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Africa University (AU)
Fairview Rd, Off Nyanga Rd
P O Box 1320
Mutare
Zimbabwe
Telephone (263-20) 66788, 60075

African Regional Intellectual Property Organisation (ARIPO)
11 Natal Rd
Belgravia
P. O. Box 4228
Harare, Zimbabwe
Telephone (263-4) 794 054, 794 065, 794 068
Cell: (263) (0) 731 559 987, 731 020 609
Fax: (263) (4) 794 072/3

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Innocensia John (*University of Dar es Salaam*)
Jameson Mbale *(Copperbelt University, Zambia)*
Abudho Japheth Odhiambo (*Kenya High Court*)
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Correspondence to: Munani Mtetwa, Managing Editor on *ajipjournal@africau.edu*

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USING INTELLECTUAL PROPERTY RIGHTS TO PROMOTE BROADBAND DIFFUSION IN KENYA: SOME POLICY AND LEGAL CONSIDERATIONS

Abudho Japheth Odhiambo
PhD in Law Candidate at the University of Dar es Salaam, Tanzania

Abstract

This article examines and makes proposals on how Intellectual Property Rights (IPRs) can be used to promote broadband diffusion in Kenya. This was motivated by the increased demand for access to information and telecommunication technologies (ICTs) related to the continuous development of technology intensive products and services that are Internet-based. The resultant demand-pressures make high speed Internet critical for the optimal realisation of the socio-economic benefits of the Internet hence the essence of broadband. Broadband diffusion is therefore necessary. However, the problem is that IPRs have not been adequately mainstreamed in broadband diffusion. The study aims at examining how IPRs can be used to improve broadband diffusion. The study is qualitative in design. The research finds and concludes that patents, utility models, industrial designs, trademarks, copyright and related rights can be used to enhance the technological innovations and content development which drive broadband diffusion. The article recommends the development of a national IP policy that provides for, inter alia, an appropriate innovation model, strategic use of IPR information, investment in broadband SMEs, awareness creation, and commercialisation of broadband innovations, mainstreaming IPR into government ICT initiatives, and financing broadband innovation. The article also recommends legislative review, review of broadband licenses and protection and enforcement of IPRs in broadband.

Keywords

broadband, broadband diffusion, intellectual property rights

Introduction

Since its advent, the Internet has generally transformed society and has retained a significant potential to advance socio-economic development (Lessig, 2001). Concurrent to this import is the phenomenal increase in the demand for access to information and communications technologies (ICTs). The increased demand drives and gets driven by the continuous development of technology intensive products and services that are Internet-based (Kramer, Jenkins and Katz, 2007;

Cincera, Dewulf and Estache, 2012). The increasing demand and the resultant demand-pressures make high speed Internet *sine qua non* of sorts to the optimal realisation of the socio-economic benefits of the Internet (Communication Systems, 2000).

Broadband offers a fundamental solution to the foregoing state of affairs because it provides high-speed, always-on connections for large numbers of subscribers as well as the requisite services and applications directed as facilitating such access (Kim *et al,* 2010). These features in return facilitate the contribution of Internet to innovation, increase in productivity, and social and economic development at a much faster and effective pace (Qiang *et al*, 2009; International Telecommunication Union, 2003).

Broadband has been characterised by a combination of connection capacity (bandwidth) and speed. In this characterisation, the International Telecommunication Union (ITU) defines broadband as a network offering a combined speed equal to, or greater than, 256 Kilobytes per second in one or both directions (ITU, 2005; ITU, 2011; Kelly and Rossotto *eds,* 2012). The characterisation emphasises a specific data transfer speed, and by extension, technology. In this sense, it portends the limitation of narrowness, since broadband should be viewed more broadly as the ability to deliver data and foster innovation (Coyle and Williams, 2011). Consequently, broadband in the context of this study shall refer to an ecosystem integrating infrastructure used to deliver data to users, high-speed and always on Internet access and data transfer, as well as the requisite services and applications directed at facilitating such access (Kim, Kelly and Raja, 2010). The definition takes cognisance of the capability that serves the immediate market context and the "dynamic context that allows capabilities to expand in line with user needs and changes in relative prices, as well as supply side improvements and technical innovation." (Coyle and Williams, 2011).

Considering the foregoing generalities, broadband has become one of the highest priorities for public policy and political agendas at the global level and has thus found its way in the prevailing discourse on access to communication services (ITU, 2013; ITU, 2012a; OECD, 2001; Bauer *et al,* 2003). Consequently, broadband diffusion is seen as a precondition for harnessing the benefits of the next generation of information services for economic growth, competitiveness, and development of the national and transnational knowledge economy (Czernich *et al*, 2009; ITU, 2012b). Its use, especially in relation to intellectual property rights (IPRs), is crucial.

This article focuses on the application of IPRs as a tool for promoting broadband diffusion in Kenya. The broad rationale for the assessment under the study is founded on the need to address various supply-side and demand-side interests in the broadband environment through the use of IPRs. This balance, the study argues, can be achieved by innovatively integrating and applying IPRs in the

demand and supply aspects of broadband to enhance diffusion. On the demand side, there is the content (and its related aspects). On the supply side, there are the applications for content delivery and the physical infrastructure on which the applications ride to deliver the content (as well as the implications of the two). This article is based on two main concepts; the first being content production and the wider creative industry while the second one is the support infrastructure which will include other aspects of IPRs such as patents, trademarks, utility models and domain names. For propriety of purpose, it is crucial to assess Kenya's context within which the study issues.

Kenya's Contextual Background

ICTs have accounted for a significant share of investment and have made a substantial contribution to the economic growth in Kenya since 1990 (Msimang, 2011). As at 2013, the contribution of the ICTs to the Gross Domestic Product (GDP) was approximately 7percent in the financial year ending June 2016. This is indicative of the significant contribution that the communications sector has made in the economic growth of the country. The Internet largely drives the communications sector.

To put the foregoing into a more specific context, it is noteworthy that businesses, individuals, and the Government have all profited from the benefits delivered by the increased bandwidth and use of the Internet (Msimang, 2011; Communications Authority of Kenya, 2017). Internet usage and penetration in Kenya stood at 32.4 percent as at June 2017 (Communications Authority of Kenya, 2017).

Part of the reasons for the increased access has been (cumulatively) attributed to the landing of three submarine optic cable systems in Kenya. These are The East African Marine System (TEAMS) with a capacity of 1.28 Terabytes per second (Tbps) at landing (Msimang, 2011). The others were South East Africa Cable System (SEACOM) and the East Africa Submarine Cable System (EASSy) with capacities of 1.28 Tbps and 3.84 Tbps respectively at landing. Submarine cables substantially reduced the costs of Internet since three cable systems were offered on an open access basis, providing competition which in turn increases quality and puts downward pressure on prices (Msimang, 2011). In addition to the cable systems, increased subscription to mobile telephony has led to the increased penetration. Mobile data contributes the greatest number of subscriptions as has been the trend over the recent years. The indicative factors of this growth include the number of Internet subscriptions, which stood at 29.4 million as at June 2017 (Communications Authority of Kenya, 2017).

Despite the increased growth in access to Internet generally, access to Internet, especially through broadband, is still low in Kenya. A 2016 access gap report commissioned by the Communications Authority of Kenya estimates that "only

164 out of a total of 7149 sub-locations remain totally uncovered (0 percent), while further 418 have less than 50 percent of their populations covered (Communications Authority of Kenya, 2016). This report is the most recent study on the actual Internet penetration gaps in general, and broadband in particular. These gaps fundamentally remain the same presently.

The foregoing trends are indicative of the increased demand for the Internet access as well as the significant penetration and access gaps that require redress. Considering the users' increased demands for faster Internet connections, the technologies that enable access to the Internet have undergone significant changes to enable access to high bandwidth applications with reduced time costs (Umino, 2002). However, Kenya has not adequately maximised on the deployment of these technologies to promote broadband diffusion.

Indeed, over the last decade, many governments have considered access to broadband networks a priority in the design of their economic growth policies (Koutroumpis, 2009). In this regard, Kenya has developed the National Broadband Policy (NBS), which defines broadband as the platform for a developed Kenya with economic growth and innovation through enabled healthcare, education, employment, and government service delivery (Republic of Kenya, 2013). These policy objectives have even been nuanced in the law. For instance, in defining the objectives of the Universal Service Fund (USF), the Kenya Information and Communication Act, 1998 provides that the USF is to be applied to support the development of information and communication technologies, including related human capacity and technological innovation. Under the same law, it is USF's main role to provide support for the introduction and expansion of communication services to schools, health facilities, and other organisations serving public needs, in addition to facilitating the development of and access to a wide range of local and relevant content. However, the application of the fund has not adequately addressed IPR shortfalls in broadband diffusion. This invites a deeper consideration of the nexus between IP and broadband as well as the problems attendant thereto.

IP and Broadband: General Nexus and the Kenyan Problem

The role of intellectual property is central to the development of broadband infrastructure and services, which are the critical determinants of diffusion. This explains various efforts at the United Nations (UN) level through the World Intellectual Property Organisation (WIPO) and the ITU to collaborate on certain issues of confluence. The issues include *inter alia* content, intellectual property (IP) infrastructure, IP awareness, public-private partnerships (PPPs) in IP, and networked innovation (WIPO, 2002). The common issues between IP and Broadband are broadly administered with the influence of the international frameworks *inter alia* the Paris Convention, Berne Convention, TRIPs Agreement,

the WIPO Internet Treaties, comprising WIPO Phonograms and Performances Treaty (WPPT) and the WIPO Copyright Treaty (WCT) on the WIPO part, and the International Telecommunication Regulations (ITRs) and the Radio Regulations (RR) under the ITU regime. Regionally, various legal regimes affect IPRs as they may be applicable to broadband, including the Harare Protocol and the Banjul Protocol. Kenya is party to these international and regional instruments. At the local level, the NBS, the National ICT Policy, the Kenya Information, the Communications Act, the Industrial Property Act, and the Copyright Act provide the basic framework on IPRs as they may be applicable to broadband diffusion.

The interplay between IPRs and broadband can generally be determined by the purpose of innovation (as substantially IPR factor) in ICTs (at the core of which broadband is) and vice versa can be seen in at least two perspectives: first, ICTs enable access to platforms of knowledge that accelerate and enable further innovations. On the flipside, innovations enable the development of the physical, logical, and application layers of the ICTs architecture (Weiser, 2003; Shaw and Lanvin, 2012; Werbach, 2002). Second, ICTs exponentially increase the ability of people to create, exchange and to debate ideas and knowledge, which are critical building blocks of innovation. On the reverse, innovations enable the protection of the information exchanged over the ICTs with the effect of incentivising development of knowledge (Weiser, 2003). In summation, therefore, IPRs are a critical element in the development of broadband, which is measurable through diffusion.

IPRs have unfortunately not been adequately mainstreamed in broadband diffusion. As a result of the inadequate application of IPRs, among other factors, broadband diffusion in Kenya is slow. The untapped potential of IPRs is a critical explanation of the broadband diffusion gaps from the perspective of the core function of IPRs. Under intellectual property systems, innovators are granted certain exclusive rights to a variety of innovations they generate (Bentley and Sherman, 2009). The rights are intended to provide legal incentives that promote investments in knowledge creation and business innovation by establishing exclusive rights to use and permit or otherwise control use of newly developed intellectual output (Roschmann and Wendo, 2009). Largely, without these rights, innovations can easily be taken without compensation to the innovators. This misappropriation portends a loss of investment, because innovators in the broadband space do not get the opportunity to exclusively reap the benefits of their creations. In this respect, failure to harness IPRs therefore creates a disincentive to generate proprietary innovations in the broadband space thus contributing to low diffusion levels.

In addition to the foregoing, it is noteworthy that not all innovations especially in the broadband space are motivated by prospects of financial returns. Such are the innovations that are generated as part of the commons such as free and open source software as well as commons content (see for example Sihanya, 2014). IPRs

create an environment where such innovations can be generated by providing an enabling framework through which innovation ideas and knowledge are created, and exchanged. IPRs also provide some level of protection of the information exchanged over the broadband. This generally has the effect of incentivising development of Broadband-Enabled Innovations (BEI) in terms of content and technology (ITU, 2012a). In this sense, therefore, failure to harness IPRs leads to an environment that stifles development of the commons innovations that are critical for the development of broadband hence contribution to low diffusion levels. The general nexus between IPRs and broadband as well as the problem manifest therefrom can be assessed best when the main elements of broadband in Kenya are delineated.

Main Elements of Broadband in Kenya

The main elements of broadband in Kenya can be assessed through establishing the regulatory structure of broadband to highlight the key aspects of broadband to which IPRs are directly or indirectly applicable. In this regard, broadband in Kenya can be divided into three structural layers for policy and regulatory purposes. These layers are: the network facilities layer made up of the physical infrastructure and the logical infrastructure that facilitates information flow in the networks, the applications layer and the content layer. In this respect, broadband can be segmented as per the Unified Licensing Framework (ULF) that Kenya has. The categories in the framework include the network facilities, the applications that interface with the network to deliver content, and content. This position partly confirms the argument by Weiser (2003) and Werbach (2002) who argue that in terms of policy, the Internet comprises four layers comprising the physical, logical, applications and content. The argument is also in line with the position advanced by Lemley and Lessig (2000) who acknowledge the same elements as the main components of the Internet.

Simply delineated, broadband comprises the content and the networks through which the content is carried to the consumer, a position held by the World Bank (2013) which argues that broadband comprises content and conduit. In my view, this position leaves room for breaking down the content carrier component further even though it is two tiered. In this regard, the conduit element can be divided into a number of separate network elements such as the physical networks and the applications that combine to provide users with a complete link to and from sources of content. It is thus important to obtain insights as to how the different elements of broadband highlighted above relate to each other.

The Interaction Between the Various Elements of Broadband in Kenya

The network facilities layer is the physical transport infrastructure or pipes through which data moves. This component comprises two elements both of

which have the physical components and the logical component. The first sub-element is the international infrastructure that provides connection to the rest of the world such as submarine cables like TEAMS, SEACOM and EASSy. The second sub-element is the domestic backbone network infrastructure that carries traffic from the landing point of the international infrastructure to the different regions of the country. In the network facilities, service providers such as Safaricom Limited, Wananchi Group, Liquid Telecom Limited are some of the examples. The applications element is the interface between the physical networks and the content being delivered to the users. The applications services are meant to provide all forms of access network technologies and services to end users using the network services of a facilities provider. The *content* layer is the end product that may comprise of data or even voice and include all forms of content services such as information and data processing services. Examples range from public sector entities that provide certain services on the electronic platform to private entities that provide content development and aggregation services for commercial returns.

These interactions corroborate the position of Werbach (2002) who argues that the various components of the Internet relate with each other. According to Werbach (2002) the physical layer comprises the physical transport infrastructure comprising of the underlying. The logical infrastructure includes the management and routing functions that keep information flowing smoothly within and across networks, while Weiser (2003) observes that the Transmission Control Protocol/internet Protocol (TCP/IP), that facilitates all Internet communication, is the most significant of these functions. The application layer provides the interface for service delivery in the form of content (Werbach, 2002). According to Weiser (2003) this layer "represents the inventions that enable consumers to use the Internet in different ways" and may include software or a combination of hardware and software. The foregoing three are a breakdown of the conduit element that has been supplied by the World Bank as a category. The content layer, that is the final layer in the stack, involves the information delivered to and from users as part of the applications running over communication networks.

The foregoing linkages signify different functionalities that can be performed by various innovations. The technological innovations and the content relevant for the functions are likely to exhibit one or more of the IPRs considered under this study.

Main Technologies Presently Used in Broadband in Kenya

The technologies largely form the infrastructural innovations that then helped in the analysis of whether and what IPRs are applicable to the technologies, and other associated innovations. A number of fixed technologies are identifiable. These include Cable TV and Cable Modems, Digital Subscriber Line (DSL), Broadband Power Line, and Fibre to the Premises (FTTP). For wireless

technologies, several examples are apparent including Wireless Fidelity (Wi-Fi), Worldwide Interoperability for Microwave Access (WiMax), Microwave Link, Third Generation Mobile Network (3G), Long-Term Evolution (4G LTE) as the main technologies already in use. Other technologies such as Very Small Aperture Terminal (VSAT) and Code Division Multiple Access (CDMA) technologies and White Space are equally useful to broadband. They noted that these technologies involve several technical innovations to which IPRs are applicable. In this regard, broadband technologies involve some level of intellectual input to which the corpus of intellectual property is relevant.

The existence of various technologies for broadband confirms the argument made by Joo (2010) who has stated that the Internet is a network-based innovation; existing infrastructure have been advanced by Weiser (2003), Shaw and Lanvin (2012) as well as Werbach (2002) who have suggested that broadband and innovations have a cyclic relationship. Considering the foregoing position, it can be deduced at this point those IPRs shall play a major role in broadband enabling innovations. This role is likely to be shaped by the factors that determine broadband diffusion in Kenya.

IPRs and their Applicability to the Promotion of Broadband Diffusion in Kenya

The extents to which specific industrial property as well as copyright and related rights are determinants in broadband diffusion in Kenya worth considering at this point to provide specific relevance. Examples that demonstrate the applicability of IPRs to broadband diffusion in Kenya are also worth noting in this regard.

The Extent to Which Industrial Property Contributes to Broadband Diffusion

Patents, utility models, industrial designs and trademarks are all forms of industrial property relevant to broadband diffusion in Kenya. The foregoing classes of industrial property are assessed below in turns in some detail.

Patents

Patents apply to technological inventions that are new, involve inventive step and have some industrial use. According to section 22 of Kenya's Industrial Property Act, 2001 "An invention is patentable if it is new, involves an inventive step, is industrially applicable or is a new use." Article 27 of the Agreement on Trade Related Aspects of Intellectual Property (TRIPS) echoes these thresholds. In addition, the findings corroborate the observation by Sihanya (2009) who argues

that "patent protects and promotes high technology inventions rather than lower level innovations, fabrications, improvement, modifications." Technological inventions are mainly found in the infrastructural aspects of broadband.

Patents within the broadband space apply in network devices, telecommunications systems, as well as systems and methods of managing broadband content rights. A simple patent databases search through Espacenet database of the European Patent Office (EPO), United States Patent and Trademark Office (USPTO) and Patentscope of the WIPO revealed several patents applicable to broadband and consequently diffusion in Kenya. The examples of registered patents applicable to broadband and whose terms have not expired include mobile broadband device and method for managing broadband devices, which is a US patent number US8370461 B2 owned by Huawei Device Corporation, as well as a mobile broadband device which is a European patent number EP 2493013 A3 granted to the same corporation. In addition, there exists a patent entitled broadband cellular network device, which is a US patent number US6859447 B1 owned by Nokia Corporation. US patent number US6314102 B1 that is a telecommunication system for providing both narrowband and broadband services to subscribers particularly relating to the provision of high-speed communication services to ordinary residences and small businesses on DSL. Also worth noting was the patent entitled systems and methods for managing rights to broadband content, a US patent number US8788361 B2 whose import lies in its applicability to digital rights management (DRM), which remains a key IPR issue in the digital space. It is noteworthy that most of the patents in this space have been granted in the US which has taken a more liberal approach in the patent grants since the decision of the court in *Diamond v. Chakrabarty* 447 U.S. 303, 305 (1980) in which an invention was deemed to "include anything under the sun that is made by man."

However, it is possible for one to hold a view contrary to the foregoing. In this regard, it may be argued that patents do not have a link with broadband and, therefore, do not necessarily contribute to broadband diffusion. Considering the discussion on the applicability of patents above, this finding may signify the possibility that innovations in broadband do not necessarily meet the strict tests of patentability. This could imply that a more suitable protection framework such as utility models or copyright ought to be considered for broadband.

Utility Models

Utility models, also known as petty patents, may apply to innovations in the infrastructural elements of broadband that may not meet the novelty and inventive step tests of patentability. This observation confirms the provision of section 82 of Kenya's Industrial Property Act, 2001, which states that "An invention qualifies for a utility model certificate if it is new and industrially applicable." Utility models consist of any form, configuration of some appliance, tool, utensil, electrical, and electronic circuitry, instrument, handicraft, or object

allowing a different or better functioning, use or manufacture that was previously unavailable in Kenya. From the foregoing, the findings - in as far as they appreciate the scope of utility models - support the observation by Sihanya (2008) who states that utility models in Kenya protect and promote novel innovations that may not embody an inventive step.

Industrial Designs

Industrial designs apply to the ornamental or aesthetic aspects of various broadband hardware ranging from fixed to mobile computer equipment. In this sense, industrial designs may be used in the broadband ecosystem to protect, *inter alia,* the design, shape and visual characteristics of various computer equipment or other devices used in broadband such as mobile cellular telecommunication devices. The foregoing findings confirm the position under section 84 of Kenya's Industrial Property Act, 2001, which emphasises the special appearance element of designs. This provision is aligned to Article 25 (1) of TRIPS Agreement, which prescribes minimum requirements for protection of industrial designs. An apt example is that of the BRCK portable router designed to enable access to broadband Internet in challenging environments in terms of weather and energy. The design aspect of the router noted was its rugged shape that is made to deal with drops, dust, and weather and is a blend of ornamental outlook and technical function. In addition, mobile phones are, of course, the most obvious example.

Industrial designs are useful to broadband diffusion because industrial design protection may enhance the competitiveness of broadband technology products that are hardware-related. This is achieved through production of more aesthetically attractive and diversified products in the broadband space. This view is in line with the diffusion theory (Rogers, 2003), which suggests that the ornamental character of a technological product, which makes it attractive to adopters, is one of the determinants of technology adoption.

Trademarks

Trademarks are applicable to both infrastructural and content elements of broadband, and therefore contribute to broadband diffusion. Trademarks are intended to distinguish the products or services of an entity from those of another (Sihanya, 2016). Trademarks play two major roles, first, distinguishing the products and services as between competing broadband service providers. In this category, examples such as Liquid Telecom, Zuku, Safaricom, and Access Kenya are worth noting.

The second role is in respect of the trademarks as they are used in goods and services traded in the broadband space through e-commerce. In this regard, they also felt that trademarks are closely linked to domain names, which are site identifiers on the Internet without which broadband content may not be easily located and accessed.

These arguments signify trademarks as indicators of the source of goods or services, and confirm the position under section 2 of the Trademarks Act (Cap 506) which provide that trademarks used in reference to goods or services is a mark used to indicate connection between the goods or services and a person having a right to use the mark as the owner or a licensee. This provision also reflects the position under Article 15 (1) of TRIPS Agreement. The examples of various trademarks given above are therefore appropriate to demonstrate the applicability of trademarks in the broadband space and therefore diffusion of the same.

The Extent to Which Copyright and Related Rights Apply to Broadband

The relationship between copyright and related rights and broadband is mainly found in the nature and purpose of the rights, that is, the exclusive character of copyright and related rights. In this respect, legal protection conferred by copyright assures creators that others cannot use their works in the broadband space without their authorisation. In this sense, copyright provides incentives for creativity, which in effect guarantees broadband users of content and other means that aid access to the content such as software. The exclusive rights conferred under the Copyright Act, 2001, TRIPS Agreement, the Berne Convention for the Protection of Literary and Artistic Works and the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations (Rome Convention) include the rights to reproduction, performance, distribution, broadcasting and communication, and creations of derivative works. The rights apply when works are created and disseminated through new technologies and communication systems such as broadband. The foregoing exclusive rights are therefore applicable to broadband as dissemination through and reproduction in broadband amounts to distribution and reproduction.

