

Legal Justification to Innovation of Indigenous Knowledge and the Right to Development in Africa

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Abstract

Economic and social development of an individual or a community depends on the freedom to innovate and enjoy their common heritage. Discrimination from the freedom to enjoy this common heritage is a violation of their basic rights. Due to colonialism and Western concepts of innovation, innovations of indigenous knowledge in Africa are often not accepted in the face of competition within the international market. The intellectual property standards to recognise and protect innovations, especially within the context of the international market, are generally not suitable for innovations in indigenous knowledge. As a result of this, indigenous knowledge is now heavily appropriated by foreign firms in order to gain protection or incentives out of Africa. African states have a duty with respect to the provisions of the African Charter on Human and Peoples' Rights (ACHPR, also referred to as the African Charter) to enact suitable legislation to provide recognition or protection of innovation in indigenous knowledge in Africa so as to exercise their God-given right to development. African states practices to implement this right include assessing trade policies and technology transfer that support local innovations. My analysis in this paper includes an examination of the effective implementation of the provisions of the African Charter, the protection of local innovations without intellectual property right standards and an African model that takes into account socio-economic development as a fundamental right.

Introduction

Innovation in industrial societies is expanding because of profit-making generated from what has been produced or innovated. These innovations are regulated through intellectual property rights to guarantee market competition void of imitation and conflict. However, intellectual property

right standards put in place as a regulatory mechanism in the global market have been criticised for not including knowledge of indigenous peoples in Africa.

Indigenous knowledge can simply be defined as innovations and practices of indigenous and local cultures that have been developed through intergenerational experiences and shared orally with each generation.¹ Recognising indigenous forms of art and innovation as protectable intellectual property could be a paradigm shift in international law on intellectual creativity, which would enable indigenous peoples in Africa, for example, to contribute to the use of their local knowledge for socio-economic development.² The right to development (RTD), on the other hand, is an empowerment of the indigenous peoples to utilise associated traditional knowledge, to control their uses and to benefit from foreign or external commercial exploitation. The emergence of the RTD should look back to the epoch of decolonisation when developing countries wanted a restructuring of the global economic system through a New International Economic Order.³

According to the United Nations Declaration on the Right to Development (UNDRTD) of 1986:

The right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realised.⁴

The RTD has been classified as the third generation of rights as proposed by Karel Vasak, a human rights professor at the International Institute of Human Rights in Strasbourg, France. Other classes of rights include civil and political rights referring to the first generation of rights, and social, economic and cultural rights as the second generation of rights.⁵

The RTD as a third-generation right has remained a serious bone of contention between the developing and developed countries.⁶ The analysis in this paper concerns the legal recognition and promotion of local creativity as a useful tool for the socio-economic development of the peoples of Africa. Africa is the breadbasket that has fed the world, provided medicines that have healed the world, but has not provided for the sustainable management of these resources. The central role of indigenous knowledge within the framework of the RTD paradigm can only most appropriately be understood within the context of resource management for economic growth.⁷ When discussing the RTD, in essence, we mean that all peoples shall have the right to their economic, social and cultural development with due regard to their freedom and identity and in the equal enjoyment of the common heritage of mankind.⁸

Fears of misappropriation in the innovation of indigenous knowledge are more often than not cited in reference to the need for developing formal legal instruments and mechanisms to protect indigenous knowledge in Africa effectively.⁹ The RTD, which is regarded as a fundamental principle, is enshrined in the ACHPR as well as the UNDRTD. There are questions posed today indicating that a system where a bundle of rights provided in an intellectual property protection regime may not be sufficient to protect local peoples or indigenous innovations.¹⁰ The United States (US) has been very critical of the RTD and, as such, voted against the adoption of the UNDRTD.

