterfeiting criminal law is partly embodied in the general framework of penal law in the Penal Code, Cap. 63. The relevant provisions include forgery, coining, and counterfeiting. These offences are provided for under Division VII (secs. 345–87). Secs. 312 and 313, which deal with obtaining under false pretences, would also be relevant. The difficulty would be that some forms of IP that are the object of counterfeit trade may not fit within the definition of "anything capable of being stolen" (sec. 313).

A fairly widely debated and prosecuted offence is counterfeiting coin (sec. 365), which relates to counterfeiting Ben. 188

ARIPO member states include Botswana, The Gambia, Ghana, Kenya, Lesotho, Malawi, Somalia, Sierra Leone, Sudan, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe.

¹⁸⁶ The member states are Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Congo, Cote d'Ivoire, Gabon, Mali, Mauritania, Niger, Senegal and Togo.

¹⁸⁷ B. Sihanya, *Intellectual Property in Africa*, op. cit. C. Juma and J.B. Ojwang (eds) (1989) *Innovation and Sovereignty: The Patent Debate in African Development* ACTS, Nairobi, p. 25.

¹⁸⁸ The US\$100 bill is one of the most counterfeited "products." It is so called because it bears the portrait of Benjamin Franklin, the US statesmen. See G. Turbak, "Fighting fakes...," 1998, *op. cit*.

Sections 380 and 381 penalise counterfeiting or forging trade marks. A trade mark is defined under these provisions to mean:

"(a) A mark, other than a trade mark registered under the Trade Marks Act, ¹⁸⁹ lawfully used by any person to denote any chattel to be an article or thing of the manufacture, workmanship, production or merchandise of such person or to be an article or thing of any peculiar or particular description made or sold by such person; or

(b) Any mark or sign which in pursuance of any law in force for the time being relating to registered designs is to be put or placed upon or attached to any chattel or article during the existence or continuance of any copyright or other sole right acquired under the provision of such law."

Section 381 outlines conduct which constitutes trade mark counterfeiting. This includes forging or counterfeiting a trade mark; applying any forged trade mark to any chattel or article; and applying or attaching "any chattel or article to any case, cover, reel, ticket, label, or other thing to which any trade mark has been falsely applied, or to which any false or counterfeit trade mark has been applied" (sec. 381 (1)(4)).

The utility of the criminal law is dubious partly because secs. 380 and 381 explicitly mention and emphasise "chattels." In the ICT society, chattels is limiting, since technology and services and intricately linked to goods and are therefore important candidates for counterfeit trade and should receive greater attention than they do. Second, it does appear that the Penal Code offence of counterfeiting is tied to the old trade mark law, which was superseded in 1994. 190

Third, the provisions of the Penal Code do not sufficiently deal with other IP rights, such as copyright, patent, design right, industrial design, mask work, trade secret, if at all. In many situations, such as counterfeiting musical tapes, counterfeit trade marks (such as labels of established musicians or recording corporations) accompany pirated copyright music. Thus trade mark counterfeiting is not the only IP offence. Fourth, sec. 381(2) regards counterfeiting trade marks as a misdemeanour punishable by incarceration for a term not exceeding two years and/or an unspecified fine. The penalty is not specifically stated in the material clauses and has been extrapolated from sec. 36, which embodies a blanket penalty for misdemeanours. Under the South African Counterfeit Goods Act, 1997 pirates face a fine amounting to about US\$1 100 per infringing item or imprisonment for a term to be set by the court. The other sanction or relief, forfeiture, assumes that the chattels

^{189 1962-1994,} Cap. 506.

¹⁹⁰ See the discussion infra.

¹⁹¹ The South African regime is discussed below.

or instruments applying such trade mark will not have changed hands or are easy to locate.

In the information society it is difficult to detect counterfeiting, for instance in e-commerce where a consumer may order one product and receive a different one. Reliefs or sanctions such as forfeiture would therefore be very difficult to implement mainly because the physical address of counterfeiters may not be disclosed. There may also be problems of arresting the counterfeiters, bringing them to court, and difficulties relating to choice of law and choice of forum, among other constraints. 192

8.12.2 Civil law of counterfeiting

In Kenya and many African states counterfeiting and piracy are addressed under the criminal and civil law, or only the latter. The specific civil law regimes which have a bearing on counterfeiting include standards regulation, ¹⁹³ weights and measures, ¹⁹⁴ law general contract law, ¹⁹⁵ competition law, ¹⁹⁶ import and export regulation, ¹⁹⁷ sale of goods, registration of business names ¹⁹⁸, and transfer of businesses. ¹⁹⁹ Sale of goods law implies certain terms to a sales contract. For instance, where there is a sale by description or by sample the goods must conform to the description or sample. ²⁰⁰

These laws, which largely address counterfeiting from the perspective of contractual liability, tortious liability and breach of statutory duty, largely codify the English common law in a fairly fossilized moment in its development. These have not benefited from recent developments in the UK. Indeed, the UK has made these laws more responsive to new forms of

¹⁹² See C. A. Wangui (1999) Regulating Fraud in E-commerce: Prospects for Technological and Transnational Reform Unpublished, University of Nairobi LL.B. dissertation, August 1999; B. Sihanya, (1997) The State of Consumer Law in Kenya, op. cit.

¹⁹³ See Standards Act, Cap. 496 (Kenya).

¹⁹⁴ Weights and Measures Act, Cap 513.

¹⁹⁵ See Law of Contract Act 1961, Cap. 23 (Kenya), Contract Act, 1963 (Uganda), Law of Contract Act, 1961 (Tanzania).

¹⁹⁶ See Contracts in Restraint of Trade Act, 1932, Cap. 24 (Kenya) and Restrictive Trade Practices, Monopolies and Price Control Act, 1989, Cap. 504 (Kenya). The latter focuses on goods and exhibits a technology deficit.

¹⁹⁷ Imports, Exports and Essential Supplies Act, Cap. 502 (Kenya).

¹⁹⁸ Registration of Business Names Act, Cap 499.

¹⁹⁹ See Transfer of Business Act, Cap. 500 (Kenya).

²⁰⁰ Such implied terms may found a basis for scrutinising and attacking counterfeit products. See secs. 14–17 of the Sale of Goods Acts: Cap. 31 (Kenya), Cap. 79 (Uganda), and Cap. 214 (Tanzania). See R.W. Hodgin (1975) *The Law of Contract in East Africa*, East Africa Literature Bureau, Kampala, Uganda.

counterfeiting and piracy, especially by implementing various EU and WTO standards.²⁰¹

Major problems with the efficacy of standards (including weights and measures) and trade descriptions law in addressing counterfeit trade includes limitations in the content of the law. The main problem is the focus on goods. There is also a limited number of qualified, motivated and sufficiently equipped inspectors who can competently detect, arrest, prosecute and penalise counterfeiting. For instance, in 1990, a copyright seminar organised by the ruling party, the Kenya African National Union (KANU) and the London-based International Federation of Phonographic Industry (IFPI), illustrated the limited capacity in the police force and the difficulties law enforcement officials face in distinguishing genuine or original products from counterfeits²⁰³.

In many situations innovators and investors cannot distinguish between the genuine and phony or fake products. Perhaps this is due to or in spite of the fact that many traders, especially in spare parts, proclaim that they deal in "genuine parts." Where this is detected, and announced or advertised, this has been immediately followed by more sophisticated fakes. Thus warnings issued to protect IP owners, traders in legitimate products and consumers provide a forum for counterfeiter education or sophistication!

Another factor affecting enforcement is laxity and rent seeking among law enforcers. It has thus been argued that enforcement officials require various forms of incentives to avoid opportunistic behaviour. Incentives may include better terms of service, such as remuneration and training. Perhaps avenues for industry contribution to IP management and policing in Africa should be explored more strategically.

8.13 Kenya's Anti-Counterfeit Act, 2008

In recent times Kenya has increased efforts in the fight against trade in counterfeit products. A legislative response to the problem is the Act on Counterfeiting. The Act was initially drafted as the Counterfeit Goods Bill

²⁰¹ See I. Ramsay (1989) Consumer Protection: Text and Materials Weidenfeld and Nicholson, London; T. Frazer and M. Waterson, (1994) Competition Law and Policy: Cases Materials and Commentary Harvester, Wheatsheaf; Paul Craig, Grainne De Burga (1998) EU Law: Text, Cases, and Materials Oxford University Press, 2nd ed.

²⁰² See B. Sihanya, *Intellectual Property in Kenya and Africa*, op. cit.; B. Sihanya, *The State of Consumer Law in Kenya*, op. cit.

²⁰³ These difficulties have been underscored in other recent for on IP, trade law and consumer protection. See Sihanya, *IP and Innovation in Kenya and Africa, op. cit.*

and published in 2005 but it lapsed before discussion in Parliament. The Bill was republished on July 1, 2008 as the Anti - Counterfeit Bill, 2008.

8.13.1 Debate on the Anti-Counterfeit Bill

The Anti-counterfeit Bill generated some controversy. Some lobby groups argued that the definition of counterfeit products includes generic drugs and hence the Bill would restrict access to drugs by majority of the public. They even sought amendment of the Bill on the definition of counterfeiting and counterfeit goods.²⁰⁴

They said the definition would mean that all generic drugs on which the county health care system relies would be outlawed. Lobbyists are seeking amendments to distinguish counterfeit medicines from other counterfeit goods and hence recognise that generic drugs are not counterfeit medicines.²⁰⁵

Some lobbyists protested on the basis that,the Bill would restrict the availability and affordability of drugs, particularly anti-retrovirals (ARVs), malaria and TB drugs which are leading health needs in Kenya. ²⁰⁶ According to the Kenya Access to Treatment Movement (KETAM) the Bill would increase the costs of drugs by 20 and 80 per cent. Health Action International (HAI) Kenya and other Non Governmental Organisations (NGOs) also campaigned against the Bill. ²⁰⁷

I quote from a briefing paper produced jointly by Health Action International (HAI) and the Kenya Access to Treatment Movement (KETAM). The paper states the following five points as the major concerns about the Bill:

- (a) " ...the Bill does not distinguish medicines from other goods. Medicines are essential and lifesaving and should be distinguished from non-essential goods such as DVDs, batteries, etc.
- (b) Intellectual property rights (IPRs) (including patents, trademarks, copyright, and data protection) is clearly distinct from quality control issues when related to medicines. The Bill in its current form confuses these issues. As such, generic medicines may be erroneously interpreted as counterfeits in this Bill.
- (c) The Bill contravenes some sections of existing legislation (i.e. the Industrial Property Act, 2001), such as section 58(2) which provides for Parallel Importation, and section 80 on Government Use. These sections have played

²⁰⁴ Ibid.

²⁰⁵ Ibid.

²⁰⁶ Ben Sihanya (2008) "How IMF policies constrain policy space in Kenya's health sector," in Ben Sihanya (ed) *The Impact of IMF Policies on Education, Health and Women's Rights in Kenya, op.cit.*

²⁰⁷ Macharia Kamau, "Anti-counterfeit Bill rages on," *East African Standard* (Nairobi) available at www.eastandard.net/archives (last accessed on 23/11/2008).

an important role in the struggle to increase access to essential medicines in Kenya.