However, most relevant to the broadband space are the provisions of the WIPO Internet Treaties (WIPO Copyright Treaty and WIPO Performances and Phonograms Treaty of 1996) which expound on the right to make available to the public as an exclusive right in digital copyright and related rights, and also prescribe the three step test for defining exceptions and limitations for copyright and related rights in the digital space. Kenya has signed but not ratified these treaties and therefore these treaties do not bind Kenya. Under Article 18 of the Vienna Convention on the Law of Treaties (1969) though, it can be argued that being a signatory, Kenya is bound to act in good faith not to defeat the object and purpose of the treaties. This is the case even though strictly speaking under Article 2 (6) of the Constitution of Kenya 2010, only treaties or conventions ratified by Kenya form part of the law of Kenya and bind the country.

Computer software is a key link between copyright and broadband. The main reason for this example is that broadband is largely driven by software, which is a critical aspect of access, and use of computer systems that deliver broadband. This supports the protection of computer programmes as literary works under section 2 of the Copyright Act as software or computer programmes comprise sets of codes expressed in written form in conformity with Article 10 (1) of TRIPS.

The second example concerns the mechanisms used to protect content online. This example could fit into the Technological Protection Measures (TPMs), which are crucial for broadband diffusion. These include passwords, content encryption, and measures put in place to prevent or limit reproduction and printing of content. These measures contribute to broadband diffusion by protecting the rights of copyright holders who can control access to their content as well as the control the manner in which broadband consumers user their content. This is in line with Section 35 (3) of the Copyright Act, 2001, which prohibits circumvention of TPMs. In addition to the TPMs, the Copyright Act, under section 2, makes provision for electronic rights management information when it defines the information as any information by right-holders which identifies the work or recording in the electronic space, which broadband is part of. This is intended to promote the identification of works online and therefore enhance protection of such works.

The growing creative industry that thrives because of copyright protection included, among others, online publishing and communication of works through broadband multimedia such as streaming content, authorised file sharing and digital gaming is yet another example. This has in return ensured that content supply is maintained for broadband development.

Increased infringement online is also an example that demonstrates the applicability of copyright and related rights to broadband. This is relevant in the context of the increasing unauthorised exercise of exclusive rights by third parties. The infringements include the copying material from an online textbook, sharing files over the Internet and unauthorised download of content.

The exceptions and limitations to copyright are also key to their applicability to broadband diffusion. In this respect, section 26 (1) of the Copyright Act, 2001 in prescribing the rights conferred by copyright, makes exception to certain acts that could otherwise be regarded as infringing on the rights of the copyright holder. The provision states that copyright in literary, musical or artistic work or audio-visual work shall not include the owner's right to control any of inter alia fair dealing in works, personal use, educational purposes with certain limitations, incidental uses in certain cases. In my view, the exceptions and limitations ensure access to protected broadband content and therefore facilitate the dissemination of knowledge and information, which, in turn, is an indispensable prerequisite of any new content that drives broadband. A simple example would be reproducing

a literary work for personal reading which results a work of critique that then enriches topical issues through spinout content.

Considering the foregoing, therefore, it is possible to conclude that IPRs are a crucial determinant of broadband diffusion. IPRs provide incentives for innovation that enables the development of the physical and application layers of the broadband, and also enable the protection of and generation of content. The exclusive rights conferred by IPRs, as well as the exceptions and limitations to these rights, provide economic incentives and information incentives necessary for the development of innovations that spur further broadband penetration and access. Opati (2009) argues that IPRs provide exclusive rights to provide incentives towards intellectual creativity by offering legal protection to innovators' works, creating repositories of vital information and facilitating the growth of both domestic industry and culture as well as improving international trade. This is also in line with the labour theory as mainly propagated by John Locke who argued that those who sacrifice to 'labour' should be rewarded with property rights such as IPRs which come with varied economic rewards (Yen, 1990). However, according to Andersen (2003), the reward may not reflect the value created by the inventor to even provide the incentive to further generate innovations. In addition, not all people who generate technological innovations and content are motivated by the economic incentives as some are generate innovations out of the need to address challenges they face which challenges may not have economic connotations at all. Others derive their inspiration from other opportunities availed by the IPRs system such as limitations and exceptions, and even exclusions without necessarily looking to the attendant economic rewards.

Exceptions and limitations to IPRs seem to provide opportunities for the generation of innovations through means or acts that would otherwise be regarded as infringement on IPRs. This supports the position taken by Bently and Sherman (2009) who, writing in the copyright context, argue that "exceptions promote and encourage the creation of works". However, Bently and Sherman (2009) have added various perspectives to the importance of exceptions and limitations that may be useful to broadband diffusion. In their view, exceptions set in to address market failure that would arise where the available market systems would not amount to optimal use of an IPR such as where the costs of exploitation outweigh the benefits for instance through licensing. Bently and Sherman (2009) also argue that exceptions and limitations help prevent abuse of monopolies that arise out of the exclusive rights in IPRs. The foregoing means that exceptions and limitations to the exclusive rights is a form of a trade-off applied to balance the interests of IPR holder and society in certain circumstances. The opportunity presented by the exceptions and limitations may enable various broadband users to develop innovations that feed into the various structural elements of broadband. From the perspectives in the findings, it can be inferred that indeed IPRs are necessary of broadband diffusion. The necessity is, however, subject to certain challenges that remain prevalent in the IP-broadband space.

A Note on Some Prevalent Challenges

To optimally tap into the use of IPRs to promote broadband diffusion in Kenya, various prevalent challenges are worth considering. These should then be mitigated against or addressed from a policy and legal points of view.

First, inadequate of awareness by some of the key stakeholders such as innovators, the law enforcement agencies, the judiciary and key government stakeholders such as the Communications Authority of Kenya remains a challenge. The value of IP generation, administration, management, commercialisation and enforcement in the promotion of broadband diffusion is therefore worth revisiting. Measures to enhance awareness on the applicability of IPRs to broadband will contribute significantly to enhancing broadband diffusion.

Second, infringement of intellectual property rights a key challenge to the utilisation of IPRs in promoting broadband diffusion. Infringement occasions losses in terms of loss of sales, royalties and license fees, as well as revenue losses as a result of new competition from lower-priced infringing goods and services. The foregoing, coupled with high costs incurred in assertion of IPRs by the rights holders through the legal and administrative processes. These losses and additional costs are disincentives for investment in creation of additional IP products that are required to drive broadband diffusion.

Third, weak enforcement of IPRs is a key challenge to the application of IPRs in broadband diffusion. In this respect, Kenya has not optimised some of the measures to protect IP locally and internationally to ensure better enforcement of IPRs. In this regard, the NBS states that "the existing innovation chain, especially concerning innovations in ICTs characterised by poor enforcement of IPR protection inhibits development of relevant content and applications" (Republic of Kenya, 2013). This infers the need to enhance enforcement.

Fourth, the weak linkage between innovators, relevant R&D institutions, relevant industries that hinders optimal generation, administration, management, commercialisation, enforcement and development of broadband related IPRs hence a challenge to broadband diffusion. This challenge has limited the scope of human and financial capital that would otherwise be availed through collaborative linkages. In this respect, the NBS indicates that the innovation system in respect of ICTs "is characterised by a lack of collaboration between diverse skill sets (technical, creative, Research and Development (R&D), legal, marketing, business and entrepreneurial) that are critical for successful and sustainable innovations" (Republic of Kenya, 2013). The ITU and UNESCO (2013) have also argued for collaborative innovation while recognising the weak linkages that come with closed innovation.

Fifth, inadequate financial and human resource capacities to effect IP generation and commercialisation for broadband diffusion remain a major challenge. These have led to inadequate support systems that would otherwise be necessary for the protection, promotion and support of IPRs uses in broadband diffusion. In line with this argument, Sihanya (2009) states that insufficient human, technical and financial resources in KECOBO "and in Kenya generally further hamper the enforcement of copyright in Kenya." Within this context, it is also noteworthy that the universal service and access under the Kenya Information and Communications Act (KICA), 1998 (as variously amended) has largely not applied the USF towards financing the generation, protection and commercialisation of broadband innovations for broadband diffusion. The findings therefore signal capacity building and adequate financing to promote the use of IPRs to promote broadband diffusion in Kenya.

Policy and Legal Considerations for Optimal Use of IPRs in Broadband

It is important that some salient considerations from the policy and legal perspectives are established and applied to address the challenges facing the use of IPRs in the promotion of broadband diffusion. This forms a basis for some of the proposals that are proffered hereinafter to enable Kenya effectively apply IPRs to promote broadband diffusion.

First, Kenya's policy framework for IPRs and broadband should prescribe and apply appropriate innovation models that are likely to promote innovation in broadband. In this respect, the closed and open innovation models are available for consideration. The former largely disengages collaborative innovation while the latter fundamentally relies on collaboration and is therefore recommended. Open innovation therefore means that valuable IP can be introduced from outside the organisation into the innovation process, or that internal IP can be made public outside the boundaries (Chesbrough, 2006). For practical implementation, open innovation can be anchored in the implementation process for the National Science, Technology and Innovation Policy of 2012 (Republic of Kenya, 2012). Open innovation can also be provided for in national IP policy and strategy, if developed for Kenya.

Second, it is recommended that the Government, and indeed other relevant stakeholders, should focus on improving IP output of various research entities concerned with ICT related research, with broadband as a priority (Kelly and Rossotto, 2012). Already, there are a few focused research initiatives such as the iHub and IBM Innovation Centre which research on ICT related innovations, and more need to be developed. In addition to availing local technological innovations for broadband diffusion, increased R&D will be useful in the generation of IPRs by

Kenyans and may in turn translate into economic benefits, if properly commercialised.

Third, the Government should encourage the use of IPR information disclosed through the IPR systems. The use should primarily focus on information related to subsisting patents, utility models and industrial designs, as well as copyright and related rights. Similarly, information on the foregoing IPRs that have fallen back into the public domain may also be useful in enhancing innovations since they are available for use without risks of infringement. This is because the innovators may be sensitised on the use of such IPRs without the need to expend funds on acquiring rights of use. To be effective, all stakeholders should prioritise access to and use of relevant IPR databases. If applied appropriately, this recommendation can be useful in enabling innovators build on the existing innovations.

Fourth, Kenya should put in place policy interventions that can encourage Small and Medium-sized Enterprises' (SMEs') investment in new technological infrastructure, content and applications in order to ensure increased uptake. The rationale for this proposal takes cognisance of the fact that most businesses in broadband access technologies and content are carried out by SMEs. In this respect, supply-side interventions may include promoting availability and access to locally relevant content by capturing new local content and promoting development of relevant applications to deliver the content online.

Fifth, it is recommended that, as part of a broader IP awareness plan, a medium-term to long-term national multi-stakeholder awareness program aimed at improving the awareness on the benefits of IPRs and their value to the rights-holders and the public within the broadband space. Such a program, if properly executed, has the potential of developing and informing a national culture on creativity and innovation, which is likely to lead to the generation of IPRs that can be commercialised.

Sixth, deliberate policy interventions need to be put in place to stimulate commercialisation of IPRs relevant within the broadband context. In this respect, the Government can consider encouraging sale, licensing and transfer of technology in respect of broadband innovations. The Government should also take interest in encouraging, through suitable business environment, business models such as joint ventures and mergers and acquisitions, and public private partnership (PPPs) to promote efficient use of broadband-related IPRs. The application of broadband-related IPRs in financial transactions such as securitisation, monetisation and venture financing should also be considered and encouraged in Kenya. Commercialisation has the potential to reward the innovators and in turn avails alternative sources of funding broadband related innovations and content hence contributing consumer-focused innovation.

Seventh, apart from applying commercialisation of IPRs to fund broadband innovation, existing policy interventions aimed at funding infrastructure deployment and service provision should be strengthened to address the deficiencies caused by lapses in the implementation of policy. In this regard, the Communications Authority of Kenya (CA) through the Universal Service Fund (USF) has largely concentrated on models that fund infrastructure rollout directly or through subsidies.

Eighth, to mainstream IPRs in broadband diffusion, the Government should integrate IPRs into various government initiatives that involve or will involve the use of broadband. The recommendation recognises that the digital environment provides opportunities for utilising IP in e-applications. These initiatives include e-governance through projects such as the Kenya Open Data Initiave (KODI), Integrated Financial Management Information System (IFMIS) and County Connectivity Project (CCP), e-commerce, e-literacy.

Ninth, the above policy proposals cannot be actualised without a robust policy document. It is therefore recommended that Kenya develops and adopts a national IP Policy and Strategy to prioritise the use of IPRs in promoting broadband diffusion among other sectors of priority.

Tenth, for effective protection and enforcement of IPRs relevant to broadband, it is recommended that the Government formally establish a centralised multi-agency forum to coordinate the enforcement of IPRs in the broadband space. This proposal recognises the existence of different institutions with different mandates, all of which are useful to enforcement of IPRs in broadband. The key institutions include KIPI, KECOBO, CA, Anti-Counterfeit Agency (ACA), the National Police Service, Kenya Bureau of Standards (KEBS) and Kenya Revenue Authority (KRA).

Eleventh, it is recommended that the Government should foster effective competition and ensure continued liberalisation in infrastructure, network services and applications across different technological platforms that supply broadband services.

Twelfth, the review should focus on updating IP rules, procedures, practices and guidelines for clarity and simplification in administration and enforcement of IP rights. The review, implemented, should lead to the revision the Kenya Information and Communications Act, 1998 to accommodate secondary transactions in broadband licenses, and provide for safeguards for the protection of IPRs by the broadband licensees under the Act. To complement the national laws, it is recommended Kenya considers ratifying or acceding to some international treaties that are in Kenya's interest. Priority should be given those treaties that Kenya has *de facto* implemented such as the WCT and WPPT to enable it to participate in their decision-making process.

Thirteenth, the CA should review the licenses related to the provision of broadband services to accommodate the protection, promotion and support of IPRs in the broadband services. In this regard, it is recommended that a specific condition be included in the NFP, ASP and CSP licences to place an obligation on the licensees to respect other peoples IPRs and promote the generation and use of IPRs in broadband business.

Conclusion

This article set out to explore how IPRs can be used to promote broadband diffusion in Kenya. The article has established that despite their importance to broadband development, IPRs have not been adequately applied to broadband diffusion in Kenya. The infringement of digital content is a manifestation of this inadequacy. In addition, the inadequate mechanisms to deal with IPR generation, protection and commercialisation are also an indication of this inadequacy. In addition, IPRs are not adequately considered in licensing and regulation of broadband services in Kenya. Furthermore, several challenges confront the application of IPRs in the promotion of broadband diffusion. The challenges include inadequate financial and human resource capacity, lack of awareness, weak enforcement of IPRs, and weak collaborative linkages between the key stakeholders in the generation, protection and commercialisation of IPRs in broadband services. To adequately mainstream IPRs into broadband diffusion, the research has argued these challenges ought to be addressed through various means such as building capacity to enhance expertise in IPRs, financing IPRs generation and use in broadband, multi-stakeholder engagements and awareness initiatives, strengthened enforcement of IPRs in the digital space, and collaborative innovation models. These policy and legal proposals and supporting recommendations have also been nuanced in accordingly.

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CROSS-BORDER PROTECTION OF FOLKLORE IN BOTSWANA AND THE SOUTH AFRICAN COMMUNITY MUSEUMS: THE CASE OF BAKGATLA BA KGAFELA HERITAGE PRECINCTS

Bathusi Lesolobe
Managing Director, Palm Consult, Botswana

Jacob Holland
PhD Candidate, Intellectual Property Law, Xiamen University, China

Abstract

The Bakgatla ba Kgafela Heritage Precincts is an online archive developed by the Bakgatla ba Kgafela museums in Botswana and South Africa (Phuthadikobo and Mphebatho respectively) to promote and educate interested parties about the culture of the community. The online archive raises issues such as trans-boundary expressions of folklore, digital rights management and whether or not the classical intellectual property system can adequately protect works of folklore. The protection of folklore has attracted the attention of the global community and stirred policy debates at national and international level, at present there is no agreed definition of folklore and there is no international instrument that protects folklore in a holistic and comprehensive manner. It is therefore the purpose of this study to find means and ways of effectively protecting the IPRs associated with the Bakgatla ba Kgafela Intangible Cultural Heritage Database. The study involved fifty one (51) respondents of whom twenty seven (27) were practitioners of folklore and the rest were professionals of culture, museums and intellectual property. It is concluded that the protection of folklore in Botswana community museums is still without a concrete legal protection mechanism because the Copyright and Neighbouring Rights Act 2000 (As amended on October 1, 2006) does not adequately provide this protection. The sui generis mechanism of the Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore is also not helpful because South Africa is not a member of the organisation and therefore not obliged to implement the provisions of the Protocol. However it has been found that Phuthadikobo Museum has already engaged in access and benefit sharing agreement. The study proposes that, since the museums belong to one community, they should develop a customary protocol protection mechanism under their traditional leadership of the Kgosikgolo (Paramount Chief) and formalise the agreements by developing contracts that could be signed by the interested parties.

Keywords

Bakgatla ba Kgafela museums; Copyright and Neighbouring Rights Act 2000 (As amended on October 1, 2006); digital rights management; expressions of folklore; online archive; Swakopmund Protocol

Introduction

Folklore protection in Botswana is covered under the Copyright and Neighbouring Rights Act 2000 (As amended on October 1, 2006). The protection of folklore has recently attracted the attention of the global community and has become a focus of dialogue and has received attention in different platforms of policy debates.The classical intellectual property (IP) system has been generally regarded as not appropriate for the protection of folklore because of its nature, it has been said that folklore does not meet the agreed requisites under the classical IP system, i.e. folklore is timeless while intellectual property rights (IPRs) are usually for a certain period of time and also IPRs require fixation which is not available in folklore works. Currently there is no international consensus regarding the definition of folklore and there is no international instrument that deals with folklore protection in a holistic and comprehensive manner. The international efforts have been led by the World Intellectual Property Organisation (WIPO) which formed an Inter Governmental Committee (IGC) for the purpose of developing means and ways of protecting folklore. The IGC Draft Texts treat folklore with traditional knowledge and genetic resources and therefore do not give folkore the adequate attention it deserves. However, regional mechanisms like Swakopmund Protocol aim to protect folklore and give definition of what folklore means.

This study is aimed at undertaking a critical examination of how community museums in Botswana can protect IPRs of folklore in their collections. Most heritage organisations in the world are going digital with their collections and Botswana museums cannot afford to remain at the tail end of this development. Digital documentation of folklore has been applauded for availing major opportunities for promotion and preservation of delicate material copies and also for enabling better access of folklore archives. This includes the use of software, digital rights management tools and the creation of digital databases. However, digital documentation could also pose risks of unwanted exposure, misappropriation and misuse of sacred practices which are better protected through the customary laws and protocols of the communities involved. Digital documentation does not respect boundaries and therefore raises issues of management of rights and benefit sharing for the practitioners of folklore. There have been international debates regarding the legal protection of folklore and many are calling for the sui generis protection because of the failure of the classical IPRs system to adequately protect folklore.

Phuthadikobo Museum, through the United Nations Educational, Scientific and Cultural Organisation's (UNESCO) pilot project on Community Based Intangible Cultural Heritage Inventorying at Grassroots Level (UNESCO, 2005, p.12), has collected and documented the folklore of Bakgatla ba Kgafela (BBK) community in Botswana. As a depository centre, the museum is expected to protect and

provide accessibility to the information, particularly the BBK Intangible Cultural Heritage Database. The accessibility of the information provided by the community members raises issues of IPRs. Currently the museum does not protect IPRs associated with its collections because it does not have the IPRs policy. Because of lack of IPRs protection mechanism, the museum could be held liable for allowing infringement as it makes the works available to the public. As a result of making its collections available to the public, people would be able to take pictures, make copies of books, down-load audio and audio-visual files without permission from the rights owners. Moreover, the online archive and database will be shared by Phuthadikobo Museum in Botswana and Mphebatho Museum in South Africa. Thus, the two institutions will be loading materials to the archive and database from their respective countries and anyone can access such material from the database. Major issues arising from this situation include: digital rights management, cross border nature of BBK Heritage Precincts and the access and benefit sharing for folklore practitioners.

BBK communities are separated by the international border between Botswana and South Africa. Although they are separated by the border and live in two different political circumstances, the communities share all the expressions of folklore. Most importantly, they share the same traditional leadership, under the Paramount Chief – *Kgosikgolo* – who resides in Botswana. This is significant in that *Kgosikgolo* is the overall custodian of the culture of both communities. In order for the communities to safeguard and promote their culture, they established Phuthadikobo Museum in Mochudi, Botswana and Mphebatho Museum in Moruleng, South Africa. In 2009, an ambitious and integrated strategic plan was developed to connect and make the two museums 'talk to each other' by developing an online archive to be shared by the two institutions.

This study seeks to find means and ways of effectively protecting the IPRs associated with the BBK Intangible Cultural Heritage Database. In so doing, it shall establish ownership of rights, how the Swakopmund Protocol could be used to protect the folklore contained in the BBK Cultural Precincts. The cross border nature of the folkloric elements of BBK contained in the BBK Heritage Precincts calls for a type of protection that will encompass all the components of the elements. This is the challenge that Phuthadikobo Museum must overcome if the institution is to effectively protect the IPRs of folklore practitioners. The study asks a question; how can museums protect folklore through the IP system and what are the challenges of the system?

Efforts on the Protection of Folklore

Regional Level

Currently there is no international protection mechanism for expressions of folklore. However, efforts to develop such mechanism have been made and led by

the WIPO and UNESCO. UNESCO's efforts culminated with the model provisions for national laws on sui generis protection of folklore against illicit exploitation and other prejudicial actions which were adopted in 1980. The model provisions aim at achieving a balance between protection against abuses of expressions of folklore on one hand and the freedom, and encouragement of folklore, on the other. They encourage the request of consent from communities when their folkloric works are used outside the customary context. WIPO's efforts to establish an international treaty on folklore was left to the IGC on Traditional Knowledge, Genetic Resources and Expressions of Folklore. The draft articles for the protection of traditional cultural expressions recognise traditional cultural expressions and wish to protect them from any exposure that could lead to their "unauthorised fixation, disclosure, use, or other exploitation". The draft articles provide three alternatives for rights secured for other traditional cultural expressions with the main aim being to ensure that the right owners are the ones authorising accessibility, the balancing of economic and moral rights as well as adequate legal protection. The draft articles also provide for a National Competent Authority (NCA) to manage the rights of the beneficiaries as well as to negotiate on their behalf with third parties.

There are several regional efforts on the protection of folklore. A couple of examples are the Pacific Regional Framework for the protection of traditional knowledge and expressions of culture and the Swakopmund Protocol on the protection of traditional knowledge and expressions of folklore. The most appropriate to the study is African Regional Intellectual Property Organisation's (ARIPO) Swakopmund Protocol on the protection of traditional knowledge and expressions of folklore. It is relevant to this study in that, Botswana is a member of ARIPO. The protocol was adopted by the diplomatic conference of ARIPO at Swakopmund, Namibia, on August 9, 2010. The protocol deals with traditional knowledge and folklore separately. In terms of folklore, the purpose of the Protocol is "to protect expressions of folklore against misappropriation, misuse and unlawful exploitation beyond their traditional context". The Protocol defines expressions of folklore as in the same line as WIPO draft texts. It defines expressions of folklore as comprising of verbal expressions, musical expressions, expressions by movement and tangible expressions.