The US claims that development comes about not as a matter of a legal claim but because of economic liberties.¹¹ 'Innovation' is a commonly used word to describe a knowledge-based economy as a kind of creative, intangible asset with the potential to create substantive values.¹² According

to Elahi, the innovation of indigenous knowledge by the local population is useful for their development.¹³ African states and other developing countries have expressed concerns that international instruments like the International Union for the Protection of New Plants Varieties (UPOV) and the World Trade Organisation Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) have not provided recognition to their local creativity but have set up sophisticated high standards that are not suitable to include innovations from the indigenous population in the competitive market.¹⁴ It would be biased to ignore the importance of a participatory empowerment of people by enacting rules that do not meet the goals of the basic human needs, especially among African states. Instead, we have voted for laws that serve the interests of transnational corporations and security rivalry economies of major powers.¹⁵

An analysis of the concept of intellectual property protection in Africa is dated as far back as the colonial era. During the scramble for Africa, European powers agreed to carve up the continent of Africa at the Berlin West Africa Conference (1884-1885) with the goal of controlling African markets. They adopted intellectual property treaties that were used to control the creative and industrial markets in the interest of European rights holders.¹⁶ In the British Empire, for example, before 1886, authors had to first publish their works in the United Kingdom to acquire copyright and only exported the published works to be used in Africa. Other colonial powers were more explicit in their discrimination.¹⁷ According to the World Intellectual Property Organisation, by 1935, only three countries (Morocco, South Africa, and Tunisia) had ratified international intellectual property treaties.¹⁸ Morocco had ratified all of the five treaties in force at the time, South Africa had ratified one treaty and Tunisia had ratified four, which ratifications were all effected through colonial powers.¹⁹

Innovations as Right to Development

The notion of human rights par excellence is the enjoyment of all basic and inalienable universal rights to live life with dignity as a human being. These rights include the right to develop or invent any knowledge individually or collectively that can provide socio-economic benefits to the developer(s) or innovator(s). Innovation is considered a significant factor in the economic growth of every country. The national systems of innovation in different countries take diverse forms, which are determined by the quality of innovation as well as the factors and actors that drive such innovation. As such, the economic growth of a country involves the freedom of the local populations' ability to add value to available knowledge for their well-being.²⁰

Many indigenous local communities in Africa are engaged in finding and developing technologies that improve the lives of their households, thereby providing openings for small local enterprises. These activities include, among others, bee-keeping, making of soap, planting weeds that lure animal pests away from the fields, and growing traditional crop varieties that grow best in local conditions with no need for sophisticated technology.²¹ The institution of a legal provision in the ACHPR on the RTD is a recognition of the fact that local innovation can make a difference in addressing urgent developmental challenges as well as the obligation of states to enhance the innovation capacity of local people in addressing their specific development needs.²²

A number of observations have proven that indigenous knowledge is used commercially in other forms like artwork, music, and medicine, besides numerous other usages, mostly without the prior informed consent of the indigenous population, who are the owners of that knowledge.²³ Indigenous knowledge innovation is an expression of science, both individually and collectively. Therefore, the word 'science' itself is a multiple enterprise that often refers to different forms of inventions or creativity. The notion of science should not be restricted to Western or modern science but should be inclusive of the indigenous knowledge system of diverse cultures in different periods of history.²⁴ Indigenous knowledge innovation is a form of sociology of science, which tells us that scientists do not work in a vacuum or in accordance with an abstract scientific method based on putting forward direct and neutral observation but by adding values to existing knowledge.²⁵

In this analysis are different opinions as to whether it is the right thing to do to use intellectual property as a means to protect innovations of indigenous knowledge in Africa. The first view is that intellectual property protection is a necessary evil to guarantee incentives to any innovation, and the other view is that intellectual property protection is not required to facilitate innovation and creativity.²⁶ Taking the second view in the analysis that relates to the RTD, innovations of indigenous knowledge may be recognised or be encouraged, not only with the current standards on intellectual property protection.

Innovation does not occur within the natural or legal individual but arises from social interactions that include both the original creator and other actors, using various sources of information to create something new or to enhance previously existing forms.²⁷ A number of abuses or misuses of indigenous knowledge have typically been at the foundation for setting the standards of the conception of legally protectable innovation.²⁸ Indigenous knowledge cannot be looked upon as being static, for it is evolving and open to innovations by the people. Such innovations serve in empowering the indigenous peoples to enjoy socio-economic benefits arising from their works. This knowledge is embedded in the cultures of the peoples and is often transmitted orally.²⁹

Against this backdrop of colonial domination, the legal recognition of innovations of indigenous knowledge in Africa depended on the colonialists. However, indigenous knowledge is known as inherited knowledge, which is passed on to generations through a form of apprenticeship or spiritual guidance. Part of this knowledge is, therefore, surrounded by mystery and misconceptions since it is not clearly documented like Western knowledge, being oral knowledge.³⁰ In Africa, the issue of private ownership relating to innovations from indigenous knowledge is rather difficult to trace as it is part and parcel of community practices or family inheritance. The problem, therefore, appears to be with the existing law and probably not with the indigenous epistemology.³¹ Thus, the policies of African states in the area of research and development should include indigenous creativity or innovation as a practical measure in guaranteeing the RTD to the peoples of Africa.