- (d) Many proposed provisions within the Bill are "TRIPS-PLUS" in the sense that they go beyond the commitments required under the World Trade Organization Agreement on Trade-related Aspects of IPRs (TRIPS). TRIPS-PLUS measures in national laws are known to hinder access to essential medicines.
- (e) The Bill does not seek to strengthen the Pharmacy and Poisons Board (PPB) in its mandate to fight counterfeit medicines in Kenya."²⁰⁸

Other stakeholders in the pharmaceutical and health sectors have dismissed these claims. The Chairman of Anti-counterfeit and Illicit Trade Committee of the Kenya Association of Manufacturers (KAM) defended the Bill saying that counterfeiting is a serious economic crime, which must be curbed through appropriate legislation.²⁰⁹

Some supporters of the Bill include the Agrochemical Association of Kenya (AAK). In November 2008 they said that they will continue to support the Pest Control and Products Board and the Ministry of Agriculture in the war against counterfeit trade. The association has called for severe punitive action against the counterfeiters and those engaged in counterfeit trade.²¹⁰

During the official launch of AAK's 50th anniversary celebrations, the AAK Chairman, Daniel Kagwe reiterated the association's commitment to dealing with the problem of counterfeit agrochemical products. He said that AAK had intensified the training of farmers and pesticide stockists in order to minimise chances of counterfeiting; and that AAK endorsed the proposed Anti-Counterfeit Bill 2008 that was being debated in the (current) 10th Parliament.

8.13.2 Proposed amendments of the Bill

Following these debates by various stakeholders, the Government agreed to amend the Counterfeit Goods Bill, 2005 to protect production and sale of generic medicine. The Minister for Industrialization, Hon. Henry Kosgey said that these amendments would allay fears that the proposed law would impose a blanket ban on generic medicine. The amendments would be made

Health Action International Africa, "Kenya anti-counterfeit Bill 2008 poses threat to access to essential medicines," available at http://www.haiafrica.org, (last accessed on 25/11/2008).

²⁰⁹ Ibid. Cf. Business Daily (2009) "Vigilance needed for new standards law to be effective," *Business Daily* (Nairobi), February 25 2009, Editorial, p. 10.

²¹⁰ Macharia Kamau, "Association demands tough action on counterfeits," *The Standard*, Nairobi, 25/11/2008.

at the committee stage and Members of Parliament (MPs) were asked to support the amendments.²¹¹

Members of Parliament also proposed amendments to make the proposed anti-counterfeit agency to be established under the Bill a lean and effective agency.²¹²

HAI Africa and KETAM proposed some recommendations and amendments to protect public health needs in Kenya. First, the definition of "counterfeiting" and "counterfeit goods" should be amended to distinguish counterfeit medicines from other counterfeit goods. This definition should include the World Health Organisation's (WHO) definition of counterfeit medicines. Second, clause 34 of the Bill to be amended to limit the powers of the Kenya Revenue Authority (KRA) and to enhance the powers of Kenya Bureau of Standards, the Pharmacy and Poisons Board, and other product regulatory authorities. Third, the Bill to be amended to harmonise its provisions with the Industrial Property Act, 2001. Fourth, the Bill to acknowledge and support the role of the Pharmacy and Poisons Board which has the mandate to fight counterfeit medicines in Kenya.²¹³

Some of these concerns were addressed through revision of relevant sections of the Bill prior to enactment. For instance, the definition of "counterfeit" under section 2 was revised to include:

"in relation to medicine, the deliberate and fraudulent mislabelling of medicine with respect to identity or source, whether or not such products have correct ingredients, wrong ingredients, have sufficient active ingredients or have fake packaging; (a) the manufacture, production, packaging, re-packaging, labelling or making, whether in Kenya or have fake packaging."

This amendment of the Bill was intended to alleviate fears that the Anti-Counterfeit law would ban the use of generic drugs in Kenya.

8.13.3 Enactment of the Anti-counterfeit Act

The Anti-Counterfeit Bill was presented to Parliament in November 2008. It was sponsored by the Ministry of Trade and Industry and USAid. The Bill was passed into law on 24th December 2008 by the President. The Anti-

²¹¹ David Ochami, Alex Ndegwa and Peter Opiyo, "Anti-counterfeit Bill to be amended to protect medicine," available at www.eastandard.net/archives (last accessed on 25/11/2008).

²¹² Ibid.

²¹³ Health Action International Africa, "Kenya anti-counterfeit Bill 2008 poses threat to access to essential medicines," available at http://www.haiafrica.org, (last accessed on 25/11/2008.

counterfeit Act is awaiting a commencement date, which would be set by the Minister for Industrialization.

8.13.4 The Anti-Counterfeit Agency

The Act establishes the Anti-Counterfeit Agency (hereinafter referred to as the "Agency") which shall be a body corporate with perpetual succession with the mandate to administer anti-counterfeiting policy and law in Kenya.²¹⁴

The Agency has three main functions and mandates. These are first, to enforce the provisions of the Anti-Counterfeit Act, 2008; second, to educate the public on counterfeiting issues; and third to combat counterfeiting in Kenya

The Act authorizes the Agency to appoint inspectors who shall have powers to inspect any premises or vehicle, seize and detain any counterfeited products and seal off any premises. An inspector may also arrest any person with or without a warrant, and may search and detain such a person.²¹⁵ The Act provides for numerous offences in relation to the duties of the an inspector, including the following four: willful obstruction of an inspector in discharge of his duties; failure to comply with the inspector's requirements; making false statements to an inspector; and breaking or tampering with a seal applied by an inspector. ²¹⁶

The Agency is to be set up by August 2009 and is intended to enlighten and inform the public on matters relating to counterfeiting; to combat counterfeiting, trade and other dealings in counterfeit goods in Kenya; as well as devise and promote training programmes on combating counterfeiting. The Agency will also co-ordinate with national, regional or international organisations activities on anti-counterfeiting.²¹⁷

In early 2009, the Minister for Industrialisation appointed a taskforce comprising of intellectual property rights experts and various stakeholders to advise on the appropriate date for the gazettement of the Anti -counterfeit Act 2008.²¹⁸

²¹⁴ Section 3, Anti - Counterfeit Act, 2008.

²¹⁵ Section 24, Anti - Counterfeit Act, 2008.

²¹⁶ Section 24 of the Anti-Counterfeit Bill, 2008.

²¹⁷ Albert Muriuki, "Skepticism over prospects for new Anti-Counterfeit Agency," available at http://www.ratio-magazine.com/20090316462/Kenya/Kenya-Prospects-for-New-Counterfeit-Agency-Undermined-by-Capacity-Shortages-and-Endemic-Corruption.html (last accessed on 28/04/09).

²¹⁸ George Omondi, "Africa seeks common laws to fight counterfeiting," *Business Daily*, 24/04/09.

Prof Odek, the Managing Director of the Kenya Industrial Property Institute (KIPI), who is a member of the Minister's taskforce, said preparations are underway to implement the Act. Further that, the Kenya Bureau of Standard and Kenya Revenue Authority have been ordered to identify the counterfeit goods depot specified under the Act for keeping seized goods pending determination of matters in courts of law.²¹⁹

The Ministry has also written to the Attorney-General's Chambers to gazette prosecutors who will prosecute counterfeiting cases under the Act, while about 1,000 inspectors have already been gazetted to start inspecting goods suspected to be counterfeits once the new law is operationalised.²²⁰

8.13.5 Offences under the Anti-counterfeit Act

Under section 32, it is a criminal offence to do any of the following:

- 1. Have in his possession or control in the course of trade any counterfeit goods
- 2. Manufacture, or produce in the course of trade any counterfeit products
- 3. Sell, hire out or barter in counterfeit goods
- 4. Expose or exhibit for the purpose of trade counterfeit goods
- 5. Distribute counterfeit goods
- 6. Import or export counterfeit goods
- 7. Dispose of counterfeit goods in the course of trade.

A complaint against anyone engaged in counterfeiting may be lodged with the Executive Director of the Anti-counterfeiting Agency by the owner of the intellectual property, successor in title or licencee. Under section 33, the goods complained of must be protected by intellectual property.

Under section 30 of the Act, the Attorney-General may appoint public prosecutors to prosecute cases relating to counterfeiting. And under Section 34, the Court may make Anton Pillar (search and seizure) orders where it is proved that the counterfeit goods may be destroyed or rendered inaccessible. Part VI of the Act provides for border measures and grants

²¹⁹ Ibid.

²²⁰ Ibid.

powers to Commissioner of Customs and Excise to seize and detain suspected counterfeited goods.²²¹

Under section 35, penalties for counterfeiting are fines not less than three times the value of counterfeited goods or imprisonment for not less than three years, for first offenders. Second or repeat offenders shall face stiffer penalties: fines, not less than five times the value of counterfeited goods or imprisonment for not less than five years. Persons guilty of offences relating to inspectors appointed under (section 22) of the Bill or disclosure of information or impersonation (section 35) shall be liable to a fine not exceeding Kshs 2,000,000 or imprisonment not exceeding three years, or both.

The fines imposed by the court shall be distributed as follows: 10% to the complainant; 40% to the Government of Kenya; and 50% to the Agency. The idea that complainants shall share in the penalty is a novelty in Kenya's penal law. It may make IP owners and traders more vigilant and interested in the criminal process. But it may also encourage rent-seeking.

8.14 Local and international reaction to the enactment of Anticounterfeit Act

There have been mixed reactions to the enactment of the Anti-Counterfeit Act, 2008. Many industry players who have in the past, been adversely affected by counterfeiting hope the new legislation will curb the vice and decrease the massive losses lost to counterfeiters.

The Government on has praised the Act, as a step in the right direction. Attorney General, Amos Wako, said that the Act would augment existing intellectual property laws such as the Industrial Property Act of 2001, the Copyright Act of 2001, and the Trade Marks Act. He also praised the Act because it goes a step further and gives powers and functions that where hitherto unaddressed by the intellectual property regime in Kenya.²²²

However, some skeptics doubt the Agency will achieve its broad mandate. Some have argued that Kenya, has in the past, set up agencies that have failed to live up to expectations. For instance some fear that like the Kenya Anti-Corruption Commission and the National Environmental Management

²²¹ Cf. Art. 51 of the TRIPs Agreement.

²²² Albert Muriuki, "Skepticism over prospects for new Anti-Counterfeit Agency," http://www.ratio-magazine.com/20090316462/Kenya/Kenya-Prospects-for-New-Counterfeit-Agency-Undermined-by-Capacity-Shortages-and-Endemic-Corruption.html (last accessed on 30/04/09).