The protocol is not explicit in defining folklore and misses a very important aspect of folklore which is best captured by Botswana's Copyright and Neighbouring Rights Act of 2000, where expressions of folklore are defined as "group-oriented and tradition-based". While the protocol makes it clear that expressions of folklore are tradition based, it does not come clearly whether or not they are group or individually-oriented or can be both. It is only at section 17, protection criteria, that this aspect is captured. The Protocol sets out a protection criterion, where expressions of folklore to be protected are products of collective and individual creativity as well as showing the cultural identity and traditional heritage of a community. It is important to note that the Swakopmund Protocol recognises

individual ownership rights of folklore. The study will show that there are collective expressions of folklore and those that are a result of individual creativity. The protocol advocates for the establishment of the NCA, to deal with and register such expressions of folklore at national level. Most communities, whose countries are member states to ARIPO, share folklore in their different countries as they originate from the same community of Bantu. To cater for this unique situation, the protocol authorises the ARIPO office to be responsible for "awareness raising, education, monitoring, guidance dispute resolution and other activities associated with the protection of expressions" of folklore of those communities. This is very relevant to the study as it deals with cross border folklore. Therefore, the protocol will be a relevant instrument to use to protect such expressions of folklore although it has its own limitations in protecting the cross border folklore of BBK.

The protocol introduces the use of free, prior and informed consent in order to make sure that expressions of folklore are not used without the agreement of their owners. The protocol also lays instructions on the procedure to be followed when third parties request to exploit expressions of folklore, emphasising consultations with communities and in their traditional mode of decision making processes and public affairs management. It is interesting to note that while both the Protocol and the Botswana National Policy on Culture recognise that Botswana is not an island, unlike the protocol, the Policy does not provide any mechanism to deal with cross border cultural aspects like folklore (Ministry of Labour & Home Affairs, 2001). A notable similarity between the Protocol and the Policy however, is that they both advocate for a national authority to deal with issues affecting and associated with culture, folklore included.

Although the Swakopmund Protocol is the most relevant to the study, it is important to note that there are other regional efforts geared towards the protection of folklore in different parts of the world. Another regional protection mechanism is the Pacific Regional Framework for the protection of traditional knowledge and expressions of culture (Secretary of the Pacific Community, 2002). The framework is a draft model law for the Pacific Islands countries wishing to establish a legal protection mechanism for the protection of traditional knowledge and expressions of culture. The framework does not use the phrase "expressions of folklore" or the term "folklore", rather, it uses the phrase "expressions of culture", which it defines as "any way in which traditional knowledge appears or is manifested, irrespective of content, quality or purpose, whether tangible or intangible". The framework explains that expressions of culture include oral history, arts and crafts, performing arts, delineated forms and architectural forms. The framework also defines what traditional knowledge is, by emphasising the collective nature of such knowledge and linking it to a particular traditional group, clan or community of people. However, the protection mechanism, just as the Swakopmund Protocol, recognises individual creation of expressions of culture but only when such individual is recognised by a traditional group, clan or

community of people as the person in whom the custody or protection of the expressions of culture is entrusted in accordance with their customary law or practices.

The Pacific Framework for the protection of traditional and expressions of culture echoes the sentiments of the Swakopmund Protocol in terms of the concept of "prior and informed consent". While the Swakopmund Protocol only mentions that non community members who want to use expressions of folklore of a certain community should acquire free, prior consent, the Pacific Framework outlines a comprehensive plan for requesting consent. The two protection mechanisms are also similar in that they both propose a national office to deal with all issues relating to the use of folklore. For this purpose, the Pacific Framework advocates for the establishment of a Cultural Authority whose functions among others include monitoring "compliance with authorised user agreements and to advise traditional owners of any breaches of such agreements" and "develop a code of ethics in relation to use of traditional knowledge and expressions of culture". The establishment of the Cultural Authority is also in line with the Swakopmund Protocol's NCA and WIPO traditional knowledge IGC's proposal of the NCA.

National Level

Folklore in Botswana is protected by the Copyright and Neighbouring Rights Act 2000, which came into force in October 1, 2006. In South Africa, folklore is protected through the National Policy on South African Living Heritage (Department of Arts and Culture, 2009). The First draft of the policy, which was released in 2009, claims that it was developed as response to the ratification of the 2003 Convention for the Safeguarding of the Intangible Cultural Heritage by the country. However, a simple research over the UNESCO website shows that South Africa has not ratified the 2003 Convention but rather, has gone ahead and ratified the 2005 Convention on the protection and promotion of the diversity of cultural expressions (UNESCO, 2003). However, there is ample evidence that the Living Heritage Policy is based on the 2003 Convention for the safeguarding of intangible cultural heritage (ICH). Although the policy also avoids the term "folklore", its definition of the term "living heritage" comes close to describing expressions of folklore as defined by other protection mechanisms:

> "Living heritage" means cultural expressions and practices that form a body of knowledge and provide for continuity, dynamism, and meaning of social life to generations of people as individuals, social groups, and communities. Living heritage allows for identity and a sense of belonging for people as well as an accumulation of intellectual capital for current and future generations in the context of mutual respect for human, social, and cultural rights.

The policy, which is aimed at affirming aspects of heritage that have been ignored as a result of the apartheid system, identifies communities as important

stakeholders in the safeguarding of living heritage. This clearly has been borrowed from the 2003 Convention for the safeguarding of ICH, which emphasises that communities and groups are important in the safeguarding of ICH. Section 2.1.6 of the policy identifies identification and documentation as key aspects in safeguarding ICH;

> Identification and documentation are critical aspects in the safeguarding of South African living heritage. Identification is critical to defining heritage for the purposes of inventorying. Therefore, criteria for identification need to be as clear and explicit as possible. Identification is also the first step in the process of safeguarding. Once a living heritage element is communally identified, the element will be part of the process of documentation, protection, and transmission.

Identification and documentation were also key aspects when safeguarding the ICH of BBK in 2010. The National Policy on South African Living Heritage has a resemblance of the foundations of the BBK Heritage Precincts. It is important to establish how the policy will be useful to Bakgatla museums' online archive in their quest to legally protect the IPRs of their collections.

While the Copyright and Neighbouring Rights Act 2000 protects expressions of folklore legally in Botswana, the Botswana National Policy on Culture also recognises the importance of folklore. The 2001 policy recognises folklore as one of the key policy issues and strategies, particularly for preservation purposes. The policy singles out crafts, literary, visual and performing arts as key policy issues that need immediate attention if the cultural industries are to develop and benefit their practitioners.

> These constitute an important component of national cultural industries. Botswana is endowed with talent in these areas; however the level of development of each of these components is still at a very low level. This challenges us as a nation to adopt policies, programmes and strategies to promote the development of talent and creativity and the general growth of local cultural industries, through specific and tailored support packages to budding crafts people, writers, visual and performing artists (Section B: 6.17).

Most of these craft people, writers; visual and performing artists are involved in folkloric productions that are associated with their communities. They make the folklore to be alive as they practise it on every day basis. However, the most important aspect of their works is whether or not they are protected. A policy on the development of the arts or the expressions of folklore must make sure that such artists benefit from their works.

It is for this reason that the policy wishes to "ensure an effective and responsive Copyright and Neighbouring Rights system as well as relevant collection

agencies" and "promote the protection of artists and creators in accordance with national, regional and international conventions". This is in line with the establishment of the Copyright Society of Botswana (COSBOTS) ten years after the coming into effect of the National Policy on Culture. Botswana's Copyright and Neighbouring Rights Act 2000, is currently the authority on the protection of expressions of folklore in the country. No other legal protection mechanism comes too close to protecting folklore like the Act. As it has been mentioned above, the Act gives a clear definition of expressions of folklore and recognises both collective and individual ownership.

The Copyright Act, which is based on classical IP, is characterised by the loopholes of this classical IP legal protection system. While expressions of folklore are mostly collective creations in nature, the Act recognises creators as "authors". However, it is the definition of "authors" that creates problems in the legal protection of folkloric works. The definition of "author" is not aligned to the definition of "expressions of folklore" of the same Act, which recognises collective nature of expressions of folklore. The first part of "expressions of folklore" talks of "group-oriented" while the second part talks about "creation of groups and persons" and the definition of "author" relies much on the second part. The "author" is defined as "the person who has created the work" thus, clearly recognising individuals as creators of expressions of folklore. The Act enumerates cases in which the author can be manifested. These could be authors of literary works, artists, composers, photographers, producers, publishers and there is nowhere that groups of people, particularly those creating tradition-based works of folklore, are recognised. The South African Copyright Act 98 of 1978 defines an author in terms of "a literary, musical or artistic work" as "the person who first makes or creates the work". The Act is also rewarding individualism as against communalism. IPRs and especially copyright law, unduly emphasize the role of individuals in knowledge creation, and consequently fail to reward those knowledgeable communities and collaborators that provided the intellectual raw material that formed the true basis for the copyrighted work or patented invention (Jaszi, P. and Woodmansee, M., 1996).

The argument here is that copyright is failing to reward communities that are owners of expressions of folklore by emphasising individualism as we see in Botswana's copyright protection mechanism. Even as the Act recognises "collective work", the protection for that collective work is given to the person who initiated and directed the work "with the understanding that it will be disclosed by the latter person under his or its own name and that the identity of the contributing persons will not be indicated". Therefore, communities or groups of people who own expressions of folklore cannot claim protection as authors under the Act.

The second limitation of copyright protection is the period of protection. There is no clear date of creation for folklore, and this brings in the problem of the term of

copyright. Expressions of folklore form part of a community's living heritage and the community shall always be connected to them. However, copyright protection fails to recognise this connection. The Copyright and Neighbouring Rights Act of Botswana will protect the economic and moral rights of an author for his/her entire life and fifty years after his/her death. The Act provides a number of situations in which the issue of protection term can be manifested:

> In the case of a collective work, other than a work of applied art, and in the case of an audiovisual work, the economic and moral rights shall be protected for fifty years from the date on which the work was made, first made available to the public or first published, whichever date is the latest. In the case of a work published anonymously or under a pseudonym, the economic and moral rights shall be protected for fifty years from the date on which the work was made, first made available to the public or first published, whichever date is the latest, provided that where the author's identity is revealed or is no longer in doubt before the expiration of the said period, the provisions of subsection (1) or subsection (2) shall apply, as the case may be.

The Act will protect the economic and moral rights for a period of twenty five years from the date of making and "every period provided for under the preceding subsections shall run to the end of the calendar year in which it would otherwise expire". The protection period for copyright is made more problematic by the fact that moral rights are not transferrable and this could lead to monopoly.

The Survey Results

The protection of folklore is not an easy task. The world has just woken up to the idea of ensuring that folklore practitioners and communities from where such folklore originates benefit from its use. However, there are many obstacles that need to be solved before protection of folklore mechanisms can be put in place. This study shows that in Botswana, community museums and the national museum are operating without IP policies which could be guiding them in IP management. Phuthadikobo and other community museums are doing business with folklore practitioners on voluntary basis and no form of benefit sharing, at least in written or contract form. The two Acts under which museums operate in Botswana – the National Museum and Art Gallery Act 1967 and the Monuments and Relics Act 2001 – have little to do with the protection of folklore even though folkloric elements form a larger part of museum collections.

The Legislation

The study sought to find out if it is possible to protect folklore through the IP system. The relevant question as indicated from the beginning of the study: How can museums protect folklore through the IP system and what are the challenges

of the system? All the professionals engaged in the project listed the Copyright and Neighbouring Act, 2000 as a protection mechanism that can be used to protect folklore. However, it has become apparent that only the IP professionals are conversant with the Act as they interrogated it while others did not. The question was mostly directed to the professionals who were engaged in the project such as the culture, museums and the IP professionals.

The study revealed that while practitioners are the most affected by the legal protection of folklore, many of them are not familiar with the copyright law of Botswana. A significant number of respondents know of the term "copyright" but many of the artists are not aware of what the term means. This means that artists are powerless in managing their copyright assets found in museums and any other depository facility. They are not able to negotiate licensing and assignment or any other form of transferring rights. It has become apparent that artists are only happy to hand over their assets to organisations that will market their works. Asked if they are familiar with the Copyright and Neighbouring Rights Act, 2000, they answered as follows:

Only 15 percent of the practitioners are familiar with the 2000 Act while the rest of the respondents did not know about the Act. The 15 percent is mainly found in visual artists who have all gone through tertiary education and might have been taught about IP in their majors or may have also attended several workshops on IP, particularly copyright. This shows that awareness raising is needed if practitioners are to benefit from their works of folklore without being cheated. However, the young visual artists informed the author that the problem of not understanding the 2000 Act lies with the terminology used, which is legal in nature. This is also significant in that for those practitioners who can be able to read for themselves, the terminology used is difficult.

The poor knowledge of the 2000 Act is not only restricted to the practitioners but to the professionals as well. Save for the IP professionals, the rest are not familiar with the Act although they have read it at least once. While they have not shown this by writing, the fact that they have not answered any question associated with the Act exposes their negligency in familiarising themeselves with it. This is significant in that it shows the copyright law is still ignored by both practitioners and professionals, which will lead to copyright infringement of works of folklore. For the works of folklore to be adequately protected, all the stakeholders concerned must understand the law governing the protection.

The study showed that several works of folklore in museums can be protected through the classical IP system. Unfortunately, only the IP professionals answered most of the questions associated with IP. Although not all the five IP professionals answered the question, those who answered listed museum collections that are eligible for the IP system.

Table 1: Works of Folklore Eligible for IP Protection

Item	Protection
Audio Files	Copyright and Neighbouring Rights
Text Documents	Copyright
Photographs	Copyright
Artistic Works (Exhibits)	Copyright
Audio Visual Files	Copyright
Artists' Signatures	Trademarks
Database	Copyright

An interesting observation from the respondents was the inclusion of "artists' signatures" as a form of trademark by one of the IP professionals. Mr. Letsomo La Tshipa, who works at the Department of Arts and Culture, believes that artists with reputation can easily be identified by their signatures in their art works. Ultimately, the signatures become their trademarks because of reputation. This idea is also supported by Michael Shapiro and Brett I. Miller, who outline and identify the different types of copyright-protected assets and trademark-protected assets in *A Museum Guide to Copyright and Trademarks* and Rina E. Pantalony in *WIPO Guide on Managing Intellectual Property for Museums* (Shapiro M, Miller B & Steiner C, 1999). They both include the assets owned by folklore practitioners such as artists names, artists signatures, titles of exhibitions and works of art that are inherently tied to certain artists because of reputation.

The IP intellectuals were also able to link the protection of the above IP assets to the Copyright and Neighbouring Rights Act of Botswana as they referred to the articles of the Act. The study therefore shows that different exhibitions of Phuthadikobo and Mphebatho museums are also eligible for protection under copyright. The photographic images entered into exhibitions by artists will be protected as their IP assets. Artists will now have the confidence of mounting exhibitions in the museums knowing that any infringement on their assets will be prosecuted. Artistic works such as paintings, sculptures and photographs are eligible to be protected under copyright as outlined by the Copyright and Neighbouring Rights Act of Botswana. The Act provides guidelines on how they can be protected. As the respondents pointed out, the museums will have to follow the laid down procedures in order to ensure that such works are not infringed by their clients.

The other observation that was made was the protection of the database, which the respondents thought was very difficult to implement in Botswana, although the 2000 Act covers it. Their major argument is that the Act is not clear as to how protection is to be effected and that technology is keeping a faster pace than amendment of laws in Botswana. The Phuthadikobo and Mphebatho museums, through the Bakgatla ba Kgafela Heritage Precincts possess IP assets that are eligible for copyright protection. The museums host the Kgatleng District ICH database. The database contains collections of the stories of BBK who participate in the activities of the museums. While the stories are the IPRs of their individual owners, the database is the development of the museums and therefore belongs to the museums. The database is eligible for copyright protection. However, the materials contained by the database are protected by copyright as assets of the individuals who submitted them to the museums. The database of Kgatleng District ICH also contains the audio and audio visual works of the folklore practitioners. The works must be arranged systematically and labelled to ensure that the practitioners do not lose the rights to their materials in the database.

The IP and few culture professionals have criticised the Copyright and Neighbouring Rights Act 2000 for not adequately protecting the expressions of folklore. The common critique of the Act among the respondents is that it protects works that have been documented while most expressions of folklore are not documented. The critique of the six respondents who managed to answer the questionnaire is summarised below:

Of the total six respondents, five identified the major short fall of the 2000 Act in protecting expressions of folklore as its inability to recognise group authorship. Only one respondent did not pick this shortfall, a culture officer at the Department of Arts and Culture. The response of the IP professionals is significant in that it shows their high level of awareness on the Act because they all picked this shortfall. The problem of fixation was also seen as a major problem by four of the six respondents. They decry the fact that the Act only protects works that have been fixed. Interestingly, only three IP professionals talked about this shortfall while the fourth respondent who picked it is a culture officer. Only two respondents mentioned term of protection as shortfalls of the Act. While one respondent did not give their reason, the other's argument is that folklore is part of a community's culture and therefore its protection should not be limited. Three of the respondents argued that the Act emphasises originality and that this may make it difficult for expressions of folklore to be recognised as original works.

Despite the shortfalls identified, the study shows that in the absence of a protection mechanism specifically for works of folklore, the classical IP system can partially protect folklore. They cite some of the artefacts in the collections and exhibitions of museums although the National Museum and Art Gallery Act does not elaborate on any protection mechanism. The classical IP system includes protection mechanisms such as trade marks, industrial designs, copyright and

related rights, patents, trade secrets and geographical indications. While museum professionals believe that the National Museum and Art Gallery Act and the Monuments and Relics Act can fully protect works of folklore, the IP professionals believe that the two Acts protect just few works of folklore, particularly tangible folklore. However, all the professionals concur that a lot needs to be done to protect folklore in Botswana, particularly in museums as the museums have stepped up and won the confidence of their communities again so that the communities are now lending their cultural artefacts to the institutions. The culture and museum professionals have recommended that the Museums and Relics Act and the National Museum Act must be amended to include IPRs in the collections of the museums. One museum professional also recommended that the national museum and the community museums must develop an IP policy which will cover issues relating to the copyright assets of practitioners of folklore. The officer cited the National Museum of Australia Intellectual Property Policy which "sets out the rules applying ownership, management, use, protection and disposal of rights to IP developed or used wholly or partially as a result of activities performed for or on behalf of the museum".

Different respondents have shown that there are other non-legal instruments that could help in the protection of folklore. All the culture professionals have clearly shown that the National Policy for Culture must be fully implemented as it is a guiding tool in the protection and promotion of Botswana's different cultural aspects. However, they realise that the policy is not a legal mechanism. The following is the answer from Mr. Bopelo Gaothuse, who works in the Performing Arts Division of the Department of Arts and Culture:

> The National Policy on Culture is not a protection tool but rather a document that guides on how issues of culture can be documented, preserved and promoted. National Cultural Policy's work is to support the arts, culture and creativity and strengthen its contribution to a dynamic and diverse nation. It also provides a common strategic direction and rationale for current and future investment.
> (Gaothuse, B. Answers to Study Questionnaire)

Benefit Sharing for Folklore Practitioners

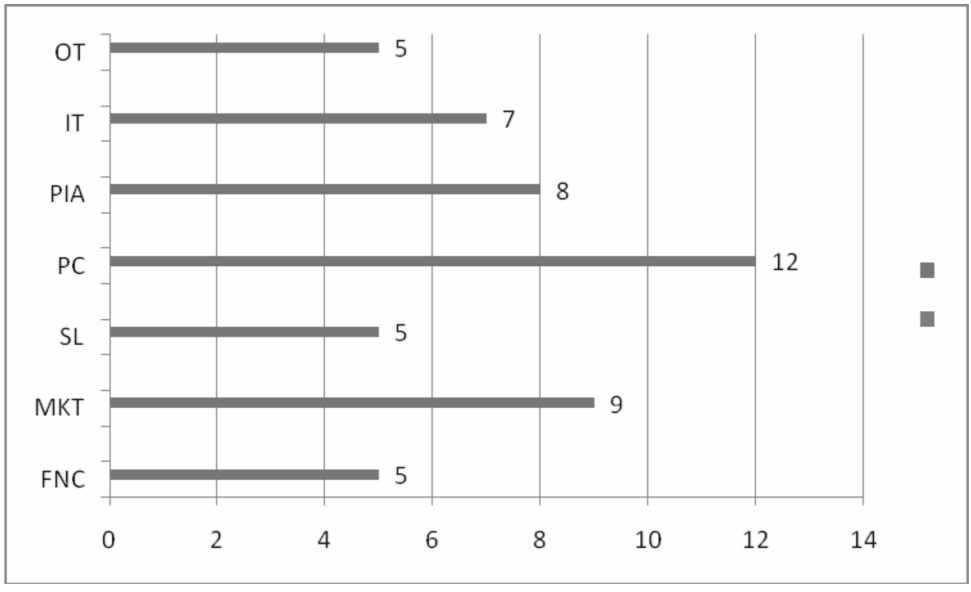
The concept of benefit sharing in museums has not been discussed in detail by museum professionals and the practitioners of folklore or any other museum user. The museums and museum collections' owners have only worked on the basis of voluntarism where the owners of intellectual property rights lend the museums their assets without any benefit. This is because community members value the museums as their property and therefore volunteer to educate the museum visitors by availing their artefacts for free. Such agreements however, are characterised by lack of any written agreement between the museum and the

owner of the artefacts. While the idea of lending artefacts to museums without any remuneration is an accepted phenomenon world over, the rights to an IP asset must be declared and in writing. This will create trustworthiness in the museums by the folklore practitioners.

The question of benefit sharing was posed to all respondents in the questionnaire and the practitioners during the meeting called by the author. As it has been stated before, there were twenty seven practitioners who took part in the meeting. However, not all the practitioners had worked with Phuthadikobo Museum before. Among the practitioners, sixteen (16) had worked with Phuthadikobo, translating into fifty-nine percent (59%) while forty-one percent (41%) had not worked with the museum. Dividing the practitioners into these two groups was important in that the present research should not be biased towards the museum. The practitioners who have not worked with the museum provided a balanced response as they are not associated with the museum.

The practitioners who have worked with Phuthadikobo Museum provided their experiences concerning benefit sharing. While they did not understand what the concept really involves, they were able to give answers once it was explained to them. The chart below shows the benefits that the practitioners have accrued from working with Phuthadikobo Museum.

Table 2: Benefits of Working with Phuthadikobo Museum



KEY:

FNC:	Financial	MKT:	Marketing
SL:	Sales	PC:	Peer Criticism
IT:	International Trips	OT:	Other
PIA:	Performing/Exhibiting with International Artists		

What has come out clearly is that to practitioners, benefit sharing is not only about finance. This is shown by the number of categories that they came up with as outlined by the chart above. The practitioners were requested to list the benefits and give them the titles. Out of the sixteen (16) practitioners, fourteen (14) listed peer criticism as the most important benefit they get from working with the museum. This is because during exhibitions and after performances, other artists give feedback and suggest improvements on the works concerned. The next important benefit is that of marketing, which the practitioners say leads to financial benefits as more organisations hire them after seeing their performance and exhibits at the museum. International trips, sales and finance form the next group benefits. The practitioners have performed in South Africa at another BBK museum, Mphebatho, where they have mingled with South African and international artists. The visual artists have credited the museum for the sales they make when they exhibit their works. The practitioners have included other benefits such as accompanying the Paramount Chief of BBK, Kgosikgolo Kgafela II; performing for him and his guests; media coverage and providing venue for their meetings.