The policies of the African states should remove the Western concept of indigenous knowledge, commonly known as 'common heritage or public goods', as this amounts to free-riding or to a kind of knowledge system that is altogether excluded from property rights or intellectual capital discourse.³² Intellectual property protection on certain inventions characterise the basic problem when protecting poor peoples' knowledge or the necessity to promote the recognition of indigenous innovations.³³ In recognition of innovation of indigenous knowledge, Africa frees herself from the Western model of development, agricultural engineering and marketing; the implementation of

certain forms of state intervention; the aggravation caused by foreign policies; and the failure to settle major national questions aggravated by external power interventions. Because so many people in Africa survive at the margins of society, human rights are only likely to be achieved directly through the implementation of government policies in a number of important ways. If the minimal support systems are withdrawn or misallocated, then millions of persons are destined to perish.³⁴

Contrary to 'modern' innovation, indigenous knowledge in Africa has been cast as traditional, which gives the connotation of it being opposite to innovation or creativity. It is unlikely that certain formal, informal or mixed forms of innovation and creativity in Africa could be fully or properly accounted for through a Western-oriented prism of intellectual property protection.³⁵ Some authors describe indigenous knowledge as 'knowledge common' in which the knowledge common idea is shared by groups of people with a dynamic mixture of formal and informal rules of ownership and control. These norms are sometimes closed and at other times open or a combination of both.³⁶

A more effective regulatory framework is required, to exert greater control over indigenous innovation, tangible or intangible, through a *sui generis* system. The latter should be aimed at combating potential conflicts in archiving, mapping and recording or by promoting national educational strategies aimed at educating younger generations about their heritage and to protect this heritage from inappropriate exploitation through the use of secrecy, prohibition and sanctions.³⁷ It is also true that individuals may want to exploit or innovate personal indigenous knowledge in ways that they choose rather than in ways that have been preserved traditionally. Meanwhile, many indigenous knowledge holders may feel this adulterates the value of such knowledge, or they may want to safeguard it in a more formal way that entitles the general community to the benefits of exploitation.³⁸

Although more comprehensive understandings of development based on human freedom and capabilities have been made, economic growth standards need to be used to measure success.³⁹ This economic growth standard includes rights to innovation, especially within the African context.⁴⁰ The South African Adelphi Charter, for example, states that 'human rights call on us to ensure that everyone can create, access, use and share information and knowledge, [to] enable individuals, communities and societies to achieve their full potential'.⁴¹

Another legal justification to the innovation of indigenous knowledge in Africa is that it is an 'African' epistemology and a means of readjusting development methods in areas such as health-care, agriculture and natural resource management. As a result of the weaknesses involved in achieving these development initiatives, proponents of the alternative development model insist on the RTD as evidence of the need for new concepts rooted in peoples' cultural heritage, which guarantees their improved living standards.⁴² Legal recognition of indigenous knowledge provides the means and the process for articulating of what local people know, and in involving them in the creation of the knowledge required for development, and, by so doing, transmitting to the future generations the best that the present has to offer through their innovations.⁴³ In this regard, we need to look at the provisions of the ACHPR, to determine if these provisions could enable the peoples of Africa to enjoy their local innovations as a practical measure in the realisation of the RTD.

Why Right to Development?