Authority (NEMA, the new Anti Counterfeit Agency will fail to deliver up to expectations. 223

Other concerns by the skeptics relates to the implementation of the Act while having regard to the nature of the counterfeit industry and laxity on the part of enforcement and prosecutorial agencies, and the police. ²²⁴

In spite of the positive comments on the Act, even the Attorney-General Wako concedes that without proper implementation and enforcement, the new law might not live up to its expectations.²²⁵

On the international platform, the Indian Government registered strong protest against the Kenyan Anti-Counterfeit Act. India is arguing that the Act could severely restrict the market for Indian generic drugs into Africa.²²⁶ If this is the case, then India as the largest supplier of generic antiretrovirals to low- and middle-income countries and with Kenya being the third largest African market for Indian drugs, India may have reason for concern.²²⁷ To register this protest, India called an extraordinary meeting of ambassadors of all African countries to register raise its concerns.²²⁸

8.15 Conclusion

Intellectual property is becoming increasingly important in trade, as well as in social and cultural transactions. It rewards innovation but may also limit access to the products. There is need to secure a balance between the rights or interests of innovators and traders in legitimate products, on the one hand, and the interests of consumers, on the other hand.

Unfair business practices as well as developments in technology (especially in ICT) are facilitating the infringement of trade marks, copyright, patent, trade secret and geographical indications. The practices are also promoting counterfeiting in Kenya and Africa.²²⁹ Urgent reforms are required in at least

²²³ Ibid.

James Ratemo, "The loopholes counterfeiters exploit," *The Standard*, Nairobi, 19/01/09 available online at http://www.eastandard.net/sciencetech/InsidePage.php?id=1144004380.

²²⁵ Ibid.

Darren Olivier, "Kenya's anti counterfeit legislation: India protests," *Financial Express*, 21/04/09 available at http://afro-ip.blogspot.com/2009/04/kenyas-anti-counterfeit-legislation.html (last accessed on 28/04/09).

²²⁷ Ibid.

²²⁸ Ibid

²²⁹ The author's Chapter in this whine "Copyright in e-commerce and the music industry in Kenya. The Chapter explores the challenges posed by ICT to intellectual property, particularly copyright and protection and promotion.

Chapter Eight

these areas. First, clear laws and policies ought to be passed or adopted to promote or protect innovation while facilitating equitable access. Second, existing regional and national institutions working on IP, innovation and trade should be strengthened and new ones created on anti-counterfeiting. These and related measures will help combat counterfeiting, secure innovation and legitimate trade and facilitate Kenya's survival and sustainable development in the context of Kenya's Vision 2030 and related development strategies.

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Chapter Nine

Traditional Knowledge- The need for *Sui generis* System of Intellectual Property Rights Protection

By Moni Wekesa

I. General Introduction

9.1 Introduction

ntellectual property rights (IPRs) issues in traditional knowledge (TK) can be generally divided into defensive protection and positive protection. Under defensive protection, measures are taken to ensure that IPRs are only given to customary TK holders. These measures include the development of TK data bases that can be used to contest claims of patents on TK based on prior art. Positive protection is the creation of positive rights in TK. These empower TK holders to protect and promote their TK. *Sui generis* legislation is a good example of positive protection. Contracts/licenses and existing forms of protection may also be used as positive protection.¹

Traditional knowledge has been defined as:

Traditional knowledge is all the intangible elements associated to the commercial or industrial use of local varieties and other indigenous material developed by local communities, collectively or individually, in a non-systematic manner and that are inserted in the cultural and spiritual traditions of those communities, including, but not limited to, knowledge relating to methods, processes, products and denominations that are applicable in agriculture, food and industrial activities in general, including handicrafts, trade and services, informally associated to the use and preservation of local varieties and other endogenous and spontaneous material that is covered by the present law.²

¹ Traditional Knowledge at http://www.wipo.int/tk/en (16 December 2008)

² Article 3(1) Portuguese Sui Generis Law

TK is passed on from generation to generation orally or by imitation or through apprenticeship.³ Hence, TK is communally owned. With respect to traditional cultural expressions (TCE), however, individual composers, singers, creators and performers using modern technology may re-use, rearrange and set in a new context the older material. In traditional medicine, a healer may mix herbs from different places to come up with his/her own new concoction for treating one or several ailments. The relationship between collective and individual ownership is therefore very dynamic.⁴

In terms of beneficiaries, more than one community may qualify for protection as communities may share the same or similar forms of TK.

9.2 Forms of traditional knowledge

Two main forms of TK can be identified: traditional cultural expressions (TCE) which is also known as expressions of folklore (EF) and traditional medicine. Each will in turn be considered separately.

9.2.1 Traditional Cultural Expressions (TCEs)/Expressions of Folklore (EF)

Traditional Cultural Expressions (TCEs) or Expressions of Folklore (EF) embody traditional culture and knowledge and consist of tangible and intangible forms. Intangible forms of TCEs are made up of verbal expressions stories, epics, legends, poetry, riddles and others; musical expressions such as song and instrumental music; expressions by action in dances, plays, ceremonies, rituals and other performances. Tangible expressions include drawings, designs, paintings, carvings, sculptures, pottery, terracotta, mosaic, woodwork, metalwork, jewelry, baskets, needlework, textiles, glassware, carpets, costumes, handicrafts, musical instruments and architectural forms such as sanctuaries, tombs and memorials.

The World Intellectual Property Office (WIPO) considers protectable TCRs/EoFs to be intellectual creations both individual and communal which have a nexus to a community's cultural and social identity and cultural heritage.

³ WHO, WHO Strategy for Traditional Medicine 2000-2003, Geneva, 2000

WIPO 'Traditional Cultural Expressions (TCE)/Expressions of Folklore (EOF) – Revised Provisions for the Protection of Traditional Cultural Expressions (Expressions of Folklore) WIPO/GRTKF/IC/9/4 (Art. 2)

⁵ WIPO 'Traditional Cultural Expressions (TCE)/Expressions of Folklore (EOF) – Revised Provisions for the Protection of Traditional Cultural Expressions (Expressions of Folklore) WIPO/GRTKF/IC/9/4 (Article 1)

Such material must be authentic or characterize a certain community, and still be used and maintained by the community.⁶

9.2.2 Traditional medicine (TM)

Traditional medicine is the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness. Herbal medicines include herbs, herbal materials, herbal preparations and finished herbal products, that contain as active ingredients parts of plants, or other plant materials, or combinations. ⁷

A major distinguishing feature of TM is that it is made up of both spiritual/metaphysical as well as the organic. The concept of disease causation is based on spiritualism. Spirits are consulted to reveal the cause of the disease and the possible remedy. Most TM healers claim to be guided by spirits in identifying applicable herbs and other forms of treatment/ritual for a given condition. TM thus differs from herbal medicine which is largely based on identifying active ingredients in a herb that is useful for a given disease. Given the spiritual/metaphysical angle to TM, it becomes difficult to evaluate it (TM) using the prism of Western standards. Herbal medicine is easier to analyse using modern medical knowledge.

Fifty six percent of the world's population relies on TM for the treatment of a variety of physical and mental illnesses. This is aided by the fact that TM is accessible, culturally acceptable, and available. Conversely, modern medicine reaches a very small population in developing countries.⁸

TM is said to have great value in the global economy. For example, the World Health Organisation estimates that over 80% of all medicines used worldwide are of plant origin. A quarter of all medicines used in the United States have a plant origin. Within the East African region, more than 70%

⁶ WIPO 'Traditional Cultural Expressions (TCE)/Expressions of Folklore (EOF) – Revised Provisions for the Protection of Traditional Cultural Expressions (Expressions of Folklore) WIPO/GRTKF/IC/9/4 (Art. 1)

WHO 'Traditional Medicine: Definitions' at http://who.int/medicines/areas/traditional/definitions/en/print.html (January 5, 2009)

⁸ CM Good 'Traditional medicine: An agenda for medical geography' Social Science & Medicine 11(14-16) 1977, pp. 703-713; see also: S Campbell 'Traditional Medicine in the Gambia' Complementary Therapies in Nursing & Midwifery 3(4) 1997, pp.103-105

⁹ C Obijiofor, Integrating African Ethnomedicine into primary healthcare: a framework for South-Eastern Nigeria, in M Iwu & J Wooton (eds), Ethnomedicine & Drug Discovery 23-24 (2002)

¹⁰ NR Farnsworth & RW Morris, 'Higher plants – The sleeping Giant', in Am J Pharmacy,

of the population relies on TM.¹¹ In the twentieth century pharmaceutical companies invested time and money into creating drugs from synthetic chemicals. These drugs have not proved to be as efficacious as those from nature. Hence, there has been a renewed search for drugs from plants, mainly in the tropics.

TM is used in both developing and developed countries. Studies in Mongolia reveal that 46% of the population use TM and that TM plays a significant role in the Mongolian healthcare system. ¹² In Tanzania, TM constitutes a major part of the healthcare system. ¹³ TM in Bulamogi County, Uganda, is used for physical as well as psycho-spiritual illnesses. It is used to prevent and eliminate the effects of witchcraft, to appease spirits and to cure chronic illnesses. ¹⁴ It is closely connected to biodiversity conservation and community rights over their knowledge. ¹⁵

In Swaziland plants used for medicinal purposes are identified and stored in the National Herbarium of Swaziland. It has been reported that over 47 different species are used in various forms to treat a variety of diseases. ¹⁶ In the Lake Basin around Lake Victoria, *Toddalia asiatica* is prepared as a decoction or concoction and used in the treatment of stomach problems, malaria, cough, chest pain, food poisoning and sore throat. ¹⁷ Twenty species of plants are used in the treatment of malaria. Water extracts from these plants form the drugs. The most frequently used plants include *Vernonia amygdaline, Mrmidica foetida* and *Zanthoxylum chalybeum*. ¹⁸

Olembo and others ¹⁹ found that over several hundred species of plants are used to treat 40 broad conditions, ranging from cancer to heart disease.

Mar-Apr. 1976 at 46

S Nelson-Harrison et al., 'Ethnobotanical research into the 21st century', in Iwu & Wooton eds, Ethnomedicine & Drug Discovery, Elsevier, Amsterdam, 2002

JA Bernstein, MA Stibich & S LeBaron 'Use of traditional medicine in Mongolia: a Survey' J Complimentary Therapies in Medicine 10(1) 2002, pp.42-45

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JRS Tabuti, SS Dhillion & KA Lye 'Traditional medicine in Bulamogi County, Uganda:its practitioners, users and viability' J Ethnopharmacology 85(1) 2003, pp.119-129

¹⁵ K Timmermans 'Intellectual Property Rights and Traditional Medicine:Policy dilemma at the interface' Social Science & Medicine 57(4) 2003, pp. 745-756

OOG Amusan et al 'Some Herbal Remedies from Manzini Region of Swaziland' J Ethnopharmacology 79(1) 2002, pp 109-112

JA Orwa et al. 'The use of Toddalia asiatica (L) Lam. (Rutaceae) in traditional medicine practice in East Africa' at http://www.sciencedirect.com (20 January 2009)

JRS Tabuti 'Herbal medicines use in the treatment of malaria in Budiope County, Uganda' J Ethnopharmacology 116(1) 2008, pp.33-42

¹⁹ N. Olembo, S. Fedha & E. Ngaira, Medicinal and agricultural plants in Ikolomani

Another Kenyan researcher holds that 3,000 plant species are used for medicinal purposes in East Africa.²⁰

The *Prunus africana* grows wildly in the highland areas of Burundi, Ethiopia, Kenya, Rwanda and Tanzania. It is used by communities to treat cancer of the prostate.²¹ It is a much sought-after plant in the world. Trade in this plant is believed to fetch more than US\$200 million, with Germany alone spending over US\$100 million on its importation. It is now classified as an endangered species. Another plant, imported to East Africa from India, found mainly along the coastal areas, is the neem tree (Azadirachta indica). According to local folklore, this plant can treat approximately 40 diseases, ²² including eye and ear infections, fungal infections, genital thrush, fever and malaria. It has been commercially exploited for many years. Creams and soaps containing extracts from this tree can be found in supermarkets all over East Africa. Additionally, traditional healers continue to use the various parts of the tree in raw form for treating various diseases. Ginger (Zingiber officinalis), another non-native plant, grows widely in this region and is believed to be effective against colds, flu, coughs, pneumonia, ringworm, constipation, mouth sores, sore throat and more.²³ This plant has also been heavily commercialised and it is sold in the form of spices and in roots.