However, the respondents accept and recognise that the process leading to benefit sharing policies in museums will take a long time. Most folklore practitioners are alarmed at the rate research papers and books are published on the materials they voluntarily give to museums. They believe that if museums are not keen to control access to their material they will be forced to stop giving information to them. Since all the practitioners who took part in the study project are members of the BBK community, they took pride in that the Phuthadikobo and Mphebatho museums are developing the online archive with their cooperation. They suggested that while the archive is still under construction, the museums must develop memorandum of agreements which could manage how their IP assets are used by the museums. The museums would then develop an IP policy that will guide in all IP matters.

The issue of benefit sharing seems to be an unfamiliar topic among the professionals because none of them answered the question. Some of them have indicated that the subject is new to them and could not talk about it at all.

Trans-Boundary Nature of Bakgatla ba Kgafela Heritage Precincts

BBK Heritage Precincts is an online archive owned by Phuthadikobo Museum in Botswana and Mphebatho Museum in South Africa. The director of Phuthadikobo Museum, Mr. Phemelo Rapoo said the online archive will be hosted through the website www.kgaboprecincts.org. The museums will be loading materials from their collections and everyone from both countries will have access to the materials. The issues involved include digital rights

management, access to owners of materials, access to researchers and tourists. He said the challenge for the museums is to provide access to the owners of the materials in their collections, particularly the Kgatleng District ICH database. The practitioners, although not familiar with the technology involved, recommended that the museums must utilise software that will differentiate their access with the access of other users so that they may also benefit from their IP assets.

Protection of Folklore through the Swakopmund Protocol

The Swakopmund Protocol on the protection of traditional knowledge and expressions of folklore is relatively new and largely unknown even among the IP professionals. None of the respondents has answered the questions on the protocol, which proposes a sui generis mechanism for folklore. The protection of cross border folklore is also a new subject the world over. For Botswana, the reality is that the country is not yet ready to protect cross border folklore. Botswana is a member of ARIPO, which adopted the Swakopmund Protocol on the protection of traditional knowledge and expressions of folklore in 2010 and entered into force on May 11 2015. The Protocol is helpful as it provides procedures in the management of expressions of folklore found across borders. However, Botswana has acceded to the Protocol. Therefore, she is obligated to implement its procedures and obligated to establish the NCA to deal with domestic folklore while the ARIPO office will deal with cross border folklore.

However, the major obstacle for the protection of folklore found in both Botswana and South Africa is that the latter is not a member of ARIPO. Therefore, South Africa is not obliged to follow any procedure provided for by ARIPO agreements or protocols. With this in mind, the Swakopmund Protocol becomes a non-useful protection mechanism for Botswana's folklore which is also found in South Africa. The protocol itself lacks answers to the pertinent issues that it must address. While the rules and regulations have not yet been released, there are gaps that need to be addressed. While it proposes the NCA in all members of ARIPO, the protocol does not elaborate on the duties of the same. The establishment of the NCA must be preceded by District Competent Authorities, in case of Botswana for instance. However, the Districts will also have to establish sub-districts because they may comprise of different communities with different or same cultural practices. The protocol needs to elaborate on who will own or register cross border folklore in cases such as Basarwa who are found in Botswana, South Africa and Namibia.

However, all is not lost for the practitioners of folklore who work with Phuthadikobo and Mphebatho museums. The protection of their cross border folkloric works can still be protected through customary protocols of BBK.

Conclusion

The study has shown that the folkloric collections of the BBK Heritage Precincts can be partially protected through the classical IP system. It has shown that copyright and related rights, trade marks and trade secrets can be able to protect folklore. However, the protection offered by the above mentioned mechanisms is not adequate. The copyright system does not recognise collective ownership of works as is the case in the expressions of folklore. Rather, it emphasises individualism through the use of the word "author". For the protection to take effect, the collective owners will have to designate one of them to be the rights owner on their behalf. The results of the study show that museums can use trademarks to protect folklore, particularly for artistic works such as drawing and sculptures.

However it has also shown that currently, the community museums can not be able to protect cross border folklore. The Swakopmund Protocol on the protection of traditional knowledge and expressions of folklore has good intentions that must be improved to achieve its goals. The BBK Heritage Precincts is shared by museums in Botswana and South Africa and the latter is not a member of ARIPO and therefore is not obliged to follow its guidelines in the management of cross border folklore. The Swakopmund Protocol needs to be amended to detail the responsibilities of the NCAs and how they link with different communities and the ARIPO offices. The best option to protect cross border folklore in the interim is through the traditional protocols of BBK since they are ruled by one Paramount Chief. The other option is through the bilateral cultural agreements between Botswana and South Africa.

While the concept of ICH inventorying emphasises community pride in documenting their own cultural practices including expressions of folklore, IP aims at encouraging creativity by rewarding rights owners. Museums are meant to showcase a community's culture and therefore the community members do not expect to be paid once they bring their artefacts or information to their museums. For the community, the reward and benefit is when their children visit the museums and learn about their culture so that it does not lose its value in the society at large. This belief by the community members is not translated into any form of contract between the museums and the community members.

The BBK Heritage Precincts however, intends to use its collections from community members for commercial purposes. The two museums will make profit from these free collections from the community. In the era where IP assets are key to the social and economic development of communities, museums have to change their working relationship with folklore practitioners. The Nagoya Protocol on Access to Genetic Resources and Fair and Equitable Sharing of Benefits Arising for their Utilisation gives clear guidelines which could be used to ensure that communities benefit from the use of the genetic resources (Kamau E,

Fedder B & Winter G, 2010). While this protocol is not specific to folklore, it can help museums with strategies to ensure good working relations with community members. It has come to light through this study that Phuthadikobo and Mphebatho museums do not have agreements with owners of their collections. The agreements would help in determining what the practitioners of folklore want to be rewarded with. Benefit sharing does not only refer to money but could also be development of facilities which could be enjoyed by all community members. It is however, important to note the positive feedback from the practitioners who have worked with the museum that "benefits" does not refer only to finance. The practitioners are already benefitting from their relationship with the museum but the museums must develop contracts that are legally binding so that it could be trusted by artists.

Recommendations

i. A clear national IP policy providing guidance in the subject is required. The national policy must include protection of folklore across borders, digital rights management and benefit sharing. It is therefore proposed that Phuthadikobo Museum mobilise all the community museums in Botswana and the national museum so that they could develop a national IP policy for museums.

ii. It is proposed that Phuthadikobo and Mphebatho Museums conduct an IP audit individually to record all the IP assets in their possession. This will help in acknowledging and paying the correct owners of the IP assets in the online archive. The audit will also determine who owns which rights and the duration of the rights.

iii. The study has revealed that the use of digital rights management tools is the key to enhance the value of documentation of folklore works as a strategy for positive protection, particularly in online archives. The BBK Heritage Precincts must therefore engage skilled and creative information technology experts to develop a friendly yet secure access to the online archive. Practitioners of folklore who have collections in the museums must be offered special access to the archive for motivation purposes.

iv. The Phuthadikobo and Mphebatho Museums must develop benefit sharing mechanisms for all the people who help them with collections of folklore. The Mutually Agreed Terms (MAT) must be explained clearly to the practitioners before they are signed. In the interim, the museum must develop contracts with all artists to formalise their relationship.

v. It is proposed that Phuthadikobo Museum must register all of the artefacts in its collections with the Copyright Society of Botswana (COSBOTS).

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AFRICAN UNIVERSITIES ROAD MAP TO COMMERCIALISATION (FUROMAC): A MODEL ENVISAGING IPRS TO FORMULATE RESEARCH OUTPUT INTO PRODUCT

Jameson Mbale
Copperbelt University, Zambia

Abstract

Despite the majority of African universities undertaking research vigorously, very minimal if any commercialisation of research output was done. Every academic year, lecturers conduct research whose publications were only used for promotion and contract renewal, thereafter such results were indefinitely shelved without any economical gain. Similarly, final year students each carried a project whose outcome were not profitably utilised. In addition, being institutions that dealt with knowledge across all walks-of-life, however failed to realise the potential of utilising Intellectual Property Rights to commercialise their yearly produced research output. Surprisingly, one wondered what the problem was. It was against this background that the Africa Universities Road Map to Commercialisation (FURoMaC) model was conceived as a tool to guide in formulating research output into final industrial products that could be commercialised. The model starts from conceptualisation of the intellectual property; then establishment of Technology Transfer Offices. The model continues to assess if the research output meet the requirements of novelty, inventive step, and industrial application as a measure to attain commercial value. The model yields two outputs, either a Journal Publication or a Patented Product. Furthermore, the model guides in protecting the invention, as part of the research output, whose product in collaboration with the industry is channelled into business venture.

Keywords

commercialisation, entrepreneurship, final product, FURoMaC, African universities

Introduction

Like the developed world, African Universities have also the majority of academic staff actively involved in research and consultancies. In every academic year the lecturers and students produce a lot of research output and many of them are published in local and international journals. However, such results are never commercialised for economical gain. Similarly, in every academic year final year students undertake research projects whose output upon graduating are shelved. It is against this background that the Africa Universities Road Map to Commercialisation model was conceived and in this article abbreviated as

FURoMaC. The FURoMaC is a tool which chronologically guides the institution management, from the inception of formulating the research into a final output in the form of either a Publication or Market Product. At the core of the model is commercialisation, which is the kernel of all the procedures involved in the cycle of FURoMaC. Surrounding the core is the Intellectual Property Rights (IPRs) composed of all types of rights that govern research output. In the outer realm are various factors that facilitate and serve as catalyst in the complete commercialisation processes. The process starts from conceiving and conceptualising the concept of intellectual property. This is followed by assessing the commercial value of the research output up to the yield of final results as either a Publication or Market Product.

Statement of the Problem

Recently, in addition to teaching, African universities have incorporated research as one of the core businesses. In fact, research output has been used as a criterion for promotion, contract renewal and any other career advancement in academic fields. This requirement has increased the number of research undertaken by academia including the publication of such results in various International Journals and Conferences. In every academic year publications are made and the research output is just shelved without checking to whether it has the commercial value or not. In addition, the majority of final year students undertake specialised research projects. Upon graduating the reports of these research projects are equally archived without assessing as to whether they can be used for economic gain or not. The sense of realisation as to whether the research output has commercial value is tremendously missing despite universities being sources of knowledge. With such enormous shelved research output in the past two to three decades, universities have failed to utilise the IPRs to convert the research output into business ventures, thus concluding that university management has little appreciation of the value of research output. Furthermore, the management has also failed to interpret the importance of utilising intellectual property to transform the research inventions into industrial products. Therefore, the knowledge of intellectual property was never appreciated. However, an appreciation of the utilisation of the intellectual property, leads to the formulation of research output into business enterprises, in the form of commercialisation. Hence, it is against this background that the Africa Universities Road Map to Commercialisation (FURoMaC) model was conceived to exploit the IPRs in order to translate the university research output into industrial products through commercialisation. The model is to enable the university management and researchers to first, gain a better appreciation of the concept of intellectual property and the benefits it can bear in commercialising the research output. In addition, the model emphasised the formulation of an intellectual property (IP) policy, which requires the establishment of a technology transfer office (TTO). The TTO is one of the most important units in driving commercialisation of university research output.

The work is organised in the following parts: the first Section introduces the FURoMaC model. The second Section provides an overview of related work concerning commercialisation of research outputs through a comparative analysis between developed and developing countries. The complete FURoMaC model is illustrated in the third Section where the functions of each component are outlined. The fourth Section explains in detail the processes involved in using the FURoMaC to complete a commercialisation cycle. The last Section concludes the commercialisation of the university research output.

Literature Review

The WIPO Report (2000) stated that African universities are faced with the challenge of formulating and adopting comprehensive IP policies. The Report continued to emphasise that they lagged behind compared to universities in North America, Europe and Australia. It stressed that in their quest to have such policies, they need to adopt a holistic approach to IP and learn from the experience of other countries. Whilst Reichelt, K. M (2004) stressed that intellectual property was a catalyst for social, cultural, and techno-economic development, the author also emphasised that developing countries aspiring to compete in the global marketplace must ensure adequate intellectual property protection for their researchers' creative output was adhered to. The author cautioned the researchers that without strong intellectual property rights, investors lacked private incentives to invest in innovation since they could not prevent market mimicry. In addition, once an idea was hatched, the marginal costs of diffusing the idea were extremely low and thus society benefited tremendously but the innovator could not capture rewards. He then emphasised that providing exclusivity rights to the inventor cured what economists called "the appropriation dilemma" of innovation, a market failure that resulted in underinvestment in technology development. The author further highlighted that failing to provide that incentive, resulted in an aggregate failure to reach the maximum efficiency or Pareto Optimum volume of investment and society loses valuable innovative power. In addition, the author stressed the lack of strong IPR introduced inefficiency in the *ex post* (post invention) stage. The author confidently assured that well established and defined property rights were necessary to reduce unnecessary transaction costs associated with litigation and enforcement uncertainty. He also observed that the more efficient the IPR regime in delineating grant and ownership rules, the lower the likelihood of spurious litigation and piracy.

Kanhukamwe, Eng. Q. C. (2006) highlighted the factors that inhibited the smooth commercialisation of IPRs by the African universities included lack of: entrepreneurial skills, awareness of IPRs, intellectual property policy (IPP), and data bank of specialists and research findings from R&D institutions. Other inhibiting factors the author alluded to were: insufficient market strategies for products and services, weak university – industry linkages, and tedious bureaucracy. He further emphasised that most universities as well as R&D

institutions do not have in place clear and comprehensive operating guidelines to govern day to day management of consultancy, technology transfer and commercialisation of IPRs. The author further advised that the researchers needed to take note that the IPRs created an environment that encouraged and expedited the dissemination of inventions and new knowledge generated by researchers for the greatest possible public benefit.

Maskus K. E. (2001) pointed out that developing nations thus face the important development challenges of fitting their new intellectual property regimes into a broader, precompetitive policy agenda. The author suggested that stronger IPRs increased economic growth and promoted beneficial technical change if those property rights were structured in such a way that they encouraged vigorous dynamic competition. The author also argued that if structured to promote effective and dynamic competition, and centered within a framework of competitive processes and appropriate regulation, IPRs could foster technical change and growth. Maskus K. E. (2001) further stressed that if developing countries embedded their intellectual property systems within a broad and coherent set of collateral policies and transparent regulation, the systems would bear considerable promise for promoting growth in the long run. The author cited some examples such as: in Brazil, utility models helped domestic producers gain a large share of the farm-machinery market by adapting foreign technologies to local conditions; in the Philippines they encouraged successful adaptation of rice threshers; the post-war-Japanese patent system (JPS) promoted Japanese technical progress including utility models were an important source of technical change and patent applications both directly and indirectly raised productivity. In fact, the author further gave an emphasis on the Japanese's patent system which shifted markedly towards stronger protection of basic inventions. Further the author gave several channels through which IPRs could stimulate economic development and growth and these included: enhancement of domestic innovation; attraction of technology transfer; shut down infringing activity; generate effective market power; and promote growth in open economies.

Khademki, T., et al. (2015) and Rasmussen and Gulbrandsen (2006) pointed out that traditionally, teaching and research have been the universities' main objectives but recently the commercialisation of research results or entrepreneurial science has emerged as a different role for universities in society. The authors emphasised that it was important to identify factors affecting commercialisation of research output in the university. Some of identified factors included the role of technology transfer offices (TTOs); availability of finance; availability of potential licensee; and entrepreneurial orientation among academic researchers. Rothaermel, F. T. (2007) and Dai, Y. (2007) singled out TTOs as a traditionally more popular mode for commercialisation since it served as the gateway to university inventions, establish linkages between the universities and industry?. The authors further outlined other TTOs' services such as handling and stimulating patent application issues; labour assistance on assorted

paperwork; educating and encouraging faculty members about patenting opportunities; managing licensing and all other patent related legal tasks; introducing and reinforcing university intellectual policy; building personal connections with faculty members; informing them about university policy changes; federal policy trends and industry technology requirements. On the other hand, Powers, J. B. (2000) stressed that TTOs served as a filter by helping faculty decide whether the technology had commercial potential or not.

The other key function of the TTOs is to strictly assess all the research carried out in the university as to whether it meets the requirements of commercialisation or not. The duties of Technology Transfer Officers in the TTOs are to go work with faculty to identify research that has commercial value. These officers guide the researchers on the type of research to undertake in line with latter's specialisation. They also write highly technical proposals to seek funding from donor agencies. They assist researchers to process and protect their inventions. As it is known that in most cases, researchers are loaded with teaching loads, as such they do not have the extra time to concentrate on research work. Hence much of commercialisation activities would be done by Technology Transfer Officers. These officers should frequently conduct intellectual property awareness campaigns to the university community on use of the IPRs. Furthermore, knowing about intellectual property does not guarantee that the researchers will come up with a new technology at all. However, appreciating the significance of the results born from the utilisation of the IP enhances the formulation of research output into business enterprises, as part of the commercialisation process. As the researchers gain adequate awareness on the utilisation of the IP, they also acquire the innovative skills beneficial for their research output. In that way, they will manage to undertake research in an entrepreneurial manner. This view is supported by Alemu, G. M. (2010) who emphasised that the development and integration of IP polices into a national development strategy and plan, the streamlining of intellectual property administration, the revision of existing IP laws and putting in place new laws will be meaningless unless there is a reasonable level of awareness of intellectual property. In addition, Sahlan, S. A. B. et al (2014) and Pikethly (2012) stressed that the success of the intellectual property system was very much dependent on the public's level of awareness.

Siegel, D. S. et al. (2003), Thursby, M. C. et al (2001) and Colyvas, J. et al. (2002) cited that the main reason why university technologies were not being exploited was that they did not show any commercial value, and were so embryonic that they demonstrated insufficient proof of concept. The authors further stated that university research commercialisation could not be implemented successfully because a lot of scientific research generated by colleges and universities did not meet the actual needs of enterprises and the market. Thursby, J. G. And Thursby, M. C. (2003) stressed that many university inventions were typically the sort of technology push which was mainly looking for a market, but not the type of market pull where the market searched for new inventions.

The FURoMaC Model

Figure 1 illustrates the FURoMaC Model whose core component deals with the commercialisation of the university research. Surrounding the core is the IPRs the concept which interprets the tools that protect various inventions of research. On the realm of the model are other factors that are essential for the implementation of the IPRs and these include: awareness of intellectual property, technology transfer office, adequate funding, innovation, identification of research output with commercial value, entrepreneurship, and university - industry linkages.

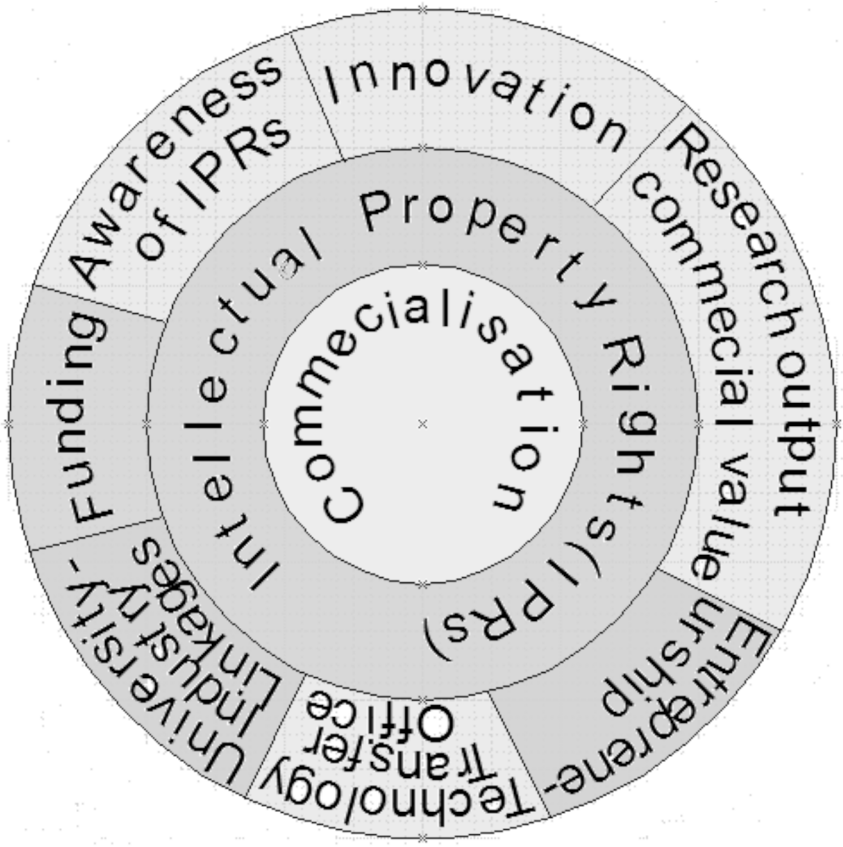

Figure 1: The Realm of the FURoMac Model

With commercialisation as the core component of this model, it is imperative that the concept is fully understood or defined. Many scholars have attempted to give a definition of commercialisation in respect to academic research. Just to cite a few: Ogunwusi, A.A. & Ibrahim, H.D, (2014) for example defined commercialisation as the process of turning an invention into a product or service which could be sold in the market, thereby, providing profits for the company; Whereas, Crabb, T. M. (2002) described commercialisation as, the development of an idea to the point at which it may be sold as a standard product or service in quantity to an open and

competitive market for creating revenue for the organisation. Whilst, Rahal, A. D. (2005) discussed the concept of university commercialisation as a process of converting research discoveries from university to industry into useful products or practical applications. The FURoMaC Model conforms to the above definitions as a tool which will process university research output into industrial product that could be marketed for creating revenues for universities.

The definition of IPRs is a very important clause in a university's IP policy. The WIPO Report (2001) describes IPRs as the creations of the mind, through inventions; literary and artistic works and symbols; names and images used in commerce and is divided into two categories, namely industrial property and copyright. Whereas, WIPO Handbook (2001) defined IPRs as the legal rights which result from intellectual activity in the industrial, scientific, literary and artistic fields. In this regards, this component protects all the inventions done from different schools or faculties of the university. The fields or types of IPRs include: patents, copyrights and related rights, trademarks, industrial designs, geographical indications, utility model, trade secret and know-how, new plant variety, electronic commerce, expression of folklore and traditional knowledge, layout design of integrated circuits, protection against unfair competition, geographical indication, genetics resources and micro organisms.

The outer ream of the FURoMaC Model constitutes some of the major factors that are cornerstone to the formulation of the research output of the university. World-wide they have been an emphasis for the universities, organisations and industry to establish TTOs to drive commercialisation at greater heights. The Association of African Universities (AAU) Practical Guide (2012) pointed out that universities and industry are advised to create a Department / Office that could be named a TTO or Technology Management Office (TMO). The Guide further envisaged that such established office would be responsible for the following functions: manage the IP assets, protect commercial development of inventions and creations, determine patentability of research output; undertake patent search and complete applications for patents, process and safeguard relevant IP agreements, evaluate the commercial potential of an invention, and negotiate and manage licenses. Reichelt (2004) emphasised that TTOs in developing countries should endeavour to commercialise university produced innovations to the benefit of local communities, regional economies and national economic development. In addition, the TTOs should enhance strong university-industry linkages. In that way, industry assist universities to process the research output into final products and market them.