The concept of human rights involves physical, mental, moral, psychological, and social and property development, which is compatible with human dignity. These aspects have been articulated and classified in the United Nations International Covenant on Civil and Political Rights⁴⁴ and the International Covenant on Economic, Social and Cultural Rights (ICESCR) of 1966. It can be assumed that the provisions in the ICESCR have provided guidelines for the protection and enforcement of the socio-economic and cultural rights of human well-being.⁴⁵ Was there a need for the adoption of the UNDRTD in 1986? Is this not a repetition of the ICESCR? The preamble to the UNDRTD describes the RTD as:

A comprehensive economic, social, cultural and political process that aims at the constant improvement of the well-being of the entire population and of all individuals on the basis of their active, free and meaningful participation in development and fair distribution of benefits resulting therefrom.⁴⁶

Development entails respect for human rights and the basic rights of the community to which a person belongs and through which a person has access to the necessary resources for growth.⁴⁷ Participation of and/or involvement of persons from indigenous and local sectors of society in Africa should be strengthened in a dignified manner that will increase their well-being and reduce various types of human right abuses. Such human rights abuses include the inability to enjoy innovations of indigenous knowledge in Africa.⁴⁸

The UN Convention on the Right of the Child in Article 6 adds that the RTD has been characterised as a participatory process which ultimately shall lead to the full realisation of all human rights and fundamental freedoms. The African states are to create an enabling environment such that local communities can freely and without fear of discrimination exercise their ability and full potential to carry out innovations as a practical measure in the implementation of the RTD.⁴⁹ The RTD will mean rewriting international economic policies or standards to take human rights fully into consideration.

Moreover, the RTD is understood from the perspective of the UNDRTD to come from a moral duty owed to developing countries by the industrialised nations.⁵⁰ This duty imposed on industrialised nations can be translated into the acceptance or recognition of innovations of indigenous knowledge in Africa, which would enable Africans also to enjoy international market competition without discrimination.

Effectiveness of Article 22 of the African Charter on Human and Peoples' Rights

Many international and regional instruments provide some workable evidence of the RTD. Articles 55 and 56 of the United Nations Charter impose a duty on all states parties to cooperate for economic and social progress and for development and universal respect for human rights of all peoples.⁵¹

The ACHPR stipulates the following in Articles 22 (1) and (2):

All peoples shall have the right to their economic, social and cultural development with due regard to their freedom and identity and in the equal enjoyment of the common heritage of mankind. States shall have the duty, individually or collectively, to ensure the exercise of the right to development.⁵²

To live life with dignity also implies that the individual or community is free to create and use their creativity without discrimination to eradicate poverty. It can be said that the reason for enshrining Article 22 in the African Charter was driven by the necessity to bridge the economic gap in relation to the unevenly balanced distribution of resources between developed and developing countries.⁵³ The quest for development as a right also acknowledges the legal obligations of states to ensure the delivery of all fundamental rights.⁵⁴

The African Charter contains a number of provisions that can be interpreted as both defensive and offensive mechanisms in the protection of indigenous knowledge.⁵⁵ Article 1 of the African Charter mandates states parties to 'recognise the rights, duties, and freedoms enshrined in the Charter' and to 'adopt legislative or other measures to give effect to them'. This recognition of rights, duties, and freedoms would thus include an obligation on states to refrain from interfering with those rights and freedoms and a duty to adopt positive measures in the protection of these rights and freedoms. These rights include, among others, the right to property, environmental rights and the RTD.⁵⁶

The use of the words 'to participate, contribute and enjoy' in Article 1 of the UNDRTD amounts to unequivocally calling on UN member states to protect and promote innovations of indigenous knowledge as its fundamental duty for the well-being of their peoples.⁵⁷ The adoption of this Declaration in recognition of the RTD stemmed from the need to promote international cooperation as a means to resolve economic and social problems. This notwithstanding, developing countries, particularly those in Africa, continue to face domination, neocolonialism and discrimination perpetuated by industrialised countries. Innovations from Africa are mostly excluded from competing favourably in the international market.⁵⁸

The Convention on Biological Diversity, for instance, recognises in Article 8 (j) that the respect, maintenance and preservation of innovations of indigenous knowledge by indigenous communities embody traditional lifestyles,⁵⁹ to the effect that these innovations and practices include promoting and encouraging the equitable sharing of the benefits arising from the utilisation of such knowledge.⁶⁰ The human rights perspective relating to the legal justification of innovations of indigenous knowledge in Africa may vary in status and involve different legal standards, as provided for in domestic and international instruments. Article 27 (2) of Universal Declaration of Human Rights (UDHR) and Article 15 (1) (c) of the International Covenant on Economic Social and Cultural Rights are examples of general human rights-based protection or recognition of indigenous knowledge and creativity.⁶¹ Both of these provisions recognise the right to be 'protected of the moral and material interests of an author resulting from any innovation, which is either literary or artistic production'. Although this might be a broad statement, it has provided little substantive protection for indigenous knowledge, given the problematic notion of authorship in the context of communal creation and ownership.⁶²