Traditional vegetables such as amaranth (*Amaranthus hybridus*), emiro (*Crotalaria brevidens*), Tsisaga (*Cleome gynandra*), Black nightshade/saga (Solanum spp.), pumpkin / lisebebe (*Cucurbita maxima*) and a host of others, which are generally leafy vegetables that provide micronutrients, are also known to have medicinal effects against anaemia, ulcers, constipation, thrush/candida etc.²⁴ They are said to provide nearly 100% of the recommended dietary standard for vitamins and minerals as well as about 40% of proteins.

The plant *Tylosema fassoglenis*²⁵ is said to contain ingredients that are useful in the fight against HIV/AIDS. Because HIV/AIDS is a twentieth century disease, there can be no valid claims of TK in its management, save for the management of certain opportunistic infections. Whatever is claimed to have an effect on HIV and AIDS must surely be as a result of

Division of Kakamega District 1995 (unpublished)

²⁰ J Kokwaro, Medicinal Plants of East Africa 1999

²¹ M Wekesa, Swara, p.39

²² Ibid

²³ Ibid

²⁴ TICAH: Using our traditions

²⁵ M Wekesa, Traditional Knowledge, Biopiracy and Sustainable Development in East Africa, in Swara, Vol. 31:4 October to December 2008, p.51

experimentation either formally (using modern methods and equipment) or traditionally through trial and error (administration of the herb in question to patients and observing their reaction). *Tylosema fassoglensis* grows mainly in Western Kenya, parts of Northern Tanzania, Southern Uganda, mainly in those areas around Lake Victoria. Research data based on modern investigative approaches indicates that this plant has both anti-retroviral qualities as well as nutritional value. After only three months of use on patients with HIV/AIDS, positive results have been obtained. The plant is said to reduce the viral load in the body while at the same time improving the CD4 cell count (the immune system). Plans are being made to set up a factory to process and package the product. The active compound has been patented by one of the local scientists involved in the investigations.

9.3 Philosophy of Property Ownership in the Western World

The philosophy that informs property ownership in the Western world has been presented in chapter one. Needless to mention that ownership of property in the West is on an individual basis. It is the "hardworking" individual who is accorded all the rights in the property so created through his/her own labour.

9.4 Philosophy of Property Ownership in traditional communities

Ownership of traditional knowledge (TK) expresses itself at three main levels:²⁶ the individual, several people spread across various communities such as a clan or relations within a clan, and a whole community. An individual within a community may possess exceptional knowledge about some aspects of TK. For example, an individual may be the only blacksmith in a community, having learnt his/her trade from some ancestor. In like manner, another person may be the only acknowledged 'doctor' well schooled in traditional medicine (TM). For instance, powers of spiritualism (foretelling or prophesying) may be passed on to only one member of a family. This means within a given generation, there will always be one person in the community who can be consulted on matters of the 'future'. However, through a series of experimentation such an individual may modify some processes of TK. However, strictly speaking, such a person does not qualify to be called an inventor.

²⁶ CM Correa, Traditional Knowledge and Intellectual Property, A discussion Paper commissioned by the Quaker United Nations Office (QUNO), Geneva, 2001

The second level of ownership is one of several people spread across a community. These may have acquired TK from different people. Key here is that these people may possess similar or near similar knowledge. However, any one of them may not know how much the other knows. For instance, there may be five traditional healers in a community but none knows the capabilities of the others.

The last set of ownership is the community.²⁷ This is particularly common in the area of handicrafts, sculpture and performing arts. A whole community may know how to make articles like ropes and floor mats from grass or reeds. Or a whole community is likely to be familiar with traditional dances used in ceremonies by the community. Besides, it is possible for all members of a community to be aware of certain plants with medicinal value which are locally used for 'first-aid'. Such communal awareness and or ownership of TK is well pronounced in the area of performing arts in which song and dance are used in various cultural ceremonies.

Due to similarities in weather patterns and soil types between certain regions of the world, it is not uncommon to find that the same kind of plants are found all over the tropics. This means a certain plant with medicinal value may be being used both in Africa and in Latin America contemporaneously. And yet the communities concerned may not know. A plant such as *Prunus africana*, famed for its abilities to treat prostate cancer is found in Cameroon, Ethiopia, Kenya, Rwanda, and in Tanzania. This kind of distribution of vegetation may be due to similarities in climatic and soil conditions. Similarly, the arts and crafts of people with similar environmental factors such as proximity to wild animals or to large masses of water are identical. It is therefore not uncommon to find similar carvings of wild animals in Botswana, Kenya, South Africa and Tanzania. In like manner, communities that live proximal to large masses of water such as Lake Victoria, the Indian Ocean or the Atlantic Ocean, or even large rivers like the Tana or Rufiji, have acquired similar skills of boat making, implements they use to exploit the adjacent water masses

It is thus safe to say that in contradistinction to Western philosophy, property ownership in traditional communities is communal in nature. The originator of the 'idea' may have passed on several decades or even several centuries ago. TK is passed on from generation to generation. The mode of transfer of TK is largely through oral tales or apprenticeship. TK is therefore owned by a given community in which the knowledge abounds.

II. Current forms of intellectual Property Rights and their relationship to traditional knowledge

9.5.1 Patents

A patent is a certificate granted to an inventor which confers upon the holder negative rights.²⁸ The patent holder has rights to exclude others from using his invention without his permission. It confers monopolistic rights upon the patent holder. A patent is granted for an invention that is new (novel), that involves an inventive step (non-obviousness) and that is industrially applicable. Knowledge that is already in the public domain cannot be considered novel. The invention must therefore not have been anticipated by prior art. The invention must be capable of mass production to benefit the larger society.

Can owners of traditional knowledge be considered as joint inventors under the current patent system? It is required that a joint inventor contributes to the inventive conception. This matter came up in *Monsanto Co v Kamp, Jahn & US Commissioner of Patents*, ²⁹ in which the plaintiffs brought an action for patent interference against the defendants. Kamp and Jahn were inventors of plastic pharmaceutical bottles lined with polyethylene. Jahn was an employee in Kamp's factory. Both worked on the idea separately but consulted one another from time to time. The issue was whether Kamp and Jahn were joint inventors, and therefore, whether they had priority over the invention as against the plaintiffs. The court said:

"Each needs to perform but a part of the task if an invention emerges from all of the steps taken together. It is not necessary that the entire inventive concept should occur to each of the joint inventors, or that the two should physically work on the project together..."

It is highly unlikely that practitioners of TM can qualify as joint inventors as the ideas they have are not their original work, and there is hardly any element of "working" to come up with TM as an innovation.

In the matter of *Idacon, Inc. v Central Forest Products, Inc.*, ³⁰ the defendants claimed that the patent for a process for treating wood held by the plaintiffs was invalid for failure to meet the 'non-obviousness' requirement. The defendants claimed that the inventor, Kirchner, had used an emulsifier supplied by a commercial supplier who was not named as a joint inventor.

²⁸ DS Chisum et al. Principles of Patent Law, 3rd ed., New York, Foundation Press, 2004

^{29 360} F 2 d 499

^{30 3} USPO2d 1079 (Fed. Cir. 1986)

It was argued for the plaintiffs that Kirchner had conceived of the idea of using an emulsifier as an essential part of the invention and only asked the supplier to supply him a specified emulsifier. The court held that a person who supplies basic information or background knowledge to an inventor does not become an inventor. This means that even if communities supplied information regarding medicinal or agricultural value of certain plants to an inventor, such action would not qualify communities as joint inventors.

It is possible to cancel patents based on TK that were acquired "fraudulently". A case in point here is India. The Indian Council for Science successfully petitioned the cancellation of a patent awarded in respect of Basmati rice to the Texas based firm RiceTec, Inc³¹. It was argued that knowledge of Basmati constituted prior art and it was inherent and inalienable part of India traditional knowledge. The European Patent Office (EPO) in Munich revoked a patent granted earlier to a fungicide derived from the Indian medicinal tree, neem (Azadirachta indica). Farmers in India have used the neem tree for several beneficial purposes from time immemorial. The patent was challenged on grounds that the fungicide qualities of the neem and its use had been known in India for over 2000 years. EPO conceded that the patent amounted to biopiracy³². In 1997 the United States Patent and Trademark Office (USPTO) cancelled a patent granted to the University of Mississippi Medical Centre for the use of turmeric powder as a wound-healing agent³³. India challenged the patent on grounds that it lacked novelty. Turmeric has been used in India for wound healing for many years.

Three forms of patents can be recognised with respect to obtaining medicine from plants: patents on the structure of the compound, patents on the process of isolation and patents on specific uses of the drug.³⁴ It is submitted that traditional communities do not have the technical know-how to claim joint ownership to both product patents and process patents. For use-patents this could apply only where the use of the new drug is as provided for in TK. However, the issue of the "person"/the inventor will then become critical due to communal ownership. The other issue is one of novelty. Such use knowledge could have been in the public domain for many years.

M. Khor (2002). A worldwide fight against biopiracy and patents on life. (http://www.twnside.org.sg/ttle/patch.htm).

³² C Raghavan (2000). Neem patent revoked by European Patent Office (http://www.twnside.org .sg/title/revoked. Htm).

V. Shiva (2000). The turmeric patent is just the first step in stopping biopiracy. (http://www.twnside.org.sg/title/turcn.htm).

³⁴ Michael J Huft, Indigenous Peoples and drug discovery Research: A Question of Intellectual Property Rights, 89 Nw. U. L. Rev. 1678 at 1723

9.6 Trade Marks

A trade mark is usually defined as 'a sign used, or intended to be used to distinguish goods or services dealt with or provided in the course of trade by a person from goods or services so dealt with or provided by any other person'. ³⁵ A sign ³⁶ is deemed to include any letter, word, name, signature, numerical device, brand, heading, label, ticket, aspect of packaging, shape, colour, sound or scent.

Many people, both indigenous and non-indigenous are increasingly using indigenous words, designs and symbols in trade. Indigenous words, designs and symbols are being used in trade without permission from their traditional owners. Of greater interest is that indigenous people want to use and protect their own trade interests using cultural signs.

A Trade mark can be held for as long as the owners continue using the mark. Trade marks can provide longer protection to indigenous people. A cultural group, indigenous community or individual within such a community can register a trade mark.

Collective marks refer to a sign used by members of an association to distinguish goods or services from those of non-members. Indigenous associations may use collective marks. There are no special conditions attached to the use of collective marks.