Entrepreneurship is one of the components of the FURoMaC model which is a prime mover of innovation as it converts the university research ideas and output into action and promotes business enterprises. Entrepreneurship can be viewed as the attempt to create value through recognition of business opportunity, the management of risk taking, and through the communicative and management

skills to mobilize human, financial, and material resources necessary to bring a project to fruition. From such a description, entrepreneurship facilitates innovation on the research activities that can lead to business opportunities. In this case, innovation will drive the university research output to get into the market. Derek et al (2005) described innovation is the system that provides an environment that nurtures research and development (R&D), to result in new goods, new processes and new knowledge, and as such, a major source of technical progress.

Implementation of FURoMaC Model

The implementation of the FURoMaC Model is demonstrated in Figure 2 in the form of a flow chart.

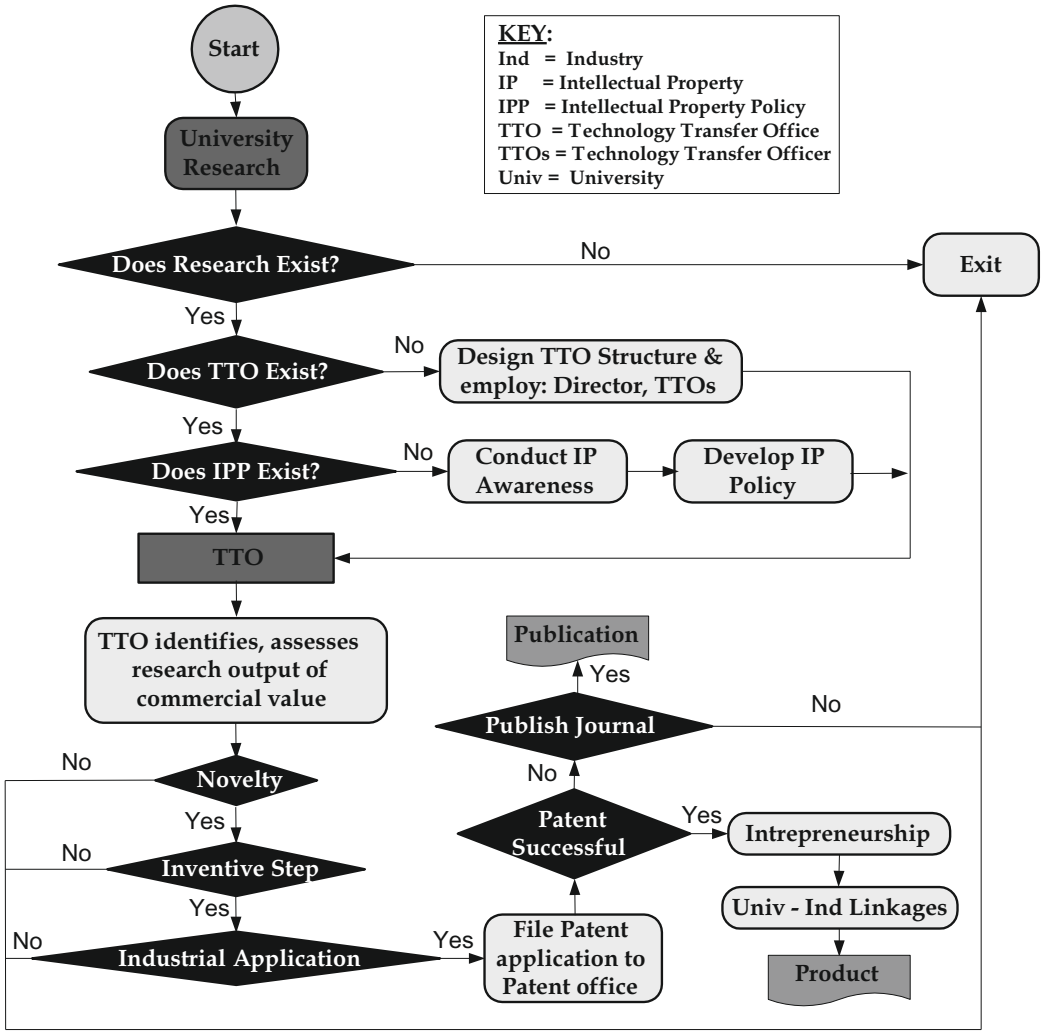

Figure 2: FURoMaC Flow Chart

Universities have research as one of the core objectives after teaching. Using the FURoMaC model flow chart, the University Management checks as to whether the research exists or not. If it does not exist, then the system exits. If the research exists, then the system goes ahead to check as to whether the TTO exists or not. If it does not exist then the university designs the structures and establishes the TTO. In this structure, immediately the key personnel such as the Director and TTO Officers are employed. If the TTO exists, then the system checks for the availability of the university IP Policy. If the IP Policy is not available, then the University Management are compelled to conduct a massive campaign awareness of IP across the university community. In this campaign, the researchers are enlightened of how the policy articulates the issues involving the protection of the innovation and inventions emanating from the research. In addition, as part of the awareness and development of an IP Policy, the university community learns about the interpretation of different aspects of the policy that includes: definition of IPRs; recognition and ownership of IP; creators of IP; commercial development; technology transfer; division of intellectual property income; spin-off and spin-out; dispute resolution; but to name a few. In that way, the university is motivated to formulate and publish an IP Policy document to guide the researchers in commercialising their research output. As mentioned earlier, the policy should have a paragraph that discusses the technology transfer process or commercialisation. In this paragraph of the policy, it has a section which highlights the importance and benefits of establishing and operationalising the TTO.

In the previous Section, the functions of TTO were adequately discussed. On the other hand, if the IP Policy exists, then the operationalisation is implemented. At this point, the TTO manages the university research output. This office identifies and assesses the research output if it meets the standards such as novelty, inventive step, and industrial applicability. If the output does not meet all the articulated standards, the system exits, else, the patent application is filed at the relevant offices. The system checks whether the patent application was successful or not. If it is not successful, then the invention or idea is submitted to reputable Journals. If the invention is publishable, then the work is published, else the system exits. On the other hand, if the patent is successful, then the work is taken to the TTO units where the output shall be developed into a product that can be sold to a market. In addition, the TTO unit can link such invention to industry for final production of the product for the invention is sold as a business venture. Hence this marks a complete processing of university research output that may be processed either as merchandise product or publication as demonstrated in Figure 2.

Conclusion

The African universities management have serious challenges in channelling the research output into business ventures. They have not yet realised that an

understanding of IP and its institution would assist in making their research outputs more relevant. The envisaged FURoMaC came as an eye opener to the university management on how to run research with a commercial outcome focus. They never thought of undertaking research with a view of attaining economic gain for the university and the community at large. Such an objective is supported by Adoyo Claris Awuor (2015) who explained that research benefits come in different forms, economic if they can create products that can be commercialized to improve the quality of life and also add on existing knowledge. Farsi, et al. (2011) added that university policies must also enable the researchers to transfer knowledge from their research into goods and services to benefit society.

The FURoMaC model provides a complete process, from conceptualising the intellectual property, utilisation of the TTO which determines the research output with commercial value up to final market product. All along, what was important in African universities was to carry out research for the sake of fulfilment of contract renewal and promotion only. The issue of undertaking research to the level of economic gain was not there. Not until the introduction of the FURoMaC, did the academic community realise the benefits of commercialisation. The academic staff had their mindset changed to prioritise research anchored on economical gain. Though the academic staff was always overloaded with teaching workloads, the TTO did the bulk of research processing. The Technology Transfer officers assess the research output as to whether it meets commercialisation criteria such as novelty, incentive step and industrial application. Once such criterion has been met, the TTO officers file a patent application at the patent office. This has changed the mindset of academic staff from a popular slogan: "either you publish or perish" to "you patent and publish". This approach is supported by Guenther and Wagner, (2008) who emphasised that the Bayh-Dole Act in the United States of America encouraged universities to patent their research findings and later transfer and commercialise them in business played a great role in commercialisation of university research results.

The same Technology Transfer Officers make a follow-up on the progress of the application until it is approved. If the patent application is not approved, then the work would be sent to a Journal for consideration and publication. Furthermore, in the case where a patent application has been approved, publication of the research results in a Journal may follow, thus giving credence to the slogan 'patent and publish.' Note that, as the bulk of the work is handled by the Technology Transfer Officers, the researchers are left with lighter loads, hence more time to teach and carryout research work was acquired.

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COMMERCIALISATION OF INVENTIONS BY SELECTED PUBLIC UNIVERSITIES IN GHANA

Richard Dua-Ansah
Assistant Lecturer, University of Professional Studies, Accra

Abstract

Intangible assets such as new inventions and research breakthroughs have propelled many a nation not only in terms of revenue generation but also their problem solving effect. Undoubtedly, Universities are crucial sources of activities that have the potential of generating such inventions and research breakthroughs. Public Universities are however constrained in terms of the public nature of their mandate as well as budgetary allocation. The need to appreciate the commercial value of university research as well as the ability to calibrate an appropriate system of commercialisation relative to potential inventions in university research work are the focus of this paper. The paper thus evaluates the mechanisms by which inventions are commercialised by selected public universities in Ghana. To this end, data was collected from these public universities and analysed qualitatively as to the levels of intellectual property awareness, generation of inventions, the state of commercialisation of such inventions and the policy environment. The paper concludes that even though there is a growing appreciation of the importance of intellectual property in the research activities in these public universities, the institutional and policy framework for commercialisation of potential inventions imbedded in these research works are at their nascent stages.

Keywords

inventions, commercialisation, academic research output, public universities, Ghana

Introduction

Intangible assets in the form of new inventions and research breakthroughs have propelled many a nation not only in terms of revenue generation but also their problem solving effect. Intellectual property law provides the legal framework that regulates the regime of these intangible asset acquisition and exploitation. Consequently, the legal rights to these intangible assets are intellectual property rights (IPRs). These IPRs are more often than not the result of intense research some of which span over several years. Undoubtedly universities are critical sources of activities that have the potential of generating inventions that can be the subject of IPRs, and they indeed do.

The United Nation specialised agency on intellectual property, the World Intellectual Property Organisation (WIPO), defines IPRs as the legal rights which result from intellectual activity in the industrial, scientific, literary and artistic fields (WIPO, 2004). A research activity within a university has the potential of resulting in some invention which can be the subject of a patent application.
It is however not enough to generate inventions. It is therefore important to focus on 'the operations and task of bringing research results to the market and to the hands of the users' (Chandran, 2010). Commercial exploitation, whether by the University itself or some third party, does not only generate revenue for the intellectual property owner but also contributes to national economic development as the research outputs are being channelled to their practical application. Commercialisation has been defined as the process of turning an invention or creation into a commercially viable product, service or process (UNECE, 2011).

The shift towards knowledge and innovation based economy (Chandran, 2010) by developing countries is evidenced by a myriad of Science, Technology and Innovation policies across the African continent; Tanzania in 1996, Uganda in 2009, Nigeria in 2011 and Kenya in 2012. The Republic of Ghana adopted its National Science, Technology and Innovation Policy in 2010. Further, Ghana through the joint efforts of the Ministry of Justice and Attorney General on the one hand and the Ministry of Trade and Industry on the other hand, with support from the Swiss Government and the Swiss Federal Institute of Intellectual Property put together a National Intellectual Property Policy and Strategy which was adopted in January 2016. The above steps are some of the national policy efforts being made to promote innovation and a knowledge-based economy, all of which activities require a vibrant research base.

The Problem

There is a dearth of inventions commercialisation by public universities in Ghana. The business of commercialisation, however, is not straightforward nor is it easy. Even in the case of developed countries, especially in Europe, success is still limited (Chandran, 2010). Indeed, Chandran (ibid) has identified availability of commercialisation funding, lack of collaboration and linkages for demand driven innovation, and lack of internal support and structure as some of the potential barriers to research and development (R&D) commercialisation. Owolabi et al., (2012) have also alluded to the complex nature of commercialisation as a challenge, and further cite funding as a crucial issue especially in developing countries.

There is however some success stories from which inspiration may be drawn. Indeed a number of American, Australian and European universities have much more elaborate intellectual property regimes as far as research and academic activities in those universities are concerned. According to Kalaitzandonakes

(1997), the most apparent benefit from commercialisation is the generation of funds from user fees that can be funnelled back into research and technology transfer activities. Research has shown that university patenting and licensing have been fundamental to the emergence of new industries such as the scientific instruments industry, semiconductors, computer software, and biotechnology industries (Rosenberg and Nelson, 1994 cited in Zuniga, 2011). The result has been increase in revenue of those institutions most of which accrue from commercialisation of inventions resulting from research activities, as well as university spin-offs. Streiffer (2006) recounts how successful commercial exploitation of inventions in the United States (US) has led to the development of agricultural, genetic and other biotechnological patents, and the immense benefits they have brought to society especially in the pharmaceutical and health sector.

Research Gap and Justification for Study

Very little research has been conducted in the area of commercialisation of inventions by public universities in Ghana. The work of Yawson (2009) rather focused on commercialisation activities by public research institutions and not universities. What comes close to the present study is Bailey et al. (2011) which is a case study on the University of Ghana as part of a comprehensive study of eight universities across the African continent within the context of higher education and national development. The specific issues relating to commercialisation of inventions within the selected universities in the present work were not addressed by the previous studies.

According to the WIPO Statistical Database online, only 45 patent applications were recorded in Ghana between 2001 and 2015, with the same period recording only 24 patent grants. It might well be that patentable inventions are being generated but the essence of registration has not caught up well with the academia and other residents. There are various medical and technical departments in the selected universities under study which churn out several research projects including graduate and doctoral theses on a regular basis, and as has been noted earlier, possibly embedded in all these works are patentable inventions.

It is against this background that the present study examines the state of commercialisation of inventions by selected public universities in Ghana and seeks to propose recommendations in respect of appropriate strategies for the commercialisation of these inventions. The research questions of what the level of IP awareness is, existence or otherwise of institutional framework for commercialisation of inventions, and the state of commercialisation activities within the selected universities were pursued.

The rest of this paper outlines the background literature which provides the basis of the present study, the methodology adopted by the researcher, data collection

and analysis within the framework of the published literature, and the final part indicating the conclusions and recommendations for policy consideration as well as future research.

The Literature

Academic Work and Commercialisation

Commercialisation of inventions is akin to commercialisation of knowledge. The question then is whether public universities are well positioned to engage in the business of commercialisation of their inventions. The literature appears to hold divergent views on this. Kalaitzandonakes (1997) has also remarked that most public research organisations are not well positioned to commercialise technology.

Rappert & Webster (1997) hold the view that when academics do engage in activities that aim to commercialise their work, they expose themselves to the authority or governance of the commercial market. McSherry (2001) similarly opines that the time-honoured but evolving function of academic institutions and for that matter academic works is to foster disinterested scholarship within the public domain and ultimately for the public good. This traditional view of the function of the university is corroborated by a study conducted in Australia which revealed that the role of academics is primarily oriented towards learning and discovery for the public good and not for commercial profit (Reid, 2004). Thus, according to Reid (ibid) and in consonance with the traditional view, academics themselves still see the principal benefit of owning the intellectual property in their research and materials as being the ability to publish rather than to profit. Owolabi et al. (2012) further insist that the fact that public research institutions appear to be less interested in rights protection points to equal less interest in commercial exploitation of their research results.

The above argument at first sight seems to conflict with the notion of commercialisation of inventions resulting from academic work since commercialisation is likely to be at variance with the traditional duty and responsibility of the researcher. It is instructive to note however that arguments have been advanced to challenge the notion that any form of commercialisation of IPRs in academic works violate academic freedom (Streiffer, 2006). The university is seen in at least three models: the university as a teaching institution, the university as both teaching and research institution, and the entrepreneurial model of university (Ricketson, 1996). The latter model, according to Ricketson (ibid), sees universities as forming partnerships with the outside world, particularly with commerce and industry. Elsewhere, Streiffer (ibid) recounts how successful commercial exploitation has led to the development of agricultural, genetic and other biotechnological patents and the immense benefits

they have brought to society especially in the pharmaceutical or health sector. As will be demonstrated shortly, this is not the case in many developing countries.

Writing on commercialisation challenges of research and development by developing countries, Chandran (2010) hints that the 'Third Mission' activities in universities that relate to generating and applying knowledge outside the academic environment are still low. Chandran (ibid) further observes that the notion of 'entrepreneur' university is missing largely due to the fact that many academics believe that universities should engage in knowledge generation and not in the business of commercialisation. The US through its Bayh-Dole Act of 1980 sought to take progressive steps in supporting its universities and other non-profit institutions in the area of intellectual assets management and commercialisation. This it did by giving universities the right to patent and commercialise discoveries made with government-sponsored research support even though they may have been published within a certain period. Schachman (2006) has observed that as a result of the Bayh-Dole Act, the United States of America recorded 425 new 'start up' companies fuelled by discoveries of professors on University campuses and a record number of patents and licences in 2004. With the hindsight of the success stories from America and elsewhere, Soga (2012) has for instance called for more proactive 'third mission' activities by universities.

Ownership and Funding of Research Work

The question of ownership of these inventions cannot be completely discussed without a reference to the source of funding of the research; whether it was by public funding, private sponsorship or partial public and private funding arrangement. Wolson (2007) notes for instance that in South Africa, only a few universities substantially contribute to research activities from their own internal budgets; Government funding also makes up a relatively small proportion of total research expenditure, but the greatest share of research funding comes from external sources, including local and international companies, philanthropic organisations, development agencies, and nongovernmental organisations.

A public university is generally funded by the government and staff salaries paid by the government. To what extent then can ownership of an IPR be accorded to a staff member whose direct activity actually generates the said invention? Does the particular researcher have any special benefit aside being paid by the government to do a job? A more philosophical question is asked as to whether one can in fact be employed to invent. Soga (2012) for instance questions whether an invention falls within the scope of the duty of a professor in any jurisdiction outside of the US, and notes that this remains a grey area.

Models of Inventions Commercialisation

There are various models and many variations to commercialisation university inventions. In Australia for instance, two principal methods predominate

(Ricketson, 1996). In the first instance, the university does the commercialisation itself through some central licensing or contracting officer or committee. The second model has to do with the establishment of a specialist corporate intermediary to manage and negotiate rights on the university's behalf. WIPO (1997) has also identified the following possible ways for commercialising inventions: starting one's own manufacturing and marketing of product based on the invention, licensing the rights in the invention, selling the patent rights, or any combination of the above. Kalaitzandonakes (1997) notes that patent licensing, research grants and contracts, research and development (R&D) joint ventures, and technical services for a fee, are all examples of commercialisation schemes. And according to WIPO (2004), there are three principal legal methods that can be used to bring about a commercial transfer and acquisition of technology. These are through an assignment, a license contract or a know-how contract.

Commercialisation of IPRs in inventions can be achieved through self-exploitation by the generating institution or exploitation by third parties. Third party exploitation is normally a matter of contract between the institution and the third party intending to exploit the IPRs. This contract can either be a licensing arrangement or an assignment wherein the IPRs are transferred outright to the third party.

Risks Associated with University Commercialisation

There are a number of challenges and risks associated with commercialisation by public universities. This is possibly as a result of the complex nature of commercialisation. While it has worked for some countries in Asia (Malaysia, China, Taiwan and South Korea) most African countries do not seem to get it right (Owolabi et al., 2012). Wolson, (2007) also notes that the income accruing to universities from technology transfer activities is not substantial, and that there is a time lag before a technology transfer office (TTO) can generate sufficient income to become self-supporting.

A study on the University of Ghana for instance found that not only is there a problem that research produced in the university is not widely or appropriately disseminated, there is also little evidence of any incentives or rewards for teaching or research activities that are specifically linked to economic development (Bailey et al., 2011).

An important characteristic of university inventions, according to Dechenaux et al. (2006), is that they typically require further development, which is risky for both technical and market reasons. Chandran (2010) holds a similar view, hinting that academic patents typically are early stage technological developments characterized by high degrees of technical and market uncertainty. Yawson (2009) rather notes that commercialisation activities have been constrained as a result of inadequate uptake of research.

The Policy Environment

Kalaitzandonakes (1997) suggests that some of the barriers to commercialisation can be removed through appropriate revision of the incentive system and policies of the research institution. According to Wolson (2007), not all South African universities have explicit IP policies. Where policies are in place, these are not uniform across institutions. This situation is corroborated by the work of Sibanda (2009) which also found that in South Africa, where out of 23 universities studied, only 10 had IP policies with majority having limited or no capacity for technology transfer. This however provides a better situation than that found by Wolson (ibid).

A review of 12 middle- and low-income countries suggest that policy frameworks in these countries are mirroring international policy trends in the provision of IPRs to research institutions and universities, institutionalizing incentives for researchers, and the promotion of technology transfer infrastructure (Zuniga, 2011). Three policy strands are identified by Zuniga (ibid) as follows: In some countries there is no explicit regulation but rather general rules defined in intellectual property or patent law, and/or legislation regulating research institutions or government funding. A second policy model consists of ministerial policies in the form of national innovation or science and technology policies. A third model adopted more recently in some emerging economies like Malaysia, South Africa and the Philippines, builds on the Bayh-Dole Act of the US.

Intellectual property policy should bring harmony to the conflicting interests of all the stakeholders in the generation and commercialisation of IPRs (WIPO, n.d.). An institutional IP policy should therefore provide for ownership, protection and management of intellectual property that is generated at the institution, promote the progress of science and technology, and to ensure that discoveries, inventions and creations generated by staff and students are utilised in ways most likely to benefit the public (WIPO, ibid).

Methodology

Research Design

The research design employed by the researcher is the qualitative approach in data collection and analysis. A focused rather than a large sample technique was adopted. The qualitative approach was employed to get an in-depth understanding of the many interrelated issues as far as commercialisation of inventions by selected public universities is concerned.

Population and Sample

As clearly indicated in the topic and introduction, the present study focused on selected public universities in Ghana. Two out of the seven public universities were the subject of study by the researcher; the University of Ghana on the one

hand and the Kwame Nkrumah University of Science and Technology (KNUST) on the other hand. The choice of these two is for strategic purpose as far as the current study is concerned. The justification for the two universities chosen is that the University of Ghana is the Nation's premier university with the widest variety of disciplines and high potential for inventive research, while the KNUST was established in 1952 purposely as a science and technology institute and should therefore have research outputs with great potential for IPRs. As far as commercialisation of inventions is concerned, the two selected universities fairly provide the best opportunity to collect data and analyse same with the view to addressing the research questions indicted earlier in this paper.

Table 1: Public Universities not studied

University	Brief profile
1. University of Cape Coast	➢ Set up mainly to train graduate teachersand professional educators
2. University of Education, Winneba	➢ Set up mainly to train graduate teachers and professional educators
3. University of Mines and Technology	➢ previously a School within the Kwame Nkrumah University of Science and Technology (KNUST) and was elevated to a College status in 2001
4. University for Development Studies	➢ Set up in 1992 to blend the academic world with that of the community in order to provide constructive interaction between the two for the total development of Northern Ghana, in particular, and the country as a whole. ➢ It is a rural community based and pro-poor focus, which reflects in its methodology of teaching, research and outreach services.
5. University of Professional Studies, Accra	➢ Engaged in the training of mainly busin ess and other professionals for the corporate world.

The main reason for excluding the other five universities is that the disciplines studied in these universities and the research outputs coming out therefrom do not have the potential of resulting in inventions.