In Article 27 (2) of the UDHR it is stated that 'everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author'.⁶³ These legal provisions are indicative of the fact that the RTD is inherently an inalienable right. As such, the demanding right to protect innovations of indigenous knowledge includes intellectual property protection, leaving the actual content to the discretion of states.⁶⁴ The UDHR provides that member states have a duty to promote, respect and fulfil civil, political and socio-economic rights of all peoples. The right to innovate and enjoy indigenous knowledge in Africa is a fulfilment of the fundamental socio-economic and cultural rights, which is akin to the right to development.⁶⁵

Within the framework of Article 22 of the African Charter, innovation of indigenous knowledge in Africa forms part of the development and preservation of local heritage.⁶⁶ When such innovations are given legal recognition it will allow for free enjoyment by the peoples to whom they belong. The Organisation of African Union (OAU) Model Law for the Protection of the Rights of Local Communities, Farmers, and Breeders and for the Regulation of Access to Biological Resources has, among the objectives, the recognition and protection of the rights of local communities to their knowledge and technologies or innovations.⁶⁷ Part II of this OAU Model Law considers innovation to be an improvement of an existing, collective and/or cumulative knowledge or technology through alternative modification. It also considers the use of the properties, values or processes of any biological material or any part thereof, whether documented, recorded, oral, written, or in whatever manner otherwise existing, possibly by local communities as a legal justification of their development drive.⁶⁸ It is important to note that this protection is not limited only to innovations relating to biological resources but comprises all innovations in whatever manner existing.⁶⁹ In South Africa, for example, the government drafted a bill concerning the Protection of South African Indigenous Knowledge of 1998 as an initiative of the South African National Assembly. Section 25 of this draft bill defines the *sui generis* right of indigenous knowledge as 'a catalogue of exclusive rights, comprising reproduction, publishing, performing, broadcasting and adaptation rights'.⁷⁰ It is worthy of note that the South African draft bill provides for a *sui generis* concept regarding the scope of rights, which are closer to any project of an intellectual property rights protection like copyright in the conventional sense.⁷¹

African Innovations without Intellectual Property Rights

Innovations within the context of Western firms mean developing new products or processes. Indigenous knowledge systems in Africa have a dynamic quality and are useful in propositional form. The generation of useful knowledge and techniques collectively implies a set of institutions working in a familiar way to produce innovation.⁷² Patent right, for example, arguably allocates private property rights to enable incentives to an innovation. Ownership of patent rights also relates to the information efficiencies of organising technological production in markets that are understood on a Western industrial scale.⁷³

The adoption of the TRIPS Agreement by the World Trade Organisation (WTO) member states has clearly brought out the fact that the introduction of intellectual property rights standards in

Africa has not only economic and technological consequences, but also human rights, social, environmental and agricultural consequences.⁷⁴ Indeed, the biggest challenge of African countries is how to reconcile the introduction of these minimum standards of intellectual property protection of the TRIPS Agreement with the need to comply with all their international obligations and national development commitments.⁷⁵ African societies have experienced various forms of domination throughout history such as slavery and slave trade, colonialism, neocolonialism and globalisation. Central to this domination stands the negation and devaluation of African indigenous knowledge systems and the influence of the European knowledge systems involving scientific innovation.⁷⁶

In Uganda, research conducted by the Makerere University Research Centre involving the case of local automotive mechanics and engineering showed that indigenous technology research and innovations in Africa are increasingly competing with research and innovations sourced from outside the continent, which are often not the best solution for local circumstances. It seems true from this case that the formal and informal sectors in Africa often do not collaborate with each other, which is evidenced by the large body of African indigenous knowledge innovations that remain underutilised and are not communicated beyond local levels.⁷⁷ The role of intellectual property rights was found to be of little importance in relation to the automotive mechanics and engineering industry, but rather, the research was conducted mainly as a form of collaboration between the formal and informal sectors. The notion of owning ideas, innovation or inventions is antithetical to the workings of the informal sector, where collaboration and sharing are the norms rather than the exception. This notion of owning ideas was closely associated with preventing access to the application of such ideas. Working in secrecy for the sake of intellectual property protection will withhold useful knowledge in promoting the RTD.⁷⁸ Formal and informal collaboration guarantees the freedom to identify and innovate, in a common heritage among the local population in Africa to promote socio-economic development.⁷⁹