Indigenous peoples of Australia ³⁷ use trade marks on a wide range of goods and services such as arts, cultural ceremonies, food preparation, medicines, tourism services and indigenous businesses. The marks used so far include indigenous words and designs, or English words that convey cultural concepts. Trade marks have been registered for indigenous festivals, concerts, plants, animals, clothing, music, film, and broadcasting amongst others.

An individual may be allowed to register a mark and hold it in trust for a community. In using trade marks it should be noted that many communities consider it offensive to use sacred words as trade marks.³⁸ Trade marks is a form of modern IPR that easily lends itself to use in the protection of TK. However, it is important that the law needs to be amended to allow indigenous communities to control the use, negotiate terms and control the flow of benefits. Also, indigenous communities should control commercial use of words and symbols as trade marks.

³⁵ S.17 Trade Marks Act 1995 (Cth)

³⁶ S. 6 Trade marks Act 1995 (Cth)

³⁷ T Janke, p.43

³⁸ Ibid., p.45

9.7 Copyright

Copyright law in Kenya is found in the Copyright Act, 2001. Section 22 of the said Act spells out what is copyrightable thus:

- "22.(1) Subject to this section, the following works shall be eligible for copyright:
- (a) Literary works
- (b) Musical works
- (c) Artistic works
- (d) Audio-visual works
- (e) Sound recordings; and
- (f) Broadcasts"

The Act provides for broadcasts to be copyrightable only after the work has been broadcasted.³⁹ Conditions for protection under copyright are contained in subsection three of the same section as hereunder:

"22

. . . .

- (3) A literary, musical or artistic work shall not be eligible for copyright unless –
- (a) Sufficient effort has been expended on making the work to give it an original character, and
- (b) The work has been written down recorded or otherwise reduced to material form"

It therefore follows that copyright is afforded work that is original and is in a fixed form. Copyright is meant to protect the expression, not the idea

Section 22(3)(a) speaks to the 'original' character of a work for it to qualify for copyright protection.

TK is not original. However, through the ages some people have attempted to make some improvements or adaptations to make the old appear to be in sync with the modern times. For instance, there have been attempts to modify or adapt the traditional costume used in traditional dances and ceremonies. However, whatever the modification, the theme remains the same. In pottery and sculpture, newer and modern implements may be used, but the idea remains the same. In a sense, it may be possible for an individual to modify the performance of a known idea, if it's a dance, through variation of movements to give the expression some form of 'originality'. Nevertheless, the bulk of the idea must reflect the tradition for it to qualify as cultural or

³⁹ S.22(2) Copyright Act, 2001

traditional. It is submitted that TK may qualify for copyright based on 'the extent of originality'.

Section 22(3)(b) requires that a material be fixed in some form for it to qualify for copyright protection. It is common knowledge that folklore, legends, music and dances are usually passed on 'orally'. In general, therefore, copyright protection is not available to TK. In practice, however, an individual may record by way of photography or audiovisual aids and claim ownership based on the Lockean philosophy of 'labour'.

Section 23(2) provides for the duration of copyright protection. This is put at 50 years after the life of the author(s) or after being put in the public domain. Most of TK has been passed on from generation to generation. One would therefore venture to suggest that according to the Copyright Act, the period of protection of TK, if any, is over and, therefore, everyone is free to exploit TK as they wish. In other words, TK may not be considered as deserving protection based either on its long existence or on the inability to ascertain when protection should have started. In general, the limitation of modern copyright law with respect to TK revolves around the issues of ownership, 'labour addition', originality, fixation and duration.

In Milpurrurru and others v Indofurn Pty Ltd and Others, 40 the defendant imported into Australia carpets woven in Vietnam which bore Aboriginal designs. The plaintiffs were three living Aboriginal artists and the Public Trustee claiming on behalf of the estates of deceased Aboriginal artists. Each of the Plaintiff artists had works which were known and stored in either the Australian National Gallery (ANG) or the Australian Information Service (AIS). Seven of the eight artworks in the carpets were reproduced in identical form and colour, the eighth was reproduced in a simplified form. Evidence showed that the ANG and AIS permitted the reproductions. Publications of ANG and AIS showed that the subject matter of the works dealt with stories that bore spiritual and sacred relevance to each of the artists. It was submitted for the plaintiffs that the painting techniques and use of totemic and other images and symbols were controlled by the Aboriginal law and custom. It was said that errors in reproduction would be very offensive to the tribe in question. The plaintiffs argued that the right to create paintings and other artworks touching on creation and similar stories, and to use pre-existing designs and clan totems resided in traditional custodians of the stories. Where a story or design was reproduced without authority, Aboriginal law provided that the traditional owners had a right to take action aimed at preserving the artwork in question and to punish those in breach.

⁴⁰ Unreported, 13 Dec 1994 at www.murdoch.edu.au/elaw/issues/v2n1/blakeney21.html

The punishment varied to include death, exclusion from participation in traditional ceremonies, removal of right to reproduce cultural art amongst others. One of the artists had created a story about the creator. She argued that the reproduction of the artwork in a manner in which the story would be trampled upon was contrary to the cultural use of the imagery in her artwork. She submitted that had the misuse of the artwork been brought to the attention of her family she would have been subjected to a number of sanctions including ostracism.

The court observed that the infringement had resulted in personal distress and potentially exposed the plaintiffs to embarrassment and contempt in their communities. The court quoted with approval *Williams v Settle* ⁴¹ that "anger and distress suffered by those around the copyright owner constitute part of the person's injury and suffering". The court expressed its difficulties with cultural works when it observed that:⁴²

"The statutory remedies do not recognize the infringement of ownership rights of the kind which reside under Aboriginal law in the traditional owners of the dreaming stories and the imagery such as that used in the artworks of the present applicants."

The court ordered delivery up of unsold carpets, damages of approximately A\$188,640 (KES 10 million). The carpets returned were burnt in a ceremony except one which was displayed in a museum. Damages were also awarded for the personal hurt and cultural harm suffered by the plaintiffs.

This case established that where unauthorized reproduction of such works involves a breach of copyright, customary Aboriginal law may be considered in quantifying damages. It is, however, unclear how this can be done. Under standard copyright cases, the measure of damages bears a relationship to the 'depreciation of the value of the copyright as a chose in action'.⁴³ In the case at hand, no evidence of a possible monetary loss was adduced.

All in all, the court in this case granted recognition to traditional Aboriginal concerns in the protection of artistic works. Issues that remain unresolved are how to protect traditional works of art in the public domain having exhausted the life of the artist plus fifty years, and how to protect ancient cultural works that are centuries old and whose "creators" died a long time ago. Also, many works are transmitted orally, without any form of fixation. The Copyright Act may not be up to the task in such cases. These issues point to the need for a *sui generis* form of protection.

^{41 (1960) 1} WLR 1072, 1086-1087

⁴² Transcript, p.66

⁴³ Sutherland Publishing Co. Ltd v Caxton Publishing Co. Ltd (1936) 1 Ch 323 at 336

The question whether copyright law can be used to protect designs of a traditional nature arose in Yimbulul v Reserve Bank of Australia 44 in which the defendant issued a commemorative banknote which bore the design of a Morning Star Pole (MSP), which had been created by the plaintiff, an Aboriginal artist. Evidence showed that MSP was central in Aboriginal ceremonies relating to deaths of important persons, and in inter-clan relationships. The plaintiff's design was carved from cotton wood and surmounted with a crown of Lorikeet and white cockatoo feathers. These represented the rays of the Morning Star. A vam leaf design was painted on the pole and this represented the yam spirit man who would climb the pole carrying the spirit of a deceased person to the Morning Star. The plaintiff had undergone several initiation rites which empowered him to paint the sacred objects of his people. He had learnt the clan's sacred designs and their meanings. Subsequent to the plaintiff's depiction of the MSP on the commemorative banknote the plaintiff was severely criticized by his people who argued that the maker of such poles had a cultural duty to his clan to ensure that a pole was not used or reproduced in a manner that could be considered offensive to its significance. The plaintiff sought to set aside his assignment of copyright on account of unconscionability. The court found the pole to be an original artistic work of the plaintiff in line with the Copyright Act, and that the plaintiff's copyright had been validly assigned. The court stated:

"Australia's copyright law does not provide adequate recognition of Aboriginal community claims to regulate the reproduction and use of works which are essentially communal in origin."

Whereas the copyright of the artist was recognized claims by the community failed.

In *Bulum Bulum & Anor v R & T Textiles PTY Ltd* ⁴⁵, Mr. John Bulum Bulum created in 1978 the Magpie Geese and Winter Lilies at the Waterhole, a bark painting with permission of the traditional owners of *Ganalbingu Country*. He later sold the work to an Arts and Crafts Centre which later resold it to a museum. It was reproduced in a book with his permission. A textile manufacturer modified the design and then used it without permission on fabric that was sold to shops where it would be made into dresses, shirts and fabric items. The artwork *Magpie Geese* and *Water Lilies at the Waterhole* depicts knowledge of *Djulibinyamuur*; the site of a waterhole complex in the Arafura swamp. It is believed to be the place where *Barnda*, the long

^{44 (1991) 21} IPR 481

^{45 [1998] 41} IPR 513

necked turtle, the creator ancestor, emerged and began ancestral travels. In his affidavit Mr. Bulum explained that:

"Barnda gave us our language and law. Barnda gave to my ancestors the Country and the ceremony and paintings associated with the country. My ancestors had a responsibility given to them by Barnda to perform the ceremony and to do the paintings which were granted to them. This is a part of the continuing responsibility of the traditional Aboriginal owners handed down from generation to generation"

It is believed that land ownership amongst Bulum's tribe has the duty of creating artworks, designs, songs and other aspects of ritual and ceremony. It was urged for the plaintiff that unauthorized reproduction interferes with the relationship between the people, their ancestors and the land. It was submitted that under traditional law Bulum did not need permission of traditional owners to licence the work to a book author but that he would have needed permission to licence the artwork for the scale of production engaged in by the defendants. It was common ground that copyright subsists in the 'Magpie Cheese and Water Lilies at the Waterhole' and that the plaintiff as the creator is recognized as the copyright holder. The traditional owners were concerned about the message the painting contains. The issue was whether the 'Magpie Cheese and Water Lilies at the Waterhole' was a work of joint ownership. The court found that 'joint ownership' refers to production of a work by two or more people. The court noted:

"A person who supplies an artistic idea to an artist who then executes the work is not, on that ground, a joint author with the artist. 46 Joint ownership envisages the contribution of skill and labour to the production of the work." 47

This ruling would appear to expose TK to abuse by crafty individuals who may rush to use the ideas from a community, 'fixate' it and therefore claim copyright. Many traditional communities are likely to loose their property using copyright laws in its current form.