Table 2: Breakdown of Respondents personally interviewed

University	Respondent
1. University of Ghana	➢ One officer at the Office of Research, Innovation and Development (ORID). The ORID was carved out from the School of Research and Graduate Studies in 2010 with responsibilities which included registration, patenting and commercialisation of intellectual property. ➢ The Director of the Institute of applied Science and Technology (IAST).
2. Kwame Nkrumah University of Science and Technology (KNUST)	➢ An official of the Technology Consultancy Centre (TCC). The TCC has the mandate to work with KNUST's academic departments to research, co-develop and transfer technology to support small and medium scale industries in Ghana. ➢ Chairperson of the Committee tasked to put together an IP policy.

Data Collection and Analysis

The researcher conducted personal interviews of the respondents as per Table 2, and also resorted to such secondary information such as the website of the universities and reports of the ORID among others. The interview sought to elicit responses to the following questions among others; what is the level of IP awareness in the university? What activities are conducted to make researchers aware of IP issues in the research undertaken? Is there a university IP policy? If there is, what provisions in the policy deal with commercialisation? How is research work within the university funded? To your knowledge, have there been any commercialisation of inventions within the university? It is worth noting that the researcher adopted a semi-structured interview as the need for several follow-up questions arose in the course of the interview.

The data collected by the researcher was analysed qualitatively. The findings were then compared to findings from published scholarly works to determine any similarities and differences. Conversational or verbal analysis was applied on the data collected. Conversational analysis was best for capturing the deep insights of the interviewees and their shared experiences (Hardy and Bryman, 2004). The researcher was thus able to capture the understandings and orientations exhibited by the respondents.

Findings and Discussions

Intellectual Property Awareness

At the University of Ghana, it is difficult to pinpoint the extent to which researchers are aware of issues of intellectual property rights. This is due to the lack of awareness creation activity being undertaken by the university. At the time of data collection, the ORID was in the process of initiating some IP and IPR awareness creation campaign for the benefit of researchers and students.

At the KNUST, it was found that there is very low IP awareness among researchers. This situation, according to one of the respondents, is attributed to the lack of aggressive industrialisation, manufacturing and commercialisation of inventions at the national level. The KNUST has done a lot of inventive works but the difficulty, according to the chairman for the IP policy committee, is how to calibrate the IPR aspect out of it.

Institutional Framework

The University of Ghana has commenced the necessary processes and procedures in relation to developing its IP and technological management capabilities. The ORID was set up to, *inter alia*, manage the university's intellectual assets accruing from inventions within the university. At the time of data collection, a draft IP policy document had been prepared and was at advanced stage of adoption and subsequent implementation. It was further found that within the same University of Ghana is the IAST which was established during the 2011-2012 academic year. The IAST is responsible for the commercial exploitation of inventions arising out of the Faculty of Science, Faculty of Engineering and the College of Agriculture. It also serves as a link between these faculties and the business community. The ORID however has a wider coverage and has some oversight responsibility over activities of the IAST. It appears however that the IAST is more proactive in its activities of engaging the business community for the purpose of commercialising university inventions.

At the KNUST, there is the Technology Consultancy Centre (TCC) which was set up as a wing of the College of Engineering with the mandate to, inter alia, work with KNUST's academic departments to research, co develop and transfer technology to support small and medium scale industries in Ghana. The issue of IP has, for a very long time since its establishment, not been considered in its activities, says one of the respondents. At the time of data collection however, there was a five-member committee set up to put together an institutional IP policy for the entire university. It is instructive to note that this committee had been set up for more than two academic years (at the time of data collection) without any success at completing the work. As a result, there is no well-structured policy regulating IPRs emanating from research activities at KNUST.

IP Policy and Ownership of IPRs

In terms of the draft IP policy, all IP generated by the University of Ghana (that is, full and part time faculty, postgraduate students, research partners or assistants, etc.) will be assigned to the university. Exceptions will however apply to student work such as thesis or dissertations. But where the student's research is funded by the university or where the student resorts to substantial use of the university's resources for his research, the student will be required to assign the IPR to the university. Ownership of IPR by a researcher will also be determined by the extent of support of the institution or whether there has been significant use of their facilities towards the research in question. At the moment, in the absence of the IP policy, an individual researcher can commercialise his research and own it subject to any arrangement with the funding agent.

The KNUST is no exception. There is an example of a cassava harvesting machine invented by a faculty member. The said member owns the IP and is free to commercialise it. Due to difficulty with funding however, it took almost two decades for the completion of this cassava harvesting machine project.

Due to the lack of institutional IP policies currently in both of the universities sampled, ownership of research output or IPRs is left in the hands of the researcher. Wolson (2007) has identified three category of ownership of IPRs in inventions as follows; institutionally owned, researcher owned or funding agency owned. It appears that the situation in the public universities in Ghana tilts towards researcher owned in the absence of a policy framework.

Funding of Research

Funding of research in the universities is largely through the ordinary research grants that are normally available for general research activities undertaken within a university. In other words, there is no particular funding dedicated to inventive or applied research.

At the University of Ghana, researchers generally source their own funds for research even though a number of grants are available for research within the faculties. The grants available are Faculty Development grants which are available for some Masters and PhD programmes. These are aimed at building the capacity of researchers within their faculties, institutes and colleges. The main condition attached to these research grants is the requirement to publish the work, given that the university is a public university and the knowledge generated is intended to be public knowledge. This is in consonance with the traditional view of the function of the university which is to generate public knowledge for the public good (Rappert and Webster, 1997; McSherry, 2001; Reid, 2004).

The KNUST is no different from the University of Ghana in respect of funding for research. The KNUST has a research and conference committee to which one can apply for research grants or for financial support to enable an applicant researcher

to present at some conference. There is also a private initiative by which project proposal may be submitted to external funding organisations for support.

It was thus found that for both universities, their internal research grants are limited and open to all faculties, institutes and colleges and not specifically towards inventive research. It appears however that the large majority of research funding within both universities are sourced externally. For a number of middle-income countries, industry funding in the form of contract research is a major source of academic research funding (Zuniga, 2011). There was no evidence to determine the extent to which university research funding emanates from industry as none was elicited from the interview.

Commercialisation of Inventions

Flowing from the findings and discussion on ownership of IPRs, the system prevailing at the public universities at the time of data collection allowed the researchers to own and commercialise their IPRs themselves in the absence of any restriction by the university. There is however no successful commercialisation activity to show in terms of commercial exploitation of inventions emanating from the universities. Indeed at the KNUST, it came to light that a faculty member, Prof. Emmanuel Bobobee, developed a cassava harvester. Some publicity was given to this groundbreaking innovation on national television, and that news report is published on YouTube via https://www.youtube.com/watch?v=B3YMbuW6_co. As regards the extent of commercialisation of the said harvester, the inventor who was also the Chairman of the IP policy committee and thus one of the respondents from KNUST sadly recounted that despite the wide publicity given to the invention at the time, "nobody came forward to express commercial interest in it". As to what must have accounted for the lack of commercial interest in the invention, he retorted thus: "the whole thing is that nationally there is no hunger for innovation". The inventor was willing to license the invention but nobody came forth.

This sorry situation goes to confirm the assertion by Yawson (2009) that commercialisation activities have been constrained as a result of inadequate uptake of research. This is probably due to the fact that university inventions typically require further development, which is risky for both technical and market reasons (Dechenaux et al., 2006). Moreover, the process of commercialisation is itself most complex and as such requires much specialised professional expertise and expert knowledge as suggested by WIPO (1997).

It is clear from the foregoing that in the public universities studied, none of the methods of commercialisation outlined by Ricketson (1996), Kalaitzandonakes (1997), WIPO (1997) and WIPO (2004) are engaged in.

Challenges of Inventions Commercialisation

The main challenge identified by the universities under study is inadequacy of research funding. The conditions attached to the limited research grants available also in a way preclude researchers or their universities from commercialising any such inventions. One such condition is the requirement to publish, which has the tendency to defeat any effort to patent potential invention and hence deny the inventor exclusive right to the commercial exploitation of such invention.

The lack of national hunger for industrialisation was also found as one of the challenges of commercialisation of inventions. National commitment where a certain portion of the GDP should go to research and innovation is lacking. There is therefore no incentive to engage in inventive or applied research. This confirms the finding by Bailey et al. (2011) that not only is there a problem that research produced in the university is not widely or appropriately disseminated, there is also little evidence of any incentives or rewards for teaching or research activities that are specifically linked to economic development.

The lack of institutional policy direction as regards commercialisation also serves as a major setback to the Universities. What also became clear in the course of this research work is the lack of expertise in the area of IP management and commercialisation. This confirms the fact that 'the process of commercialisation is itself most complex and as such requires much specialised professional expertise and expert knowledge' (WIPO, 1997).

Summary, Conclusions and Recommendations

Summary

What precipitated the present study is the dearth of inventions commercialisation in Ghana. The study thus sought to evaluate the mechanisms by which inventions are commercialised by public universities in Ghana. In pursuit of this objective, the research questions of what the level of IP awareness is, what institutional mechanisms exist for inventions commercialisation and the extent to which inventions in these universities have been commercialised were answered through interviews administered by the researcher. Data collected through the interviews was analysed qualitatively and tested against theories found in the existing literature on the subject, consequent upon which the following conclusions are reached and recommendations made.

Conclusions

The level of IP awareness among researchers in public universities in Ghana is generally low, except to say that there is a growing appreciation of the importance of the subject. This assertion is based on the fact that IP awareness is limited to a few top persons whose direct responsibilities naturally bring them into some

contact with IP. There is therefore the need to consciously bring to the attention of researchers the important place of IP in their activities.

This paper confirms the seeming tension between the publication needs of the researchers in academia for promotional purposes and patenting of inventive research results. The requirement to publish research findings normally come with the funding of the research that led to the particular invention.

The institutional policy environment for management and commercialisation of inventions in public universities in Ghana is generally fuzzy to say the least. At the time of data collection, none of the universities studied had a fully-fledged institutional set up in place to warrant any proper assessment of its effectiveness. Management of IP in these universities is quite nebulous. The universities do not have centralised systems for the management of IP as in some instances this study has found more than a single unit responsible for intellectual asset management. There is therefore no effective coordination between the various units which have some role to play in this regard. The institutional policy framework in public universities in Ghana is generally in their nascent stages.

This work has also shown that there is no effective commercialisation of inventions by public universities in Ghana. Once the funding agency does not prohibit commercialisation of a research result, the researcher is free to personally commercialise. But as an institution, in the absence of a policy that vests ownership and commercialisation in the university, no commercialisation takes place by the University *qua* university. The dearth of effective commercialisation of inventions by the Universities studied is not only due to the lack of specialised professional experts in the field but also inadequate uptake of research output.

Recommendations for Policy Consideration

It is recommended that the universities hasten the adoption and implementation of their IP policies to respond to the policy vacuum that appears to be the major bane of effective commercial exploitation of inventions. Streamlining the institutional mechanism for the management and commercialisation of their intellectual assets is also crucial. In this regard, centralised rather than segregated units within the university would best achieve the desired result.

It is further recommended that since the business of commercialisation is a complex one, professionally qualified experts in IP assets management be engaged to assist rather than drawing persons from within the university. This is necessary because the core competence of an academic may not be enough to out-negotiate an entrepreneur whenever some joint venture or licensing agreement is to be reached.

It is further recommended that the government of Ghana revisits the National Science, Technology and Innovation Policy of 2010 and roll out the strategies contained therein towards an industrialised economy which utilises inventive research.

Prioritisation of expenditure that makes budgetary allocation specifically for research in general and applied research by public universities in particular is also recommended. It is high time the government of Ghana began to look more to long term investment in research and industrialisation which would result in a more sustainable income generation and job creation that the government seems to be more concerned with.

Recommendation for Future Research

Future research may further explore the policy environment within the universities since at the time of this study, none of the institutions had a fully-fledged institutional policy in place yet, although some of them had draft policies. Moreover, since Polytechnics (Technical Universities) in Ghana generally undertake a lot of engineering and technical courses, future research which focuses on these institutions would be revealing. As has been made clear, this study focused on public universities.

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THE POTENTIAL OF MARKETING ZANZIBAR CLOVES WITH GEOGRAPHICAL INDICATION LABELLING

Innocensia John
University of Dar es Salaam, Tanzania

Abstract

Cloves are an important source of government income in Zanzibar. As an economic policy instrument, Geographical Indication (GI) has a potential of being used by the Zanzibar government in promoting its cloves that are widely known for their distinctive taste and aroma. In this article we examine the potential of marketing Zanzibar cloves using Geographical Indication labelling. The article employed qualitative and quantitative methods to look at the link between the product attributes and the environment in showing its potentiality and looking at different factors that may influence the labelling of this product. Further the study looked at the influence of cooperatives in enabling the labelling of these products. Our results suggest that producers of clove are more likely to adopt GI labelling since cloves is their main source of income and members of a community-based group are more likely to adopt GI labelling.

Keywords

Zanzibar, cloves, Geographical Indication, labelling, producers

Introduction

Cloves of Zanzibar was identified during the ARIPO meeting held in Ghana in 2012 as one of the potential Geographical Indication (GI) product in Africa (ARIPO and European Union., 2012). Geographical Indication, as an economic policy instrument, has been used widely in EU, to promote, protect and market its agricultural products - as well as wines and spirits. Producers who labelled their products with an EU approved GI label have managed to secure a premium price by selling quality products which are labelled to protect the produce from being copied by other producers. Therefore, GI can increase producer's premiums and ensure quality to the consumer that value high quality products.

As an economic policy instrument, GI could be used by the Zanzibar government in promoting its cloves that are widely known for their distinctive taste and aroma. Zanzibar depends on limited agricultural commodities - cloves and seaweed – are their primary export items.

Blakeney et al., (2012) wrote that a clove producer in Zanzibar faces a price 10-20 times lower compared to the end price for cloves paid by consumers in Europe. They went further and compared the price for cloves sold in the Mombasa auctions in Kenya, which was considerably higher than the price offered to farmers, by the government clove marketing authority in Zanzibar.

Recently, GI in Tanzania has been a topic of interest for discussion in trying to formulate a law that supports the protection of high quality products. Zanzibar on the other hand has made such effort in incorporating GI in its Industrial Law in the protection of spices, specifically cloves. Zanzibar being among the large producers of high quality clove has been well recorded and maintained in the world market. The high quality has been maintained not only by the supporting geographical environment but also through the grading system performed by Zanzibar State Trading Cooperation (ZSTC) during the purchasing process of cloves from the producers.

Knowing the potential that Zanzibar clove has in the GI Market, its obvious producers will benefit even more if they would label their products with a GI label. Few studies have tried to show the importance of GI in protecting crops in Africa (African Union-European Union, 2011) with only scholars such as Uluko et al (2012) having quantified the actual benefits that a producer of specialty product may obtain since there are very few registered GI products. In 2013, three first GI's were identified in Africa Penja pepper, Oku white honey and Ziama Coffee and in 2015 Café de Valdesia from the Dominican Republic was registered as a GI.

This study intends to contribute on the literature on GI for the case of Zanzibar by showing how producers of highly quality origin products may benefit from marketing their products using GI labelling. This article focuses on producer's awareness of GI as a marketing instrument and how these producers may benefit more in the selling of their crops locally and in the international market. The article uses data collected in 2015 from households producing clove from both Unguja and Pemba.

Zanzibar Industrial Property, 2008

The industrial act of Zanzibar includes the protection of Geographical indication in Article 55 to 60; and in section V in Article 104. The Act defined and explained the ground rule in registering GI's and the grounds of refusal for such registration. In Article 5 the government states that "it will grant patents and registration of industrial designs, marks and geographical indications" but will be subject to refusal if a mark:

> contains or consists of a designation of origin or a geographical indication registered in accordance with the Council Regulation (EEC) No 2081/92 of 14 July1992 on the protection of geographical indications and designations of

origin for agricultural products and foodstuffs (OJ L 208/92, p. 1), provided that the circumstances referred to in Article 13 of that Regulation exist and the sign does not relate to the same sort of product, and provided that the mark application has been filed after the date of filing of the application for the registration of a designation of origin or a geographical indication with the Commission(GoZ, 2006).

The 2008 Act was more detailed including Geographical indication in Part III of Distinctive Signs of paper II from section 56 to 66. The act defined a Producer of GI and a GI good. In section 2 it clearly gave the interpretation of "certification signs, collective marks, geographical indication, Paris Convention, patents". Hence, the Act in section 57 to section 66 it has stated that:

> Any interested person or any group of producer's or consumer may proceed to the court to prevent in respect to geographical indication, the use of any names in the designation of a good that indicates of suggests that the good in question originates in a geographical area other than the true place of origin in manner which misleads the public to the geographical origin of the good.

The Act further explained that a good shall not be protected as a GI if it is against the definition in Section 2, any application of a GI will specify the requirements as in section 61 and only producers carrying their activity in the geographical area specified in the register shall have the right to use a registered GI. In the course of trade the products must possess the quality, reputation or other characteristics specified in the register.

Geographical Indications as a Marketing Strategy

Research on marketing of products using GI as a marketing strategy is required to "nurture, brand, and popularize vulnerable local products to ensure their global reach and acceptability" (Dagne, 2012; Oguamanam, 2008). Marketing GI products in developing countries requires the need to convince consumers that products from a certain geographical area have attributes that are more valuable than competing products from other areas. This process involves a lot of awareness building that may seem to have a high cost to the producer and in turn not feasible to most of the producers. This situation is due to asymmetric information between the producer and the consumer. The marketing of GI becomes feasible only if there is an actual or potential market, or at least competition.

In developing countries a significant variety of agricultural products are potential candidates for GIs protection, which have broad recognition in the market for their reputation based on linking quality and other characteristics to place.

Boseong green tea from South Korea was protected in 2005 as a GI, its market price of tea increased by 90 percent, without significant marketing costs, at the early stages of introduction with GI, because Boseong green tea already had a high reputation in the market (Dagne, 2012). Furthermore, the "Madagascar-Bourbon" vanilla is recognised ,as the best in the world, and receives a premium over other varieties (Havkin-frenkel and Belanger, 2011). Similarly, the Ugandan vanilla, has the highest vanillin content and the size of the vanilla pond is long, and therefore Ugandan vanilla is recognised for its rich, complex flavour with a spicy overtone, and it is currently considered among the top three or four varieties. These distinctive features differentiate Ugandan vanilla from vanilla in other countries that are attributed to the natural and human factors in the geographical origin of the product (WIPO, 2014).

Darjeeling tea of India and Assam teas are among the world's finest quality tea (Coombe and Ives, 2014), they enjoy a significant market share that is unparalleled by tea produced from any other region, even before GIs protection was extended to major brands. South Africa's indigenous tea product, Rooibos, has a reputation as a unique product in domestic markets and is exported to 46 countries at premium price, and demand for the product is growing at twelve per cent per year (Estelle et al., 2013).

Bramley et al., (2009) and Teuber et al., (2011) wrote a comprehensive literature on the economics of geographical indications. However, very few quantitative papers on GIs have been published which have mainly discussed the aspects of GI in relation to the role of information, reputation, quality and price along the value chains. In analysing, the role of GI in promoting and in marketing agricultural products it is important to study the factors that may influence producers to adopt GI labelling.

A study by Ngokkuen and Grote, (2012a) identified a number of factors that influence the adoption of GI as a strategy of valorisation. In their logistic regression analysis, they indicated that social and human variables influenced the decision of Thai Jasmine rice farm household to adopt GI certification. However, studies on GI certification adoption in Africa are very few; this study can be a useful guidance to help select appropriate factors determining the GI certification adoption.

Different authors have focused on the adoption certification schemes in certain agricultural sectors (Ngokkuen and Grote, 2012a). As cited by Carambas (2007) and Dörr (2009), in their studies on the adoption of certification schemes, they identified factors such as certification costs and trust as playing an important role in determining the adoption of certification by farm households. Similarly, Asfaw (2008) found that education, household wealth, access to information technologies and group membership have a positive role on the decision of the small-scale vegetables producers to adopt Global GAP certification. Age,

availability of family labour, education, household wealth, farm size, intensity of irrigation use, support by exporters and farmer trainings are factors having significant influence on farmer adoption decisions.

OECD (1995) further identified factors that would then influence the success of small rural enterprises that target niche markets. The main factors identified were market access and differentiation. The study found that one approach to address these factors is to work collectively in order to develop a competitive advantage. This approach is well accommodated within an origin-labelled valorisation strategy confirming the economic rationale for protecting geographical indications (Cerkia Bramley et al., 2003). As Anson (2012) depicted, GI has the power to create niche marketing and product differentiation.

This article is biased towards ways in which GIs can be marketed, benefits that accrue to producers and ways the recognition of a GI product may benefit the economy. The authors mostly applied qualitative analyses with very few studies featuring quantitative analysis. They tried to show how the adoption technology of GI labelling may increase producer's premium and prevent counterfeit. While registration and use of these labels has been well documented in developed countries, in the developing countries only few studies have been undertaken, - motivating the wish to document and fill the literature gap for the case of Tanzania by studying Zanzibar cloves, in this study.

The Economic Theory

Marketing of GI products is linked to product differentiation theory. GI provides a scheme of attributes to differentiate the product. Therefore, GI is a helpful tool for achieving product differentiation, and can increase economic efficiency through providing producers with incentives to deliver. Producers who can ensure their goods differ from other products have a competitive advantage with variation by style, type or location (horizontal differentiation) or by quality (vertical differentiation). Figure 1 shows:

Unique attributability /qualities which the product has in contrast to other products;

Comparative: products addressed a quality difference from the similarity or dissimilarity between one thing and another; and

Holistic: characterised of the product are entirely connected to the ecosystem/Geography that provides the differentiation.

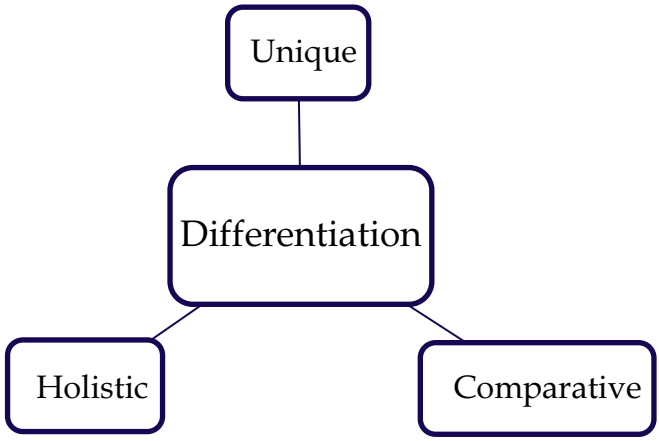

Figure 1: Link of Marketing Unique Products

Bramley and Kirsten, (2007) provides a legal framework within which producers can obtain property rights on differentiated products thereby preventing other producers from entering the market and allowing the producers entitled to use the geographical indication to appropriate benefits. This framework further facilitates collective production and marketing, providing the necessary scale of production required to justify the cost of creating and maintaining the differentiated product image. This is particularly important in the case of artisanal products (with the majority of geographical indications being artisanal) which are labour intensive rather than capital intensive and, therefore, cannot benefit from economies of scale. This is confirmed by research (Barjolle and Chappuis, 2000) which indicates that these producers increase their chances of success by adopting a common market strategy, which allows them to attain a scale of production large enough to justify the investments in product image.

Geographical indication is largely based on the economics of differentiation and niche marketing. Small producers create competitive advantage from the socially constructed difference derived from the geographic area of production. GIs then works well in the creation of collective monopolies for producers who join for a common interest of protecting their crop/production and acquiring a higher premium. These collective groups exhibit the characteristics of a club.(Samuelson, 1954; Thiedig and Sylvander, 2000), defined a club as "a voluntary group of individuals who derive mutual benefits from sharing one or more of the following: production costs, membership and characteristics or a good characterised by excludable benefits".