Similar to the automotive mechanics and engineering case in Uganda, the Kukula Traditional Health Practitioners' Association of the Bushbuckridge area in north-eastern South Africa has created collaboration with the Kruger and Canyons (K2C) Area Management Committee and the Natural Justice non-governmental organisation. This collaboration aimed at strengthening a bi-cultural community protocol to protect and control their rights to access natural resources for local community innovations. The bi-cultural community protocol is articulated to enable local communities to control their resources and associated indigenous knowledge, and express their rights under customary, national and international law.⁸⁰

African innovations, as distinct from innovations elsewhere in the world, are based on cultural attachments. In Africa, innovation and creativity of indigenous knowledge are not endeavours that inevitably take place in the context of market economic surveillance or market mechanisms to be isolated from the informality that spread through economic activity on the continent. As such, intellectual property protection has become inappropriate in this context since it requires not just intellectual property offices that register, disclose and educate, but also a culture of respect and enforcement of intellectual property rights.⁸¹ Research on the impact of copyright on access to education in Africa, for example, shows that 'the challenge with copyright is not lack of legal protection', neither is it that existing copyright laws in some of the countries do not comply with international standards. The problem is the lack of awareness, enforcement, and exploitation of copyright, as

well as awareness of copyright principles. People are unable to comply with such principles which do not reflect their socio-economic realities.⁸²

Nonetheless, to ensure a proper legal justification to innovation of indigenous knowledge in Africa, it is imperative to consider diversity for an effective and acceptable system. This should include recognising, harnessing and protecting the extensive range of intellectual property rights and interest, including indigenous knowledge.⁸³ Western firms doing business in Africa need to be satisfied that their intellectual assets would not be misappropriated thereby, by insisting on international treaties and trade agreements to be aligned with a historical outlook, even with relatively few exceptions. The reason is that both these firms and some domestic firms are interested in satisfactory financial returns on their research and development, but there are many different ways of achieving this. An increasing number of medium-sized local enterprises and African-based multinational companies have built successful businesses based on open innovation without the strings of intellectual property rights protection. For these particular firms, too much intellectual property protection in the marketplace causes economic stress and impedes returns on investment.⁸⁴

Every person by implication has a moral right to control and develop the production of his or her innovation or creativity. In Africa, indigenous knowledge has been the basis for research leading to high-priced inventions, the benefit of which is reaped by developed nations.⁸⁵ Within the framework of the African Charter, the right to property is not restricted to private property, and therefore communally held indigenous knowledge is also protected or recognised for development. This implies that the holders of this knowledge have the right to innovate, to use and control their property in whatever way they deem fit.⁸⁶ It has been pointed out that over 90 per cent of intellectual property protection granted by some African countries is owned by non-resident non-nationals, usually companies that have the power to eliminate competition and implement restrictive measures intended for innovative activities and also control output and prices.⁸⁷

This can be justified by the fact that in intellectual property, one of the public policies for the patent right is that it stimulates innovation and diffusion by raising a private return on research, development and commercialisation. The cost of licence negotiation and potential benefits of inventive activity includes possible profits from licensing the innovation.⁸⁸ Intellectual property in Africa should be viewed as a tool for human capital development by which local innovators express their choices concerning their creations, which contribute, not just to economic development, but also to the development of freedom of individual responsibility as to free expression and free trade. Although, on the other hand, intellectual property rights restrict freedom of choice for those who seek access to an innovation, it provides a means for economic incentive.⁸⁹ The widespread inequality among states, which is evident in the practice of providing development assistance to developing countries in Africa by industrialised countries, constitutes fraud. This can be explained with the fact that the phenomenon is a transformation of international law of coexistence to the law of cooperation.⁹⁰

Believing in progress suggests the practical application of tools that permit more accurate observation and collection of scientific knowledge to accelerate the development of knowledge further. The injection of scientific knowledge and processes into practical innovation thus undermines prediction and accelerates substitution and obsolescence.⁹¹ Contrary to the above analysis, other arguments for intellectual property justify that intellectual property rights can also contribute to

the enhancement of the market value of an innovation by enhancing competition among inventors, thus stimulating economic growth. The enforcement of intellectual property rights can give rise to the acquisition and exploitation of technological innovations, preventing competitors from copying or closely imitating a company's product.⁹²