The second plaintiff argued that Bulum held the copyright in the artwork in trust for the tribe. It was found that customary law allowed Bulum to licence the work and that there was no intention to create an equitable trust. An issue arose whether the first plaintiff had a fiduciary duty to the tribe. It was observed that fiduciary relationships require

"that the Fiduciart undertakes or agrees to act for or on behalf of or in the interests of another person in the exercise of a power or discretion which will affect the interests of this other person in a legal or practical sense". 48

⁴⁶ Malleys Ltd v JW Tomlin Pty Ltd (1961) 36 ALIR 352

⁴⁷ S. 32B(J) Designs Act 1906 (Cth)

⁴⁸ Hospital Products Ltd v United States Surgical Corp (1984) 156 CLR 41 at 96-97 per

The court held that Bulum had a fiduciary relationship to the tribe. That the artwork comprised of knowledge that had significant meaning to the members of the tribe. So though the artist had a right to pursue the exploitation of the artwork for his own benefit he was required to refrain from taking any steps which might harm the communal interests of the clan in the artwork. The court therefore stated that as a fiduciary, Bulum had the obligation not to exploit the work in a way that would harm communal interests, and, in the event of infringement by a third party to take steps to restrain and remedy the infringement. However, this fiduciary relationship did not create equitable interest in copyright. The tribe was said to have a right in *personam* against the fiduciart in case of breach of obligation. It is not clear to what extent an assignee for value of the legal title, who takes without notice of a "Bulum Bulum equity" will take title without encumbrance.

In this matter, the court treated customary law as evidence to find that Mr. Bulum owed a fiduciary relationship to the tribe.

This case further illustrates the limitation of copyright in protecting cultural artistic works in several ways. Firstly, it is the artistic work expressed in a tangible form that is protected but not the underlying cultural knowledge. Secondly, a person is not allowed to hold traditional knowledge in trust or as a fiduciary for others. Thirdly is the issue of duration. Whereas traditional knowledge is passed on from generation to generation copyright protection is only valid for up to 50 years after the life of the author. In this respect therefore, copyright is not an effective form of protection of TK.

9.7.1 Protection of indigenous dance performances

Song, dance and ceremony are a part of cultural life of almost all Kenyan ethnic communities. In fact, most ceremonies are punctuated by song and dance, including funeral ceremonies. The songs used reflect a certain ceremony or occasion. Over and above these, it is now common to hold festivals at which music and dance from various communities are displayed. In some of the ceremonies such as the Bukusu circumcision ceremony, the body is splashed with some designs. These reflect the cultural and social life of a community. Some of the dances use instruments such as drums, one-stringed 'guitars' horn (flute) and specific costumes. The songs, dances and body patterns are owned by the community from which they emanate. Some communities perform ceremonies at certain festivals or on occasions such as 'independence' day celebrations.

The main issues of intellectual property in dance performances are:

- 1. Whether a dance is a protected performance
- 2. Whether dance is protectable by copyright as a dramatic work
- 3. Whether body paintings are protected by copyright as artistic works
- 4. Who has rights in photography?

Copyright subsists in dramatic works that are both original and in material form (i.e. fixed). A dramatic work has been defined thus:⁴⁹

"a piece for recitation, a choreographic work or entertainment in dumb show, the scenic arrangement or acting form of which is fixed in writing or otherwise, and a cinematography production where the arrangement, the acting form or the combination of incidents represented gives the work an original character"

This definition is similar to that of 'folklore' under Kenya copyright law which includes folk songs, dances, and folk plays.

An original work is said to be that originating from the author – a result of the author's own efforts. Traditional dance is handed down from generation to generation. It follows pre-existing themes. However, the performers give it individual interpretation. Copyright may exist in traditional dances where the individual performers bring their own skill, talent and technique to a pre-existing dance.⁵⁰ A dance performance may thus constitute a dramatic work. Copyright is not considered to exist in spectacle or performance.⁵¹ Traditional dance is passed on orally and learnt in performances. It must therefore be fixed in a form such as a DVD to enjoy copyright protection.

9.7.2 Current practices to make TK copyrightable

The modern technology of recording or putting TK in a fixed form such as photography, CD, VCD can be used to bring TK to meet the condition of 'fixation'. Modern technology can be used in enhancing the protection of TK by helping with fixation. Modern technology offers communities an avenue for preserving, promoting and passing on TK to future generations. However, digitization and documentation exposes TK to misappropriation. Hence, the need for protection.

⁴⁹ S. 204 Copyright Act 1968 (Cth); s.2 Copyright Act, 2001

⁵⁰ Mipurrurru v Indofern

⁵¹ Victoria Park Racing & Recreation Grounds Co v Taylor (1937) 58 CLR 479

9.8 Industrial Designs

Industrial designs are considered to be:

"features of shape, configuration, pattern or ornamentation applicable to an article, being features that, in the finished article, can be judged by the eye, but does not include a method or principle of construction" (s.4(1) Designs Act 1906 (Cth).

In traditional culture designs, motifs, emblems, patterns and other cultural objects signify a belonging and connection to a particular group of peoples. Registration deals with visual appearance but not the function of the object. Designs are features of ornamentation or shape applied to an article that is purely aesthetic and adds to an articles' appeal to consumers. Design does not include the method or principle of construction.⁵²

9.8.1 Sculptures

Several cultural groups in Kenya produce sculptures, whose shapes are neither new nor original. Carvings of wild animals or of persons can be found across several cultural groups. The surface of some of the carvings has burnt or painted designs superimposed on them. Such burnt or painted design may be registered as such. The artistic works on the surface of the painted carvings could be protected by copyright.

9.8.2 Baskets weaving

Handicrafts form part and parcel of life in many communities in Kenya. They contribute to trade within a certain community. Handicrafts of any community have a unique design, style, reputation and goodwill. Due to these characteristics, TK in handicrafts is amenable to imitation and abuse. Many communities in Kenya weave baskets from a variety of materials. The design of the baskets varies from community to community. The Luo and Luhyia are known to weave baskets from reeds which come in various sizes. The Agikuyu are well famed for the '*ciondo*', a type of basket made from sisal. It is feared that the reputation, goodwill, design and style associated with handicrafts from various communities are susceptible to misappropriation and imitation. This problem appears to be global. Latin American and Caribbean countries have expressed this problem as follows:⁵³

". . . various representative sectors of communities and groups that produce

T Janke Minding Culture: Case Studies on Intellectual Property Rights and Traditional Cultural Expressions – The Carptes Case, Prepared for WIPO at http://www.wipo.int/tk/en/ (28 November 2009), pp. 71-72

⁵³ Group of Latin American and Caribbean Countries (GRULAC), 2001

traditional manifestations of textile art and handicraft (pottery, sculptures, etc) have reported that their works and industrial designs are being subjected to more subtle copying than the imitation or plagiarizing of the style of the original art would be, but nonetheless equally prejudicial to their economies. Some works and designs of textile goods are produced using traditional methods of considerable antiquity. There have been situations in which persons alien to the place of origin of the art or the design have come to that place in order to learn traditional methods, but then reproduced them abroad, using handicraft or even industrial methods. In such cases, original designs are stylized in such a way that, although it is not possible to allege that any design or specific work has been copied, the style aspect of the product directly evokes the original products of the community or region that originally created them."

Design law could recognize only the article, not the art of making the baskets (method of manufacture). It is unclear whether copyright protection could be available. However, design protection is only available to commercially produced goods. This makes design protection generally inappropriate to indigenous designs. A form of registration in perpetuity could be appropriate for design protection.

9.9 Geographical Indications (GI)

GI show that goods originate from a given country, region or locality and that the said goods have a quality reputation or other characteristic attributable to their geographical origin. Indigenous communities can use GI for their clan names, language or words. Some forms of sculpture and handicrafts could also benefit from geographical indications.

III. Issues of non-protection of TK

Non-protection of TK has so far resulted in a number of issues, which largely revolve around loss to the country in general and the community concerned in particular.

9.10 Economic loss – no benefits to indigenous groups

Materials from communities have been expropriated without any benefits going back to the communities concerned. TK knowledge has been commercialized by non-members of given communities to the exclusion of communities. This sentiment has been well captured in the following observation:

"Local knowledge about the pharmaceutical properties of plants was recorded; secret-sacred rituals were described and recorded; distinctive local music was captured; and, graphic designs on pottery, woodwork and the human body

were photographed or copied by drawing techniques. This transfer and fixation of traditional cultural expressions and knowledge took place in a variety of contexts, circumstances and situations, mainly for preservation purposes and scholarly research by Western institutions and researchers. These valuable safeguarding efforts have also led inadvertently to unauthorized commercial exploitation."⁵⁴

Out of between 25,000 to 75,000 plants that are used in TM, only 1% is known to scientists. Part of the current modern drugs have been developed on the basis of TK. However, the economic benefits are not equitably shared. The author advocates for collaboration with local communities to develop tools for protection of traditional knowledge.⁵⁵ It is recognized that indigenous peoples and local communities are excluded from benefits that accrue from their TM. Ready availability of ethnobotanical knowledge in the public domain further undermines the chances of traditional communities from benefitting from their knowledge.

9.11 Biopiracy

This term refers to the misappropriation of knowledge and/or biological materials of traditional communities.⁵⁶ The term 'biopiracy' therefore is negative and it connotes theft. A common form of exploitation of a valuable plant is the mass harvesting and exportation of some plants, thereby threatening their viability. Such a threat poses several problems to the communities where such a plant is found. Firstly, although its harvesting is based on knowledge held by the community, the community does not benefit from biopiracy as no efforts are made towards 'benefits sharing'. Secondly, biopiracy distorts the ecosystem. The tiny animals and other plants that co-exist with the plant being 'stealthily' harvested are exposed to destruction, thereby further worsening the ecosystem. Thirdly, biopiracy destroys biodiversity. Communities that have seen to the conservation of the species in demand are not motivated to continue nurturing it. Fourthly, biopracy robs a community of a property that it has owned through the centuries. There is therefore need to find appropriate ways of preventing biopiracy while at the same time ensuring that humankind can benefit from the medicinal value of plants within its environment. This calls for

⁵⁴ Ibid

G Aguilar 'Access to genetic resources and protection of traditional knowledge in the territories of indigenous peoples' Environmental Science & Policy 4(4-5) 2001, pp.241-256

Stephen A. Hansen & Justin W VanFleet, Traditional Knowledge and Intellectual Property, Washington, American Association for the Advancement of Science (AAAS), 2003, p.5

exploitation of medicinal plants in a manner that ensures their continued availability (sustainable development).

A good example of a plant that is threatened with extinction due to mass harvesting and export is the sandalwood tree (Santalum album). Although it is not indigenous to East Africa, it exists in areas with moderate rainfall and plenty of sunshine. This tree is said to have been used by various communities, not only in East Africa but also in Asia, for more than 4,000 years. The tree serves as food—people eat its seeds and cattle eat its leaves. The oil from the tree has been traditionally used in the management of a host of diseases including ulcers and skin ailments and it can be used as a diuretic, disinfectant and a sedative.⁵⁷ The oils from this tree are also used in the processing of soaps, candles, medicines, cosmetics and a host of other products. For a long time, this tree has been 'biopirated' by businessmen keen to make a quick profit. The tree was extensively cleared without due regard to sustainable development. Its near extinction has been a wakeup call to many communities. For example, some communities in central Kenya have formed vigilante groups to prevent biopiracy and to promote conservation efforts involving the sandal tree.