Geographical Indication are known to function well in a group of producers who have a common goal. GI registration comes with a cost, but producers in a group will feel this cost is minimal, due to cost sharing. Characteristics of a club are those termed for a monopoly producer that prohibits entry by other producers in the production market. For GI, only producers of the demarcated area are participants - who comply with the code of practice. The barriers, which are created by limiting the use of the designation of the product and the production

process, facilitate the formation of monopoly. As a result, protection of GIs imposes, with reference to producers outside the designation, a monopolistic market structure, given the causal link between a product and its origin, which results in a proprietary right for those entitled to use it. (Bramley et al, 2009). Ability/capacity to label goods with a GI can constitute a type of power in the market. This is because of the monopoly of the GI label.

The Model

This study follows the methodology of Ngokkuen and Grote, (2012a) that uses a logistic regression (Logit) to select key variables which could explain the behaviour of producers in the decision of adoption a GI label. It is also important to check on the role played by cooperatives the adoption of a new technology (in our case GI labelling) as acquiring a GI label is easily done by a group of farmers. So the study will analyse the factors determining cooperative membership and their influence on adoption.

The study specifies a logit model which is used to determine whether a single or several independent variables significantly predict the dependent variable. By using the logistic regression model one is able to indicate whether the independent variable significantly predicts the probability or odds of the dependent variable occurring (Gujarati, 2004; Katchova, 2013).

The logit probability model is done by regressing a set of independent variables (X), which can be categorical or continuous, on the conditional expectation of the binary dependent variable (Y) (Liao, 1994). The logit model uses a logistic cumulative distribution function to estimate the linear determinants of the logit (Li) or the logged odds and has the following form:

$$Y_i = x_i\beta + \varepsilon_i \text{ ……..(1)}$$

Where Y_i is a binary variable that explains the behaviour of producers in the decision of adoption a GI label i.e. on whether GI product registration will enhance premium price for clove producers from the adoption of a GI labelling, the respondents are producers (Wooldridge, 2004).

The factors to be used in the models are age, education, gender, occupation both on-farm and off-farm , membership, GI awareness, income, land size, product quality, years of farming, membership to cooperative, access to extension service, income importance from clove production, farmer willingness to accept GI technology, produce uniqueness, information and knowledge.

Due to the availability of many factors that explain the product characteristics and geographical characteristics, a chi-square analysis was used to determine the relationship between the two variables. Then a factor analysis was applied to find the variables that explain the largest amount of variation in the variables (Malai

and Pitsuwan, 2002; Tucker and MacCallum, 1997). After running factor analysis, the extracted data were run for rotation to simplify and clarify the data structure. The factors extracted from factor analysis, were run in binary logistic regression analysis and probit regression (Tranmer and Elliot, 2008).

Data Sources

Data utilised in this article was collected in June to August 2015 in Unguja and Pemba. Five regions were selected i.e. North and South Pemba; and North Unguja. A sample of 145 households was selected randomly from 5 different districts i.e. Wete (43), Mkoani (26), Chakechake (16) from Pemba and Kaskazini A and (60) of Unguja North. A structured questionnaire was administered to producers (farmers) of cloves; the information collected was on the production methods, geographical characteristics, household characteristics, product attributes, market information, extension services and access to credit. Five focus group discussions were done with producers, technical consultants (agronomists and agricultural economists) of ZSTC, public officers of the agricultural regional department from the agriculture ministry, and a producers' association. Areas in Zanzibar (Unguja and Pemba) that grow cloves are shown in Figure 2 below.

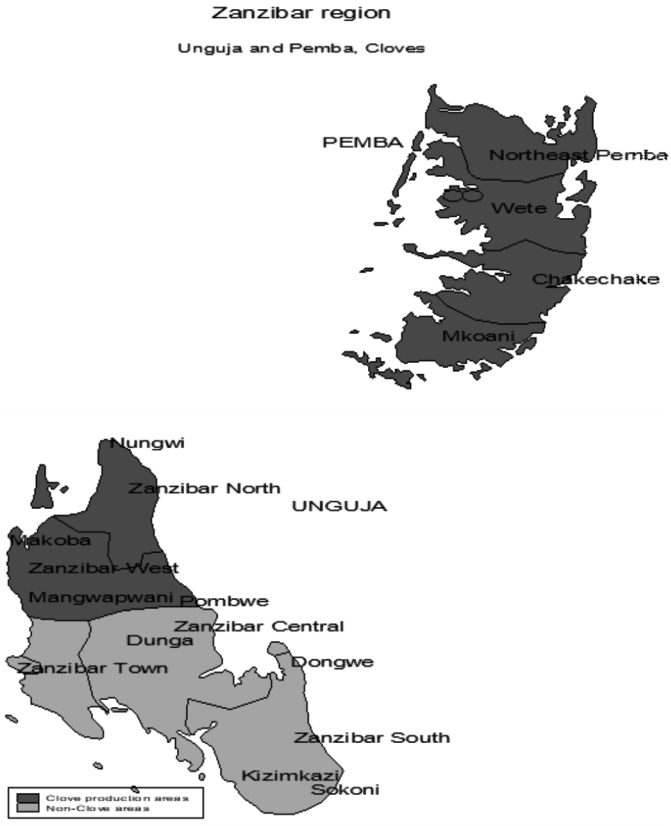

Figure 2: Clove Growing Areas in Zanzibar (Unguja and Pemba)
Source: Stata shape files using 2015 Zanzibar data

Results and Discussion

Chi Square Test between Product Attributes and Geographical Characteristics

The link between perceived attributes of the products and the related geographical characteristics was tested, to determine if the attributes are dependent on the geographical characteristics. The rationale here was that GI products must link to the area in which they are produced. The attributes mentioned by the producers were linked to the named characteristics of the area of production. To do this a chi-square independence test was applied. The null hypothesis is that Zanzibar unique attributes are independent of the geographical characteristics. Results are presented below.

Table 1: Chi Square Test between Product Attributes and Geographical Characteristics

Variable	Pearson chi-square	Pr
Product quality	8.6346 (2)	0.013
Specific product attributes	15.5601 (6)	0.016

Based on the results presented in Table 1, the null hypothesis that product attributes are independent of the geographical characteristics is rejected. The next procedure is thus identifying the factors that may influence GI adoption and the marketing of cloves that mean higher returns to the producer.

Producer's Perception on GI

Factor analysis is applied to depict producer's perception of clove as having potential for marketing with a GI label, by reducing the number of variables and collecting them into one factor. The variables were grouped according to their loadings in the same factors. A factor loading with a value of 0.30 and above is considered good and significant. Starting with a total of twelve variables, which measure the producer perception on GI products, after running the factor analysis, four factors were extracted (Table 2). The cumulative percentage of variance explained was 70.84 percent, which explains 70 percent of our sample size according to factor analysis used for producer perceptions on GI products.

The first factor has three scale items: "main source of income" "contribute to the regional economy" and "they have medicinal properties" entitled benefits from cloves. The second factor can be interpreted as confidence in GI products since it includes items such as "package" "they are of higher quality" and "reputation". The third factor includes "agro-ecosystem" "biodiversity" and "rainfall"

referring to a factor determining a product quality unique to a certain geography. Lastly, is factor four, which includes "history" "narrative" and "knowledge on existing institutional environment". The KMO test is measured as the value of 0.6026, which gives an average view of the analysis. The choice of these variables was based on the factors considered in selecting potential GI products, consumer and producer studies, as done by Albayram and Mattas, (2014) and Giovannucci, et al., (2009).

Table 2: Factor Analysis on Producer GI Perception

Variable	Benefits of Clove	Confidence in Clove as a GI	benefits to Environmental	source Information
main source of income	0.6879			
Contribute to the regional economy	0.7955			
They have medicinal properties	0.8003			
Perception of package		0.4555		
They are of higher quality		0.7297		
reputation		0.6794		
agro-ecosystem			0.6609	
biodiversity			0.6214	
Rainfall			0.428	
History				0.5145
Narrative				0.4891
knowledge on existing institutional environment				-0.334

Factors that Determine the Adoption of GI Clove Labelling

Results of the Logistic model (marginal effects) of factors determining the adoption of GI in protecting, marketing and promoting cloves in Zanzibar are shown in Table 3. The factor analysis solutions for producer's perception of clove as a GI product are used in the equations of adoption decision for GI label and membership.

Factors found to determine producers attitude towards using GI labelling of Zanzibar cloves as a marketing strategy, were run in a logistic regression in a model for decisions on labelling to identify the relationship that exists. Table 3 shows that gender was a positive marginal effect and statistically significant at 5 percent. This suggests that the probability of the decision for labelling increases if the household is male headed, i.e. men are more likely to adopt GI labelling than women.

Occupation appears to influence the decision to adopt such that households who are into agriculture as main and primary occupation are more likely to adopt the method[1].

The increase in willingness to accept GI increases the probability of labelling their products by 0.83 units. One of the main issues in making GI function well is that people accept GI as a tool that cannot only protect their products from imitation but also enable them earn more from labelling these products with a GI label[2]. On the other hand having knowledge on how the existing institutions work and how one may obtain a GI label increases the probability of deciding to adopt a GI a label.

Table 3: Logistic Estimates Factors Determining the Decision To Adopt a Gi Label (Marginal Effects)

Variable	dy/dx	Std. Err.	z	P>z
Age	0.0000	0.0000	-1.0800	0.2790
Gender	0.0507**	0.0259	1.9500	0.0510
education	-0.0576	0.0507	-1.1400	0.2560
Off-farm employment	0.0120**	0.0076	1.5700	0.1150
On-farm employment	0.0572	0.0286	2.0000	0.0450
Access to Extension services	-0.0017	0.0208	-0.0800	0.9360
Willingness to Accept	0.8314***	0.1247	-6.6700	0.0000
Importance of income from Cloves	-0.0534	0.0542	-0.9900	0.3240
Price Perception	-0.0285	0.0194	-1.4700	0.1420
Labour employed	-0.0016	0.0027	-0.6200	0.5350
Mode of Selling	-0.0562	0.0384	-1.4600	0.1430
Management	0.0434	0.0271	1.6000	0.1090
knowledge on existing institutional (score)	0.0410*	0.0220	1.8600	0.0630

Where, $^{*}p< 0.1$, $^{**}p< 0.05$, $^{***}p< 0.001$

In Tanzania, it is not only Zanzibar that produces cloves, but also Tanga and Morogoro areas in the Mainland Tanzania. In terms of quality however, there are variations. According to a respondent– a chief chemist within Zanzibar (Government Chemist Laboratory Agency (GCLA)), clove quality is linked to natural factors such as type of soil, temperature, rainfall and altitude position

from sea. These influence the amount of soil and chemical composition and hence the quality of clove. Zanzibar's clove may have the same physical properties such as size, appearance and colour to that grown in Tanga, but they differ in taste and smell[3].

Cooperative Membership

Producers form cooperatives as a marketing strategy to obtain a better price.[4] Producers with common interest, create interdependence that becomes a foundation for collective actions (FAO, 2012). Members of GI groups share a common asset, unlike other groups, i.e. the GI's reputation. In our analysis, a probit regression was done to analyse the factors influencing producers of cloves in Zanzibar to form a cooperative.

As shown in Table 4, it was found that *age* of a producer influences their decision positively of being a member of a cooperative. This means that older producers are more likely to decide on being a member since there are aware of collective benefits. Benefits obtained by producers from clove production; producer's knowledge on GI; origin characteristics; knowledge on the environment and extension services were negatively affecting the producer's decision to become a member of a cooperative, this may have been due to the fact that most of the clove producers have not actually realised the benefits they may obtain from GI labelling. However, the willingness to accept GI labelling was positively influencing the decision to become a member. The ownership of land for the cultivation of cloves was another factor that influenced producers to join cooperatives. This simply means producers with no land had no incentive to join the cooperative.

Table 4: Probit Results for the Factors Determining the Decision to Become a Member of a Cooperative (Marginal Effects)

Variable	dy/dx	Std. Err.	z	P>z
Age	0.0077**	0.0039	1.9800	0.0480
Gender	-0.0449	0.1434	-0.3100	0.7540
Marital	-0.0836	0.1318	-0.6300	0.5260
Experience	0.0001	0.0000	1.4300	0.1520
benefits from Cloves (score)	-0.1434*	0.0794	-1.8100	0.0710
WTA	0.3471**	0.1470	2.3600	0.0180
Knowledge on GI	-0.1689*	0.1011	-1.6700	0.0950
Origin characteristics	-0.1331**	0.0657	-2.0300	0.0430
Information	0.0404**	0.0181	2.2400	0.0250
Knowledge on the environment (score)	-0.1890**	0.1018	-1.8600	0.0630

Log of land	0.2236***	0.0776	2.8800	0.0040
Extension services	-0.0899*	0.0544	-1.6500	0.0990
Participation in village meetings	-0.2078	0.1448	-1.4400	0.1510
Awareness	0.1449	0.2868	0.5100	0.6130

Where, $^{*}p< 0.1$, $^{**}p< 0.05$, $^{***}p< 0.001$

FAO, (2012) explained further that with collective groups, producers are better able to prevent fraud and usurpation by enforcement of the GI code of practice, and create opportunity to enter new market segments and market places, so a GI product may enter the market and increase sales. The findings are in line with Ngokkuen and Grote, 2012b, that GI households are more likely to have better access to information on GIs and to participate more in village meetings that will increase the decision for them to join cooperatives where they can have bargaining power in determining the price.

Conclusion

The objective of this study was to investigate ways in which Zanzibar clove producers may benefit from labelling their products with a GI label and how being a member of a cooperative could help make this easier. An analysis of the decisions made by households on the adoption of GI labelling with a logistic regression was done and a probit model was used to analyse that of cooperative membership. A detailed analysis was made on the clove production in Zanzibar and how increased use of GI labels may benefit not only the producers but the Zanzibar economy, if such potential is captured in the market.

It has been noted that producers of clove are more likely to adopt GI labelling since it is their main source of income and their consumers are willing to accept such a label. Moreover, members of a community-based group are more likely to adopt GI, an observation which is in accordance with literature, suggesting that GIs work best for smallholder farmers when they operate in groups. For the case of Zanzibar, they operate under ZSTC. The study concludes that membership to farmer groups is necessary in the adoption of GI; producers with common interest in a certain geographical area can more easily enjoy the benefits at a lower cost.

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Notes

[1] Geographical Indications are "indications which identify a good as originating in the territory of a member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its origin".
[2] The adoption of GIs is effective only if there already is "an actual or potential market, or at least … competition" for the product in foreign countries.
[3] Massimo Vittori, "The International Debate on Geographical Indications (GIs): The Point of View of the Global Coalition of GI Producers—origin" (2010) J World Intel Prop at 306.
[4] See Mcdave, 2012, stated that SME's are able to brand, label and package better which may be a result of the reputation of The GI product.

LEGITIMACY CONUNDRUM: MANAGEMENT OF COLLECTIVE RIGHTS FOLLOWING DEREGISTRATION OF THE MUSIC COPYRIGHT SOCIETY OF KENYA

Mbugua Njoroge
Kenyatta University

Abstract

Kenya's collective management sector is smarting from the ongoing infighting pitting the oldest CMO in Kenya, the Music Copyright Society of Kenya (MCSK) and the Kenya Copyright Board (KECOBO), the statutory copyright regulator. In February 2017 KECOBO revoked MCSK licence due to poor corporate governance and failure to comply with licensing requirements. The regulator licensed the Music Publishers Association of Kenya (MPAKE) to fill the void left by MCSK. However, this decision opened a can of worms in the copyright sector in Kenya. Ever since, two conflicting court orders have been issued, one restraining KECOBO against revoking MCSK's licence while another restrains MCSK against executing the mandate of a collecting society pending a determination of a case lodged at the High Court of Kenya. Additionally, there are also weak regulatory mechanisms, poor corporate governance among the collecting societies, lack of institutionalizing of a competent authority among many other challenges. The conundrum has exposed the country's copyright sector underbelly with increased apathy towards the sector while copyright owners continue to lose royalties because of the prevailing conditions. The paper provides recommendations on how this labyrinth can be navigated through by stakeholders in line with Kenya's constitution, copyright law and international legal instruments.

Keywords

authority, collective management, constitution, copyright, music

Introduction

The Constitution of Kenya, which was promulgated in 2010[1] is considered as one of the pragmatic constitutions in the continent. It is among the few Constitution in Africa to have enshrined protection of Intellectual Property Rights. For instance, Article 69 of Egyptian Constitution (2014) and Article 41 of Tunisian Constitution provide for protection of intellectual property. The Constitution of Kenya (2010) makes a strong case for the protection and promotion of music as a form of cultural expression as well as a property whose owner should be protected from unlawful deprivation.[2] To start with, Article 11(2)[3] requires the state to promote

the Intellectual Property of the people of Kenya.[4] Article 40 of the Constitution provides for the right to own property of any kind.[5] Further to that, Article 40 (5) obligates the state to promote the intellectual property rights of the people of Kenya, while Art 69(1)(c) mandates the state to "Protect and enhance intellectual property and indigenous knowledge of, biodiversity and the genetic resources of the communities"[6] Further, in the interpretation section under Article 260 has for the first time included Intellectual Property in the definition of property. The Article defines property as including any vested or contingent right to, or interest in or arising from intellectual property.[7] Additionally, Article 11 recognises culture as the foundation of the nation and as the cumulative civilisation of the Kenyan people. In this regard, the Constitution obligates the State to promote all forms of national and creative expressions through literature, the arts, celebrations, science, media, communication, heritage and libraries. In his own observation, Kimani Njogu holds that the state has more work to do to enhance creative sector as contemplated in the constitution.

> It behoves the State therefore to initiate and support and in the advancement of culture, creativity and innovation, build the requisite infrastructure, source markets for creative goods and services and put in place incentives for the growth of the sector. (Njogu, 2015, p.3)

It can be argued that, the creative sector, including musical works are well protected in Article 33 of the Constitution, which guarantees freedom of expression.[8] Intellectual Property is administered through various statues including Industrial Property Act[9], Trademark Act[10], Anti-Counterfeit Act, Competition Act, Traditional Knowledge and Cultural Expressions Act of 2015 and Copyright Act of 2001.[11] The paper focus is on collective management of rights in Kenya and is largely informed by provisions as outlined in the Copyright Act.

Regarding international law and legal instruments, the Constitution gives more lucid to the connection of International law in the Kenyan legal system. It makes Kenya a monist state as opposed to dualist status Kenyan enjoyed prior to passage and adoption of its supreme law. The Constitution now allows integration of international law into the country's legal system as per Article 2(5) as read together with 2(6) which incorporate international law as part of Kenyan law. It can be argued that the following international legal instruments, relating to copyright and related rights, and which Kenya is party to are part of laws of Kenya, they include; the Copyright Conventions, administered by the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the World Trade Organisation (WTO) and the World Intellectual Property Organisation (WIPO). Kenya is also party to Harare Protocol establishing Africa Regional Intellectual Property Organisation (ARIPO). Even though the Constitution seems to suggest the monist system there is the Treaty Making and Ratification Act No. 45 of 2012 which is an Act of Parliament that gives effect to the provisions of Article 2(6) of the Constitution and to provide the procedure for the making and

ratification of treaties and connected process. The Act applies to treaties concluded after the commencement of the Act.

Copyright Act CAP 130, Revised Edition 2014 [2012] [12]

The Copyright Act provides for protection of copyright and related rights. Section 22 outlines works that are eligible for copyright protection.[13] The works encapsulated in this section includes literary works, musical works, artistic works, audio-visual works, sound recordings, broadcasts and computer programs.[14] Notwithstanding these provisions, Section 26 provides for limitations on copyright in literary, musical or artistic and audio-visual works.[15]The Section 3 of the Act establishes the Kenya Copyright Board (KECOBO). The Board is empowered to license and supervise activities of Collective Management Organisations (CMO)[16] to collect and distribute royalties on behalf of their members.

Section 46 outlines how a Collective Management Organisation will be established while Section 48(1) establishes the Competent Authority appointed by the Minister to determine any matter within its jurisdiction this include where the Board is unreasonably refusing to grant a certificate of registration in respect of a collecting society or the Board is imposing unreasonable terms or conditions on the granting of such a certificate or a collecting society is unreasonably refusing to grant a licence in respect of a copyright work.[17] One may argue that the Competent Authority can entertain appeals from the decisions of KECOBO and CMO.

The procedures for collective administration of copyright are provided for under section 46 of the Copyright Act of 2001.[18] This is to ensure that CMOs carry out their core function; collection and distribution of royalties in efficient and effective way. It is instructive to note that the collective management organisations in most cases are non-profit companies limited by guarantee that are established to collectively administer the rights of their members such as composers, performers, authors, among others. CMOs in Kenya derive their mandate from the assignment of rights by the copyright owners. Under Section 26 of the Copyright Act, copyright owners are granted exclusive rights to among other things, control the broadcast, public performance and reproduction of their works. The rights holders assign these specific rights to the CMO to administer on their behalf.[19]

Music Sector and the Aftermath of MCSK Licence Revocation by KECOBO

Kenya music scene is considered a vibrant industry whose contribution to the creative industry is outstanding. The recent studies[20] by World Intellectual Property Organisation (WIPO) indicate that copyright industries in Kenya, contribute close to 5.32 percent which translates to Kshs. 85.21 billion ($75,377,063, 382) to the Kenya's GDP. Scholars have described music as the big brother of Kenya's taking a lion's share of the creative sector earnings.

> The music industry in Kenya is diverse and vibrant, and ranges from traditional to contemporary music and comprises music creators, music arrangers and performers of the work of music arts. Further, the industry includes sound, audio-visual recordings and record companies, managers comprising of music trainers, publishers, promoters and distributors. (Manyala, 2016, p.20)

However, there are no legal provisions in the Kenyan Statute books that seek to specifically promote music. Perullo (2000, p.51) decries the fact that there exists a long legacy of music on the African continent that exists outside the parameters of copyright law. The Copyright Act (2001) is the only current legislative framework that has provisions related to music and the literary and artistic works. The National Music Policy of Kenya (2015) also addresses issues related to music. The Permanent Presidential Music Commission (PPMC) was established through a presidential order in 1988[21]. According to Okong'o (2009, p.17), PPMC is mandated amongst other functions to document, preserve and disseminate the music and dance heritage of Kenya. It however lacks the requisite statutory status to enable it to implement the objectives for which it was established. This renders it vulnerable as its legality can be contested in a court of law at any time. In absence of a Competent Authority as required by Section 48(1), KECOBO and registered CMOs remain the legitimate bodies mandated to protect the interest of musicians in Kenya. Otieno-Odek (2003, p. 279), posits that, Section 3 of the Act establishes the Kenya Copyright Board whose mandate includes directing, coordinating and overseeing the implementation of laws and international treaties and conventions to which Kenya is a party and which relate to copyright.

KECOBO first Board of Directors was appointed in 2003 but the Board became a fully-fledged state corporation in 2008[22]. It issued its first licence to the Music Copyright Society of Kenya vide a Gazette Notice dated 23 October 2008. Part VI of the Copyright Act contains provisions for the establishment and regulation of Collective Management Organisations. The law provides for the licensing of a single, not for profit, company per sector.