Elizabeth Dlamini, a herbalist and skincare adviser from Swaziland, has innovated in the area of skin care. She is using Ubuntu, a traditional plant introduced to her by her grandmother, to produce cosmetic products that are gaining ground in international markets. As a result of the fact that respect for local producers and the environment is at the core, Ubuntu Natural Oil is an innovation, which is also an important step towards protecting these plants and their ecosystems, as well as improving the livelihoods of local communities. The Ubuntu Natural Oil product is produced using indigenous plant materials that have been sustainably wild-harvested by the primary producers, thus actively protecting biodiversity.⁹³ Dlamini's innovation of indigenous knowledge in Swaziland has generated economic growth and development in her local community and Swaziland as a whole. Such an innovation is in the international market not because of an intellectual property licence but because of the usefulness and added value.⁹⁴

African Right to Innovation Model

The promotion and development of indigenous technology, technological innovation and reducing technological dependence in Africa are a major objective for all African countries. This is added to the adoption of the framework document, African Union Agenda 2063.⁹⁵ Appropriate national innovation policies or models would have to be developed to stimulate increased inventive technological advancement and change. African countries have little experience in the industrial innovations area. Tax incentives, for example, to encourage technological innovation and adaptation are often not spelt out in the tax laws of African countries.⁹⁶ However, the analysis of this paper leads to the view that African countries should provide a model or legal policies that would promote innovations of indigenous knowledge in a bid to guarantee the RTD.

The African RTD model can play a role in promoting fairness, by promoting innovations of indigenous knowledge.⁹⁷ The historical exploitation and underdevelopment in Africa justify the need for an alternative model to reduce or stop the exploitation and enhance local creativity for economic growth. Utilisation or innovations of indigenous knowledge through modern technology that are not tantamount to improvement in the lives of the owners of this knowledge constitute a violation of the RTD.⁹⁸

A number of scholars have argued about the issue of intellectual property and innovation for non-industrial countries. The first issue is the creation of a universal intellectual property system, which was first discussed in Paris in 1878 by the Permanent International Commission for Intellectual Property Law in charge of drafting a uniform legislation to be adopted by all states. Scholars like Ulmer argues that 'complete unification of intellectual property laws cannot be accomplished, due to the differences in legal systems and economic and social foundations'.⁹⁹ Rosegger also said that a 'world patent, for example, is utopian and differences in patent law create difficulties in trade and investment or transfer of technology. This difficulty includes the adoption

of a common system of taxation or trade regulation'.¹⁰⁰ Political obstacles have also stood in the way of introducing a 'universal patent system', whereas mounting economic necessities demand it.¹⁰¹

A universal intellectual property system will satisfy and benefit more industrialised countries that control them as well as the use of Super 301 and TRIPS Agreement measures. Meanwhile, non-industrial countries like those in Africa will be pushed to abandon their economic development agendas and perish in highly complicated intellectual property systems. The only solution could be for African states to use whatever they can, including forming international economic zones or curtail any expansion of the countries' markets that the industrial countries always need. The fact that the economic and technological situation in Africa is fundamentally at variance with that obtained in Western countries, and appears to be going in reverse order, suggests that mere adoption and transplantation of the intellectual property models of Western countries will not provide a conceptual and structural policy befitting for innovation of indigenous knowledge on the continent.¹⁰²

It is without gainsaying that intellectual property rights do, to some extent, have a positive role to play in incentivising one's innovation and creativity. Unfortunately, the standard of intellectual property rights also makes it clear that too little consideration is given to Africa. The establishment of an African model, with greater attention paid to potential leveraging or refinement of existing intellectual property systems, is essential. This model should be more participatory, collaborative and democratic, with appropriate methods of innovation and creativity. It should lead to openness-oriented modalities for development.¹⁰³ The RTD cannot be isolated from the freedom to enjoy economic benefits arising from individual or collective creativity.