9.12 Desecretion of shrines

Shrines hold a certain esteemed position in the lives of a community. These are largely worship places that link the community to the metaphysical/the spiritual. Communities are very sensitive to any appearances of abuses or misuse of shrines. To an outsider, a shrine may not carry as much meaning. It is vital that shrines be protected to appease the spirits of both the living and the dead within a given community.

9.12.1 What is sui generis system of Protection?

Whereas most inventions are protected by way of patents or plant breeders' rights, TK does not fit neatly into any scheme of intellectual property rights protections. For example, indigenous communities do not qualify as 'joint inventors'. Case law from USA is to the effect that for one to qualify as a joint inventor, each joint inventor must contribute to the inventive conception. In other words, the inventive activity of the joint owners should lead to the invention. Courts do not think that a person who supplies background information leading to an invention deserves to become a joint

⁵⁷ M Wekesa, Swara

⁵⁸ Monsanto Co. v Kamp, Jahn & US Commissioner of Patents 360 F.2d 499, 146 U.S.P.Q. 431, 123 US. APP. D.C. 365 (1965)

inventor.⁵⁹ This means that information supplied to 'biopirates' can lead to loss of 'property' in traditional medicine. Usually such background information is available before the conception. However, TK does not contribute to all aspects of conception of a plant derived drug—especially regarding the chemical structure and method of extraction. A person who participates in either identifying the chemical structure or in isolating the chemical compound qualifies to be a joint inventor. Such knowledge is generally beyond the realm of a traditional healer or herbalist. Issues of association with modern forms of IPRs such as individual ownership of property, conditions for protection and duration of protection make modern IPRs largely unsuitable for protecting TK.

In summary, there is a case for protecting indigenous knowledge, for sharing the benefits of such knowledge with traditional communities and for countries of East Africa to ensure that they regulate the exploitation of traditional medicine both within and outside of their borders. This is the only way to ensure sustainable development in the sector of medicinal production involving plant materials.

9.13 Sui generis system of protecting traditional medicine

WIPO has identified the following as objectives that would guide policy formulation and eventual legislation of a sui generis form of IPRs:⁶⁰ to create an appropriate system to access traditional knowledge, to ensure fair and equitable benefit-sharing for TK, to promote respect, preservation, wider application and development of TK, to provide a mechanism for the enforcement of rights of TK holders, to improve the quality of TK based products and remove low-quality traditional medicine from the market, to promote the conservation and sustainable use of biological resources and associated TK, to promote the legal safeguarding and transfer of genetic resources associated with TK, to promote the development of indigenous peoples and local communities, to recognize, respect and promote the rights of indigenous peoples and local communities, to improve scientific capacity, to promote transfer of technology which use TK, to promote and recognize innovation, and to promote development of native arts and crafts.

⁵⁹ Idacon, Inc. v Central Forest Products, Inc. 3 U.S.P.Q.2d 1079 (Fed. Cir. 1986)

WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore 2006 Document No. WIPO/GRTKF/IC/9/INF/5 at http://www.wipo.int/en

Various forms of legal protection have been identified.⁶¹ These include: laws on traditional knowledge, laws on IPRs, laws on unfair competition, laws on contracts, laws on civil liability, laws on indigenous peoples, criminal laws, fisheries laws and environmental laws, customary laws and protocols, and, regimes giving access and benefits sharing.

Several doctrines have informed *sui generis* systems so far in place.⁶² These include: the grant of exclusive property rights for TK enabling rights holders to exclude others from certain acts. Such rights are to be communally held or individually. The other one is the use of prior informed consent (PIC) which is key to effective protection of TK, except access for customary use. The third doctrine is compensatory liability approach. This is useful for commercialization. Those who commercialize TK should pay compensation to holders of TK, and reward TK holders for conservation efforts. However, there should be no attempt at restricting access. This form is more appropriate for traditional medicine. Peru and Philippines have set up funds for such purposes.

Another doctrine is that of unfair competition approach. This is meant to prevent misleading and unfair competition, passing off, and unjust enrichment. This approach has been used in trade marks and geographical indications. It can be used to supplement PIC.

Another doctrine hinges on recognition of customary law. This provides a basis for protection of TK. The Philippines law makes traditional/customary law as the applicable law for the settlement of disputes relating to TK. TK is susceptible to misappropriation. Protection against misappropriation is yet another doctrine. This aims to prevent unauthorized access to recording of or disclosure of protected TK, unauthorized commercial use of protected TK, third party IP claims over protected TK subject matter, culturally offensive, degrading or inappropriate use of TK material, and taking inequitable commercial advantage. The doctrine of misappropriation is a common law doctrine that has been incorporated in several legislations. For example, the Kenyan Industrial Property Act of 1989 used the misappropriation doctrine in reference to utility models.

It is well known that traditional communities indeed have traditional knowledge of medicinal plants. Also that these plants are under the overall control of countries within whose borders they grow. Further, modern forms of intellectual property rights are inadequate in protecting indigenous knowledge. It should be explicitly stated that protecting TK or TM is a way

⁶¹ WIPO, ibid

⁶² WIPO, ibid

of preserving a culture. Such protection can help preserve the identity of a people, conserve the environment and promote sustainable use.

The African Model law ⁶³ addresses issues relating to biological resources such as conservation, sustainable use of biological and genetic resources including community knowledge and technologies. Part III addresses issues of access to biological resources. Article three thereof recognizes the use of PIC mechanism. Article 10 proposes the formation of a national institution to process and deal with applications for access. Part IV recognizes community rights to their biological resources, their innovations, knowledge, technologies, benefits sharing, the exercise of collective rights and customary law whether oral or written. Article 23 provides for recognition of community intellectual rights. Recognition is granted to community intellectual rights whether these are written or not, community innovations receive automatic protection whether registered or not, and, the availability of certain TK in the public domain is not a bar to recognition of community rights. Article 23 can be hailed as a 'modified' patent. Instead of individual ownership it recognizes communal ownership. The element of 'innovative step' does not arise given that one is dealing with knowledge passed on from generation to generation. The aspect of 'non-obviousness' or of knowledge being in the public domain is accepted under such a regime. Articles 12 and 22 address the question of benefits sharing. These provide that benefits resulting from commercialisation of a product based on TK shall be shared with the community, and within the community on a gender based equitable basis. These two articles therefore make the community an automatic co-owner and beneficiary of the products derived from TK. But what happens when such a product is patented for international protection? Is a 'trust' automatically introduced by operation of article 12? It seems only plausible that the patentee be seen to be a fiduciary and trustee on behalf of a given community. What of the institution created to enforce protection of community rights? Can such an institution be considered a 'trustee' for the community? These are issues that require clarification when countries opt to use the African Model Law as a template. All in all, this Model Law can be a useful guide. However, it did not attempt to address protection of traditional cultural expressions (TCE) or expressions of folklore (EoF).

⁶³ The African Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources (OAU Model Law, Algeria 2000)

9.14 Sui generis: Practices from other countries

For a long time, there was no discussion about sharing the benefits of intellectual property rights with indigenous people relating to drug development. It was not until governments of developing countries realised the value of medicinal plants that they started to campaign for benefits sharing. People argued for the need to give incentives to local communities so that they could continue nurturing the desired species of plants. The question of conserving biological resources came up during negotiations on the Convention on Biological Diversity. The 1992 Convention on Biological Diversity provides that States have control over genetic resources within their jurisdictions and, where genetic materials are exploited, there should be an arrangement for the sharing of benefits with the local community in order to secure sustainability.

Malia Talakai ⁶⁴ surveyed the countries of the South Pacific with regard to intellectual property and safeguarding traditional cultural expressions. It was found that expressions of traditional culture are kept in cultural institutions such as museums, archives, libraries and information services. They are aware that recording, digitizing and disseminating a traditional song or design would easily open a way for their misappropriation. Respondents were aware that Western intellectual property laws do not adequately cater for the needs of traditional cultural expressions. They expressed the need for model laws that can protect the intellectual property needs of traditional groups.

Being aware of such limitations, countries were allowed to work out a sui generis (unique) form of protection where they thought the current IPRs may not be applicable. This is provided for in the Trade Related Aspects of Intellectual Property Rights (TRIPS) Code of the World Trade Organisation (WTO). The African Union (AU) proposed what is called 'community rights' for the protection of TK. Many countries in Africa have not domesticated the AU proposition. Some scholars argue that property rights in TK should be located at the community level for sustainable development and investment.⁶⁵

Brazil set up a Registry ⁶⁶of intangible cultural assets in 2000 to protect intangible cultural heritage. In Brazil, cultural heritage is defined as:

M Talakai Intellectual Property and Safeguarding Cultural Heritage. A Survey of Practices in the South Pacific, WIPO 2007 at http://www.wipo.int/en

T Swanson & T Goeschl 'Property Rights issues involving plant genetic resources:Implications of ownership of economic efficiency' Ecological Economics 32(1) 2000, pp.75-92

Registry of the Intangible Heritage: Final dossier of the activities of the Working Group on the Intangible Heritage

"a set of cultural assets, material and intangible in nature, referring to the action, the memory and the identity of the different groups that form the Brazilian society"⁶⁷

This registry has been described as a vehicle for the preservation of cultural heritage. This registry functions as a database for the storage of all information touching on culture and for the dissemination of the same. It recognizes the community and individual rights as apportioned by culture.

The Smithsonian Global Sound Project (SGS) ⁶⁸ in USA was launched in 2005 to avail traditional music through the Internet. It holds over 35,000 individual tracks of music, cultural, traditional and natural sounds. It seeks

"to make diverse cultural expressions broadly accessible to the public in an educational way and to nurture community-based music and musicians by making individual recordings available at a reasonable price." ⁶⁹

To use a recording licence fees must be paid to SGS. Copying of any material on SGS website is prohibited. Downloading is available at a fee. Some of the money is channeled back to the communities. SGS has two regional archives the International Library of African Music (ILAM) in Grahamstown, South Africa, and the Archives and Research Center for Ethnomusicology (ARCE) in New Delhi, India.

The American Folklife Center (AFC) which is part of the Library of Congress of USA has the duty of preserving and presenting American folklife consisting of traditional, expressive, shared culture of various groups in the USA. The AFC collaborated with the Omaha Tribe and produced an album and tape recordings of the Omaha Indian songs. The tribe was provided with a complete set of the recordings. The copyright policy provides that permission of the Omaha Tribe is necessary for distribution, reproduction, or other use of the music. The Omaha Tribe has the final say on the use of the music.

The museum of New Zealand Te Papa Tongarewa ⁷¹ is a national museum tasked with collecting, preserving, disseminating cultural heritage of New Zealand. It assembles tangible heritage of New Zealand. It acknowledges local communities as the 'spiritual owners' while the Te Papa is the guardian. Te Papa's research findings are disseminated to the community.