> 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. (Sihanya, 2006, p 170)

The licensed CMO is required to provide its financial and operations report annually for renewal of licences. Draft (Collective Rights Management (CRM) regulations issued by KECOBO in February 2017 (by December 2017 the draft had not yet been approved) highlights the following mandatory and license compliance requirements: a comprehensive report of all the society's activities during the year; a list of all its members as at the end of the financial year; the total amount of royalties collected by the society; the amount of royalties paid to each member; the amount of money spent by the society on the administration of the society and for all its operations; the name, postal and physical address of the auditors of the collecting society; the names, addresses and occupations of current officials of the society; and any other information that the Board may require.[23]

Since its establishment, the Board has licensed 5 collective management organisations namely; Music Copyright Society of Kenya (MCSK), the Reproduction Rights Society of Kenya (KOPIKEN), Kenya Association of Music Producers (KAMP), Performers' Rights Society of Kenya (PRiSK) and Music Publishers Association of Kenya (MPAKE) that was given a licence upon non-renewal of MCSK licence in March 2017 and vide a gazette notice dated 3 April 2017 to offer services which hitherto were being offered by MCSK. MPAKE was licensed to be a collective management society for authors, composers and publishers of music for a period of one year, with effect from 27 March 2017.

KECOBO has licensed three CMOs to collect royalties on behalf of the music industry for 2017 these are Music Publishers Association of Kenya (MPAKE) which represents Authors, Composers, Arrangers and Publishers, Kenya Association of Music Producers (KAMP) which represents producers of sound recordings and Performers Rights Society of Kenya (PRISK) which represents performers In the case of MCSK and MPAKE, their mandates are well encapsulated in their constitutions and memorandum and article of associations. Section (2) of the Kenya Copyright Act which defines musical work as "any musical work, irrespective of musical quality, and includes works composed for musical accompaniment." Copyright in musical works relates to the lyrics or musical composition and sound recording. Lyrics are protected just as literary works. Article 2(1) of the Berne Convention for the Protection of Literary and Artistic Works 1886 provides copyright for protection of musical composition with or without words.[24] This encompasses music in the widest sense.

MCSK was established in 1983 as a company limited by guarantee under the Companies Act Cap 489 of the Laws of Kenya, prior to revocation of its licence, the society had exclusive right to collect and administer the public performance, and

the broadcasting rights in musical works of copyright owners in Kenya. In addition, by agreement it also administered the mechanical/reproduction right on behalf of many of its members and other international affiliates. Its members consist of composers, authors and publishers of musical works. The society has also been accused by stakeholders of not doing enough in safeguarding musician interests, Hivos (2016, p. 12) complains that like other CMOs in Kenya, MCSK is not transparent and neither does it have the interests of artistes in mind.[25] The society and KECOBO haves had a challenging relationship as KECOBO supervises and expects the Society to meet the requirements. The altercation between KECOBO and MCSK can be traced back to 2011 when the Board revoked MCSK licence vide a Gazette Notice No 5093[26] of 6th May 2011. The Notice reads:

> In exercise of the powers conferred by section 46 (9) (b) and (c) of the Copyright Act, 2001, the Kenya Copyright Board has deregistered the Music Copyright Society of Kenya as a collecting society for music composers, authors and publishers with effect from 1st April 2011.

The notice also revoked Gazette Notice No. 9602 of 2008 which declared MCSK as a collecting society for music composers, authors and publishers. On 31st May 2011, the Music Copyright Society (MCSK) moved to the Constitutional and Judicial Review Division of the High Court seeking leave to apply for judicial review orders of certiorari to quash KECOBO's decision to deregister MCSK as a CMO. The orders were granted by the High Court[27]. It is instructive to note courtesy of Attorney General's Office the two parties reached an out of court agreement and which was communicated to the public through a press release MCSK on April 23, 2012. The Press Release stated as follows:

> Music Copyright Society of Kenya (MCSK) is pleased to inform its members and the public that MCSK has reached an agreement with the Kenya Copyright Board (KECOBO) for the licensing and issuance of MCSK with a current certificate as a collective management organisation. The agreement was reached following intervention by the Honorable Attorney General who advised the parties to negotiate the terms of licensing of MCSK for the benefit of the music industry in Kenya. The agreement provides for MCSK licence to be effective 1/04/2012 and the licence period to be for one (1) year renewable as provided for under the Laws of Kenya.

After a lull, the conflict replayed itself once again in early 2017. In a paid-up advert appearing on MCSK website[28], MCSK gave its own opinion on the management of rights collectively in Kenya. In its considered opinion KECOBO had no basis to revoke its licence. It argued for MCSK to execute its role, it must get the mandate and authority from copyright owners or owners of neighboring rights. It qualified its assertion by holding that copyright owners have exclusive rights to confer such rights to a CMO of their choice. The society averred that KECOBO's decision was thus null and void to the extent that Section 30A of Copyright Act was declared

unconstitutional[29] for ignoring public participation while it was being formulated, and eventual passage and assenting by Parliament and President respectively. The ruling also held that no CMO should misrepresent to or mislead the public that they can collect royalties without mandate from the copyright owners.

They also argued that it is only the copyright & neighboring rights owners who have the legal capacity to issue any organisation with the mandate to act on their behalf. They added that MCSK was the right collective management society since it has capacity to issue mandate or authority through either a Deed of Assignment as well as Exclusive/ Non-Exclusive Licence and that they have capacity to issue international mandate/authority which is issued through direct signing of reciprocal of associates sister society. In this public notice, MCSK appears to discredit any move to transfer MCSK roles to a new CMO.

An objective reading of this notice casts aspersions on the ability of such CMO to execute collecting society mandate without necessary infrastructure and superstructures. For instance, MCSK boasts of having a catalogue of over 100 million copyrighted musical works with details of over 10 million audio-visual productions. Besides, MCSK highlights that it has over 14,500 members and over 120 affiliate societies all over the world. This means that the new collecting society has an uphill task of recruiting members, developing catalogues, entering reciprocal agreements with sister CMOs in other jurisdictions and lack of capacity to execute the collective management of rights within one year licence period.

This position by MCSK seems to have been buoyed by some of MCSK members' decision to move to court to oppose KECOBO's decision. April 2017, two MCSK members, Laban Juma Toto and David Amunga moved to high court sitting in Kakamega and sought court orders to suspend KECOBO's revocation of MCSK licence.[30] The Court was satisfied with applicants' pleas and issued the order to the effect that, pending hearing and determination of the application, KECOBO by itself or its agents, and/or its employees be restrained from interfering further with MCSK mandate of collecting royalties on behalf of its members. Further, the order required KECOBO to show why Contempt of Court proceedings should not be commenced against its directors for failure to obey court orders. KECOBO was also restrained from issuing press statements and commenting on matters that are substantially before the court.

Nevertheless, the high court sitting in Kisumu[31] issued another contradictory order this time stopping MCSK from collecting royalties from music users and businesses.[32] In the ruling the judge quoted section 46(1) of the copyright act that states, "No person or association of persons shall commence the business of a copyright collecting society except under or in accordance with a certificate of registration granted under this section". The judge noted that MCSK's licence to operate as a CMO expired on 31st December 2016[33] and their application to renew was declined and communicated through a letter dated 17 Feb 2017 from

KECOBO.[34] The judge further noted that MCSK had continued to illegally collect royalties from music users in complete defiance of the law and therefore found it necessary to issue orders barring them from doing so. KECOBO and MPAKE had been enjoined in the Kisumu matter as interested parties.

The two court orders have created a conundrum among copyright stakeholders. Indeed, soon after the conservatory orders were issued by a Kisumu High Court, MCSK issued a press statement to the effect that it will be guided by court orders issued by Justice Njagi on 5th April 2017 and 25th May 2017.[35] In this regard, MCSK continues to collect royalties in all parts of Kenya safe for Kisumu region, where restraining orders were issued. On the other hand, MPAKE is legitimately mandated to collect royalties by KECOBO but it cannot fully execute its mandate in a polarized environment. The Copyright Act only provides for exclusive licence for each of copyright categories, yet there exist two collective management societies in this category namely MPAKE, a *de jure* collective management society and MCSK, a *de facto* collective management society.

Consequently, the users of music risk being charged twice for the same service contrary to Kenya's taxation policies. On the other hand, the artists are not receiving adequate royalties because of the prevailing confusion. This is because users of copyrighted works continue to exploit their works freely in contravention to Kenyan Constitution and Copyright Act. The status will likely remain until such a time when MPAKE will have fully established its foothold in the Kenyan copyright sector. Currently, the new outfit has limited membership compared to MCSK's. In a statement issued in May 2017, MPAKE revealed that the total number of member applications stood at 5,773 which was received from all counties of Kenya.[36] In contrast, MCSK has about 14,500 members. It means that about 9,000 members are yet to register with the new collecting society. Nevertheless, some pundits claim that those registering their membership with MPAKE are new artists who eschewed MCSK registration due to its structural, governance and management challenges.

This confusion and the ongoing infighting is denying copyright sector an opportunity to engage constructively with government regarding new policies and regulations. Manyala (2017, p.22) notes that some of the policies that CMOs are yet to embrace and enforce include the 60 percent local music content rule for the local media houses to play local music in their stations. Moreover, the country is still grappling with ignorance of copyright laws and infringement. Infringement and piracy challenges assisted by the weak enforcement of copyright laws, lead to economic loss by copyright owners.[37] Mutonya (2013, p. 12) notes that piracy goes on unabated, despite efforts and strategies by the copyright sector.

One of the novel features of the revised 2001 Copyright Act was the Competent Authority whose mandate includes reviewing CMO tariffs. However, KECOBO

has not pushed hard enough or fast enough for the Government to set up this Competent Authority. This is despite the High Court[38] order of 2014 requiring the Government to operationalize the Authority stating that failure to do so amounts to violation of the Constitution.[39] Amazingly, in 2012, the Attorney General vide a Gazette Notice No 4339[40]had appointed a five-member copyright tribunal chaired by Prof. Ben Sihanya but the Tribunal suffered a stillbirth, it was never consummated. This has left the copyright industry grievances and disputes in abeyance. A Medium-Term Report issued by the National Treasury in 2015 criticizes the continued disregard to court orders by public institutions. It notes that continued disregard of these orders by institutions has resulted in slow dispensation of justice and enforcement of law posing a challenge to the justice sector.[41]

This affects the operations of copyright stakeholders whose disputes should be determined by the Authority and who are forced to file proceedings at the High Court which is inconveniencing, bruising and adversarial in nature. The presence of a Competent Authority would have defrayed encumbrances currently being expensed by copyright stakeholders. Such an entity has the capacity to adjudicate disputes without exposing parties to a dispute to irreparable and antagonistic outcomes.

CMOs challenges are not only at the national level but also at the international level as well. Ficsor, (2010, p.29), observes that there is no provision on collective management in the international treaties on copyright and related rights. For instance, the Berne Convention, Universal Copyright Convention (UCC), the related rights conventions such as Rome Convention, the TRIPS Agreement and two WIPO internet treaties WCT and WPPT[42] do not provide for collective management of rights per se. However, WIPO[43] has advanced CMOs agenda by publishing several publications and studies in this regard.

Another notable challenge in Kenya is the fragmentation of creative sector regulators as well as existing and proposed legislation such as Music Bill (2016).[44] The proposed 2016 Bill proposes far-reaching changes, putting a spanner in the works in as far as the role of other government entities charged with similar responsibilities are concerned. For example, whereas the role of licensing and registering CMOs vests in KECOBO, the new law proposes to transfer these responsibilities to National Music Council. Besides, registration and licensing of Collective Management Organisation (CMOS), royalty distribution and other associated attributes. In addition, the Council will have powers to compel existing music associations to form separate federations to represent interests of musician associations, music educators, right holders, and music merchants. Although these federations will be formed subject to the law regulating the registration and control of Societies Act, they will be expected to register with the National Music Council. The Cabinet Secretary in charge of music matters will gazette such associations upon the advice of the Council.

Conclusions and Recommendations

The copyright sector in Kenya has made tremendous progress. The legal firework is well embedded. The Constitution is clear on the status of and respect for intellectual property rights, including copyright and related rights. However, the sector is still grappling with teething problems a fact that is denying the sector an opportunity to exploit her full potential. Considering this the sector will befit a great deal if the following measures are put in place. The industry believes that a strong KECOBO is key to the success of the industry. KECOBO should be strengthened through the review of existing legal framework relating to CMOs. The legal regime should empower the Kenya Copyright Board to order forensic or other audit on CMOs based on credible information as well as delimitate the role and duties of KECOBO versus that of CMOs. On the other hand, the state should consider having amalgamating CMOs into a single entity that will then collect royalties on behalf of right holders. The centralized agency will then segregate each category of right and apportion accrued royalties accordingly. Alternatively, the current multi-licensing regime should be strengthened further by putting in place strong corporate governance structures that will allow inter CMOs collaborations. Besides improving effectiveness and efficiency of royalty administration, such a framework will enable CMOs to co-share resources, expertise, cost and associated risks.

In terms of royalty collection, a rational legal framework should be put in place to insulate CMOs from vagaries of social economic dynamics. For instance, broadcasting associations have been accused of giving copyright industry a wide berth, thanks to their financial muscle, strong lobby group Media Owners Association (MOA) and deep connections within government cycles. Kenya's CMOs stand to benefit if broadcasting entities are compelled to comply with existing regulations such as 40%-60% local content rule,[45] and payment of royalties as per gazetted tariffs.

The National Music Policy[46] adopted in 2015 binds and requires the Kenyan government to facilitate the signing of recognition agreements between stakeholders and the media; and stakeholders and entertainment managers. To this end the Government shall play a facilitative role between the various players in the industry. However, music CMOs are yet to leverage on this policy requirement especially regarding broadcasting organisations i.e. TV, radio, telecommunication entities and internet based platforms. The government should move with speed and establish a competent authority as contemplated in Section 48 of the Act. This Authority, once fully in place, would act as a Copyright Tribunal to hear and determine cases brought against CMOs by users of copyright works among other matters.[47]

There is need to harmonise legal and policy framework to ensure that matters relating to music are well addressed to the satisfaction of all stakeholders. It will be prudent to set delimitations with entities proposed in Music Bill to avoid potential crash with entities operating in this realm such as the Kenya Copyright Board (KECOBO) and Collective Management Organisations (CMOs) operating under aegis of Copyright Act of 2001.

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Berne Convention for the Protection of Literary and Artistic Works (WIPO: 1886, Berne, Switzerland)
Convention Establishing the World Intellectual Property Organisation (WIPO: 1967 Stockholm, Sweden).
Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations (Convention was accepted by members of BIRPI, the predecessor to the modern WTO 1961, Rome).
Agreement on Trade Related Aspects of Intellectual Property Rights (WTO: 1995, Geneva, Switzerland).
WIPO Copyright Treaty (WIPO: 1996, Geneva, Switzerland).
WIPO Performances and Phonograms Treaty (WIPO: 1996, Geneva, Switzerland).
Universal Copyright Convention (UCC: 1952, adopted in Geneva, Switzerland).

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Notes

[1]Kenyans held a referendum on 4th August 2010 to repeal 1963 Constitution. The new Constitution was promulgated on 27th August 2010.
[2] National Music Policy of Kenya, 2015
[3]Constitution of Kenya, 2010.
[4] ibid, Article 11(2)(c).
[5] ibid, Article 40.
[6] ibid, Article 69(1)(c).
[7]ibid, Article 260.
[8] Article 33(1)(b), The Constitution of Kenya, provides that "Every person has the right to freedom of expression, which includes freedom of artistic creativity".
[9]Industrial Property Act (Act No. 7 of 2007).
[10]Trademarks Act (Act 51 of 1955).
[11] Copyright Act (Act 12 of 2001)
[12] Copyright Act, 2001
[13] Ibid, Section 22.
[14]Gerry Gitonga, *An Overview of Contracts and The Law on The Audio-visual Industry in Kenya* (KECOBO Copyright News, 2012) Page 9.
[15]Ibid, Copyright Act, Section 26.
[16] Section 5(b) Copyright Act
[17]Section 48(2)(a)(b)(c)
[18]Collective Management Organisations: A Quarterly Publication of the Kenya Copyright Board. Issue No. 8.
[19]ibid, Collective Management Organisations: A Quarterly Publication of the Kenya Copyright Board. Issue No. 8.
[20]WIPO study dubbed, 'The Economic Contribution of Copyright Based Industries in Kenya (March 2009).'
[21]Kenya Gazette Notice No 3500 of 19th November 1982
[22]KECOBO, *Kenya Copyright Board Celebrates 5 Years*, (Nairobi, KECOBO. Issue 11) Page 3-4.
[23] Draft Copyright –Collective Management Regulations 2017.
[24]Kenya Copyright law complies with Kenya's obligations under the Berne Convention. But in some instances, the Act goes beyond what has been outlined in this convention as well as WIPO Internet treaties.
[25]Ubunifu Report (2016) https://east-africa.hivos.org/sites/default/files/ubunifu_report_1.pdf accessed on 24/09/2017
[26] The Kenya Gazette, Vol. CXIII—No. 41, Nairobi, 6th May, 2011, p. 1388.
[27] Order issued on June 2, 2011 in Republic v. Kenya Copyright Board ex parte Music Copyright Society of Kenya, High Court Miscellaneous Judicial Review Application Number 133 of 2011.
[28] Nzomo, Victor: https://ipkenya.wordpress.com/category/copyright/page/21/ accessed on 23/09/2017
[29] MCSK Website, http://www.mcsk.or.ke/index.php/news accessed on 26th September 2017.

[30]Section 30A of Copyright Act was declared unconstitutional in *Mercy Munee Kingoo & Anor v. Safaricom Limited & Anor* filed before a high court sitting in Malindi . The Constitutional Petition No. 5 of 2016 was delivered by Mr. Justice S.J Chitembwe on 3rd November 2016.

[31] *Laban Toto & David Amunga v Kenya Copyright Board (KECOBO) & 2 others* Ex- Parte [2017] eKLR

[32] *Kisumu Bar Owners Association & Kisumu Green Garden Restaurant v. Music Copyright Society of Kenya Kenya Copyright Board & Music Publishers Association of Kenya* (Unpublished), The orders were issued following a petition by Kisumu Bar Owners Association and Kisumu Green Garden Restaurant. The duo had urged the court to restraint MCSK from harassing music users and businesses in the name of collecting royalties when they are not licensed to do so by KECOBO.

[33]Kecobo Press Release, http://www.copyright.go.ke/downloads/send/10-public-notice-cmos/81-pres-release-on-restraining-order-against-mcsk.html accessed on 26/09/2017

[34] The judge ordered "That pending the hearing and determination of this Application, the Respondent whether by itself, it's Agents or servants or otherwise be and is hereby restrained from demanding and collecting royalties for the exploitation of performing and Reproduction rights of Authors (songwriters), Composers, Publishers and Arrangers of copyrighted musical works form users." The case will be heard on 8th November 2017.

[35]MPAKE, Press statement issued after high court sitting in Kisumu stopped MCSK against collecting royalties http://www.mpakenya.org/statement.php accessed on 26/09/2017

Standard Newspapers: https://www.sde.co.ke/article/2001249552/mcsk-vows-to-keep-collecting-royalties-despite-high-court-order. Accesses on 29/9/2017.

[36]MPAKE statement on member registration, http://www.mpakenya.org/statement.php accessed on 27/09/2017.

[37] Business Environment Reform Facility (BERF) is funded by the UK Department for International Development (DFID) under the Business Environment for Economic Development (BEED) Programme. BERF is a central facility responding to demand from the DFID's priority Country Offices and stakeholders to initiate, improve and scale up business environment reform programmes. BERF is managed by a consortium led by KPMG LLP. The programme started in January 2016 and will finish in January 2019.

[38] *Republic v Kenya Association of Music Producers (KAMP) & 3 others* Ex- Parte Pubs, Entertainment and Restaurants Association of Kenya (PERAK) [2014] eKLR

[39]High Court: The only reason advanced by the Kenya Copyright Board why the Competent Authority cannot fulfil its said statutory duty is that the Competent Authority is yet to be operationalized owing to budgetary and administrative challenges and hence the same is not functional. Article 47(1) of the Constitution provides that every person has the right to administrative action that is expeditious, efficient, lawful, reasonable and procedurally fair. Article 21(1) of the Constitution on the other hand provides that it is a fundamental duty of the State and every State organ to observe, respect, protect, promote and fulfil the rights and fundamental freedoms in the Bill of Rights. It is therefore upon the State to facilitate the Competent Authority so that it can undertake its statutory duties. To fail to do so amounts to abdication of the Constitutional duties imposed upon the State and in applying a provision of the Bill of Rights this Court is enjoined by Article 20(3)(b) of the Constitution to adopt the interpretation that most favours the enforcement of a right or fundamental freedom.

[40] Kenya Gazette Notice No 4339-dated 2nd April 2012, the Attorney General appointed Ben Sihanya (Prof) as the Chairman while the other members included: Paul Musili Wambua (Prof), Leonard Amolo Obura, John Syekei and Michi Kirimi.

[41]Governance, Justice, Law and Order Sector (GJLOS) Report for Medium Term Expenditure Framework (MTEF) Period 2016/17–2018/19, "Anchoring Stability to Sustain Higher and Inclusive Growth that Opens Economic Opportunities and Provides a Better Future for All Kenyans."

[42] The WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT). Though Kenya has yet to ratify the two treaties, the 2001 Act incorporates the key provisions from the two treaties.

[43] Kenya is a member of The World Trade Organisation (WTO) and is thus bound by the provisions of the TRIPs Agreement.

[44] The Music Bill (2016) aims at supporting, protecting and promoting music rights and freedom of artistic creativity, promoting fair business practices by advising music industry stakeholders on fair terms of contractual engagement, establishing and maintaining databases for music associations, practitioners and music works, monitoring music content broadcast within Kenya and maintaining logs of such musical works among many other roles and responsibilities.

[45] Communications Authority of Kenya, *The Programming Code for Free-To-Air Radio and Television Services in Kenya.* 18.3, Radio/Television stations shall ensure, within one year of entry into force of this Code, not less than 40% of the programming is local content. Broadcasters' local content programming should increase to 60% within three years of entry into force of this Code. The local content programming referred to in this paragraph excludes news, advertising and teleshopping.

[46]The National Music Policy was adopted in January 2015. The Policy seeks to provide the necessary guidelines and safeguards to ensure that the artist benefits from the rights and protection provided for in international and national legislation relating to cultural and artistic freedom.

[47] Section 48. (1) There shall be a competent authority appointed by the Minister for the purpose of exercising jurisdiction under this Act where any matter requires to be determined by such authority. (2) Subject to subsection (3), in any case where it appears to the competent authority that - (a) the Board is unreasonably refusing to grant a certificate of registration in respect of a collecting society; or (b) the board is imposing unreasonable terms or conditions on the granting of such a certificate; or (c) a collecting society is unreasonably refusing to grant a licence in respect of a copyright work; or (d) a collecting society is imposing unreasonable terms or conditions on the granting of such a licence; (e) the competent authority may direct that as respects the doing of any act relating to work with which the collecting society is concerned or with respect to the granting of a certificate to operate as a collecting society, a licence or a certificate shall be deemed to have been granted by the collecting society or the Board at the time the act is done or the application is made, provided the appropriate fees are paid or tendered before the expiration of such period or periods as the competent authority may determine. (3) Where a dispute has been referred to the competent authority under this section, the competent authority shall, in accordance with such procedure as may be prescribed, give both parties an opportunity to present their respective cases, either in person or through representatives, both orally and in writing.