⁶⁷ The Brazillian Federal Commission 1988, Article 216

⁶⁸ www.folklife.si.edu/index.html (10 December 2008)

⁶⁹ www.smithsonianglobalsound.org/ourstory.asps (10 December 2008)

⁷⁰ www.memory.loc.gov/ammem/omhhtml/omhhome.html (10 December 2008)

Museum of New Zealand Te Papa Act 1992, http://www.legislation.govt.nz/libraries/contents/om isapi.dll?clientID=553312052&infobase=pal statutes (11 December 2008)

The Hopi Tribe of Arizona, USA, has had its ceremonial dances tape recorded and sold to foreigners. Their designs from skilled Hopi potters have been replicated by non-Hopi's. The Hopi's *katsinas* dolls, which are brightly painted wooden dolls with spiritual powers have been copied and used in inappropriate settings.⁷² To prevent this form of abuse, a protocol ⁷³ for Research, Publications and Recordings was set up according to which informed consent is required, use of recording devices is restricted, and subjects of a project involving cultural work are to be justly compensated. Following conclusion of this protocol, the Hopi Tribe is actively involved in projects relating to preservation and digitization of cultural heritage to prevent dissemination of knowledge and information without prior informed consent of the Tribe.

The Sudanese Traditional Music Archive (TRAMA) 74 is a research and documentation centre within the Institute of African Studies of the University of Khartoum. It collects, documents, preserves and disseminates traditional music and folklore. It makes live recordings amongst ethnic communities. TRAMA obtains consent from tribal leaders before recording performances. Fifty percent of cassette tapes are given to the groups to sell and obtain money.⁷⁵ TRAMA collaborates with other organizations with similar goals to reach a wider coverage. TRAMA aims to "promote awareness of IPRs of local artistes and communities and, at the same time, make available, monitor and preserve Sudanese cultural heritage". 76 TRAMA is aiming at digitization of materials in its archives. It is, however, not clear how the question of copyright is handled, whether copyright belongs to the communities from which the materials are sourced or whether copyright is assigned to TRAMA. It is also unclear how TRAMA deals with the rest of the recorded materials in terms of benefits to the community. It is also not clear whether the rights of performers are respected.

These diverse efforts from different parts of the world can be considered as being beneficial to the traditional communities. It has been observed that:

"Through creating and trading in distinctive cultural goods and services, supported by strategic use and management of IP rights, communities can derive cultural and economic benefit from their rich cultural heritage. Clarity on IP options, especially in the digital world, could spur new mutually-beneficial collaborations between institutions and communities, so promoting wider respect for cultural diversity, facilitating educational and scholarly

⁷² http://www.nau.edu/~hepo-p/current/hopi ipr.htm (11 December 2008)

⁷³ http://www.wipo.int/tk/en/folklore/culturalheritage/index.html (10 December 2008)

⁷⁴ www2.uofk-edu/index.php?id=125 (22 November 2008)

⁷⁵ A Seeger & S Chaudhuri (2004). "Archives for the Future" Global Perspectives on Audiovisual Archives in the 21st Century", ARCE-AIIA, Delhi & Seagull, Kolkata

⁷⁶ www.wipo.int/en/folklore/culturalheritage/index.html (20 November 2008)

opportunities, enriching and enhancing museum and archival services and stimulating creativity and community-development. In this sense, the WIPO Creative Heritage initiative is prospective."⁷⁷

The above efforts at protecting TCEs/EF while being commendable do not represent the ideal situation. Efforts at harmonizing protection of TCEs/EF are ongoing. As one author has observed:

"There are a number of challenges, such as refining the scope of the project, integrating customary laws and notions to a greater extent, clarifying what is meant by the "misappropriation" of TCEs (for example when is a use of a TCE an illegal misappropriation and when is it legitimate borrowing), balancing claims of access against claims of exclusivity and protection, and, finally, finding a common indexical language."⁷⁸

The Philippines: Indigenous Peoples Rights Act 1997 defines indigenous cultural communities (ICC)/indigenous peoples (IP) as a group of people having 'common bonds of language, customs, traditions and other distinctive cultural traits...'⁷⁹. The Act establishes an institution called the National Commission on Indigenous Peoples (NCIP) as the primary government agency responsible for handling matters of ICC/IP. The traditional concept of property ownership is captured at section five which provides:

"SEC. 5. Indigenous Concept of Ownership. Indigenous concept of ownership sustains the view that ancestral domains and all resources found therein shall serve as the material bases of their cultural integrity. The indigenous concept of ownership generally holds that ancestral domains are the ICC's/IP's private but community property which belongs to all generations and therefore cannot be sold, disposed or destroyed. It covers sustainable traditional resource rights."

This definition recognizes the communal nature of property ownership. It also recognizes that such (communal or traditional) property belongs to all generations. The Act considers rights in traditional property as being sustainable resource rights. This definition helps to overcome the Western notion of individual ownership of property and therefore paves the way for a sui generis form of intellectual property rights protection in cultural property.

Through this Act the state takes on obligations to recognize, protect, preserve, and develop indigenous culture, traditions and institutions, and at the same time guarantees the rights of indigenous cultural communities/indigenous peoples to preserve, develop, and protect the use of their indigenous knowledge. With respect to access to biological and genetic

⁷⁷ ibid

⁷⁸ ibid

⁷⁹ S.3(h)

resources, the Act makes 'prior informed consent' mandatory.⁸⁰ The Act recognizes customary law as the operative law in case of disputes involving traditional knowledge.⁸¹ This Act is indeed 'revolutionary' as it overcomes all the barriers presented by current regimes of intellectual property rights. It offers both a legal and institutional framework for the protection of all facets of traditional knowledge.

9.15 Do Free Trade Agreements (FTAs) endanger the idea of *Sui generis?*

The idea of a FTA has become very popular with many states of late. 82 This is fuelled by the fact that trade negotiations under WTO take a very long time to conclude. As a result, many countries have concluded FTAs either bilaterally or regionally, either North-South or South-South. Since TK does not neatly fit in the conventional regimes of intellectual property rights, two approaches to 'protection' of TK have emerged in the negotiations for FTAs. One form of protection is that pushed by the corporate world under which corporate rights to exclude, own and sell are granted. The second form of protection is that of collective rights to use, share, improve and develop TK further within the local contexts. The former looks at TK as intellectual property to be privatized to serve corporate interests. Developed countries try to block any multilateral agreement on the protection of TK so that they can easily exploit TK without any restrictions. The second approach looks at TK as a 'collective heritage' that states should not even regulate.

It has been observed that discussions during FTAs take two different forms depending on whether USA is involved or not.⁸³ Where FTA negotiations involve USA the other negotiating partner attempts to introduce barriers to the grant of US patents using special provisions such as disclosure of origin, prior informed consent (PIC) and benefits sharing. The US normally and routinely rejects this to protect her biotech industry. When the US is not involved, then the negotiating partners work out a raft of provisions to enable them to exploit TK. However, irrespective of the parties involved in FTAs, a common trend is that TK is subjected to intellectual property rights

⁸⁰ SEC. 35. Access to Biological and Genetic Resources. Access to biological and genetic resources and to indigenous knowledge related to the conservation, utilization and enhancement of these resources, shall be allowed within ancestral lands and domains of the ICCs/IPs only with a free and prior informed consent of such communities, obtained in accordance with customary laws of the concerned community.

⁸¹ S.65

⁸² SR Cervantes, FTAs: Trading Away Traditional Knowledge, in Grain, March 2006 at http://www.grain.org (10 August 2008)

⁸³ ibid

of exclusive monopoly rights to produce, use, buy and sell innovations. What clearly emerges from all these negotiations and agreements is that TK becomes a commodity subject to conventional IPRs and the community's ownership of TK disappears. Some scholars have noted that:

"Free Trade Agreements do not recognize the rights of Indigenous peoples, nor do they protect our traditional knowledge. Furthermore they promote the interests of the market above collective rights."⁸⁴

In the absence of an international instrument on the protection of TK, many governments are committing themselves through bilateral and regional FTAs to relegate TK to a commodity to be bought and sold under conventional IPRs regime.

Where countries have a *Sui generis* law protecting TK FTAs are being used to circumvent such laws. A case example is Costa Rica. Costa Rica is a member of the US-Dominican Republic-Central American FTA (hereinafter 'CAFTA'). Costa Rica has a Biodiversity Law that came into effect in 1998. This law has provisions on proof of origin for biological materials before patenting, the rights of traditional communities to oppose access to biological resources, and the power of a government institution to veto any patent or plant breeders rights that infringe that law. CAFTA puts more emphasis on patents and plant breeders rights. The US uses FTAs to reject any link between patents and disclosure requirements. Besides, CAFTA does not provide room for individual countries to introduce rules limiting access to biological resources. Consequently, upon becoming effective, CAFTA will render the Costa Rica law redundant. In effect, FTAs reduce TK to a commodity to be privatized, monopolized and used to exclude others. By agreeing to FTAs, developing countries are effectively legalizing biopiracy.

9.16 Which way for Kenya?

Kenya does not have a *sui generis f*orm of IPRs for protecting traditional knowledge. The country has set up a task force on traditional medicine whose efforts had not reached the legislative stage at the time of writing. To this end, Kenya is attempting to address the needs of one form of traditional knowledge. However, before that matures, the country continues to rely on conventional forms of IPRs and on contract, their shortcomings notwithstanding.

⁸⁴ International Indigenous Biodiversity Forum in its opening statement at the Convention on Biological Diversity ad hoc open-ended working group on access and benefit sharing, Granada, 30 Jan – 3 Feb 2006, at http://www.ipch.org/pipermall/ipcb-net_ipch.org/2006 (12 May 2007)

⁸⁵ Cervantes

The use of contract came up in the Baringo Aloe Bioenterprise Development Project. 86 The project involved the use of aloe plant in the manufacture of several aloe related products. Aloe is a plant that thrives very well under dry/semi-arid conditions of Baringo in Kenya. The plant itself has been used by the local community for medicinal purposes for a variety of ailments for many generations. A factory was set up in Baringo using equipment donated by the government and some brought in by an investor (Land Mawe Ltd). To ensure a steady flow of raw materials, a contract was entered into between the local community (KOKISA), the government (represented by KEFRI) and the investor (Land Mawe Ltd). KOKISA is comprised of local communities living in Koriema, Kimalel and Sabor sub-locations in Baringo. The contract was in respect of the exploitation of Aloe vera, a plant that supports dryland livelihoods and whose export is regulated by CITES. CITES emphasizes sustainable use of natural resources. The contract provides that the factory would be co-owned by KOKISA (60%) and Land Mawe Ltd (40%), with a proviso that KOKISA is to take over full ownership over time. The net profits of the project are to be shared in the ratio of 2:2:1 for KOKISA, Land Mawe Ltd and government, respectively. There is also a provision for KOKISA to eventually buy out Land Mawe Ltd. The contract allows Land Mawe Ltd to bring in her experts and to market and commercialize the aloe products for five years, renewable. The project is intended to enable the locals benefit from their traditional knowledge in aloe plants, help conserve the biodiversity of the area by maintaining the aloe plant and to benefit from technology transfer. In case of any innovation, the contract provides that each party would make its own claims. This provision, unfortunately, does not protect the harbingers of traditional knowledge from exploitation. This probably explains the weaknesses of relying on contracts to protect TK.

There is still need to tackle the protection of TK inherent in traditional cultural expressions/expressions of folklore. It has been shown that current IPRs regimes premised on the Western notion of property ownership are inadequate to protect the interests of traditional communities.

⁸⁶ E-mail communication from Mr.Kavaka Watai, a Research Officer at the Kenya Forestry Institute (KEFRI)

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