The law is neither static nor does it evolve in a closed cycle. Revisiting the law from an innovative development approach, a competition and market theory perspective contributes to its dynamic evolution and interpretation, especially within an African context. It is an inescapable fact that the protection of innovations in various forms emerged in a specific historical context and was driven by political considerations, personalities, immediate needs, compromises and other factors.¹⁰⁴

An interesting argument by Cheru states that:

in the present international economic and political environment, it is unlikely that the problem of dependency and underdevelopment in Sub-Saharan Africa can be solved by the more intensive application of conventional development strategies that created the problem in the first place. What is required is not marginal tinkering with more coffee, more aid, and more privatisation and less government intervention, as proposed by the World Bank and United States Agency for International Development (USAID), but more political action with respect to the democratisation of domestic as well as the international economic order.¹⁰⁵

The question of 'exclusive rights' in intellectual property has resulted in Western monopolies obtaining these rights from innovations of African indigenous knowledge away from Africa. Most of the people who take the trouble to secure this 'exclusive rights' for inventions believe that, somehow, the possession of exclusive rights secure to them the right to manufacture their inventions without interference.¹⁰⁶

However, institutions are not static but are constantly evolving and operate in different ways according to context. They may be appropriate and functional in one context but inappropriate and dysfunctional in another context.¹⁰⁷ This means that it can be challenging to predict how well such an institution transplanted to a completely different cultural, political or economic milieu will work in practice. The African model provides an opportunity for the continent to eliminate any form of unequal economic exploitation, particularly those practised by external monopolies to enable their peoples to benefit fully from the advantages arising from any development endeavour. History offers some pointers, or at least helps us to reflect on this precondition.¹⁰⁸

The RTD in Africa is a model where innovations of indigenous knowledge could be shared freely rather than fenced off with intellectual property claims.¹⁰⁹ The distribution of a modified technology may be regulated in such a way that it also remains open among the indigenous or local communities. Although the charging of a fee or licence to use, redistribute and modify technology is important to provide economic benefit to the developer, such charging should be within an affordable range to both the innovator and consumer of the innovation. The RTD in Africa should be a model enabling a producer to find that an open development in one area can stimulate product demand and minimise costs in another area. This development, therefore, may enhance the rate of innovation in a product, complementary to a firm's commercial enterprises, as well as offer a window of collaboration between informal and formal sectors on the continent. It promotes access to certain research tools and encourages user innovation that might be absent from a different development process.¹¹⁰

African models of creativity and innovation have long inspired those from outside. Over the past century, the dominant bureaucratic-industrial knowledge has not restricted African indigenous knowledge innovation and creativity to the extent that it has in the Western world. This is the reason why it has to give Africa a unique edge in the knowledge society of the future. Violation of the RTD includes not only technological innovation, but also the natural environment, political forces, social norms and cultural values.¹¹¹

Africa is seen as a continent that only receives and consumes, a continent that is not able to manufacture or produce finished goods to compete in the international market. The importation rate among the 54 countries in Africa is alarming. African economies largely rely on exporting resources and importing finished goods. Because more value is attached to foreign products than those that are locally produced, local innovations are considered to be of low standard and not suitable for the international market.¹¹² This scenario causes one to question the interpretation of Article 22 of the African Charter in the context of development. The United Nations Development Programme has quite correctly conceived of development in terms of human development. The latter is understood to imply the creation of an environment in which people can develop their full potential and lead productive, creative lives in accord with their needs and interests.¹¹³ The language of Article 22 on the RTD in the African Charter should no longer be conceived solely in terms of a country's economic growth, for development should involve the fostering of equity within and among African states. This entails a collaboration in terms of participatory development, based not so much on the north-south model, but adopting a rights-based approach.¹¹⁴

A made-in-Africa model, relating especially to intellectual property policy, will lead to benefits in inclusive innovation and development. This model is tailored to legally encourage human development, measures for innovation and metrics for economic growth.¹¹⁵

Conclusion

Considering the RTD as a measure for ensuring socio-economic growth, African governments need to set up fundamental preconditions for a decision on whether or not to adopt an innovation model or map out and evaluate their own industrial and innovation base and identify current and long-term economic requirements.

In African societies where little inventive or innovative activities take place, free access to technical information may well do more to foster technological capacity building than providing strong private rights over such information would achieve. Introducing an African innovative model system could potentially stimulate further innovations.¹¹⁶

The linkage between innovation of indigenous knowledge and the RTD is established by international and regional legal instruments like the International Bill of Human Rights, the Universal Declaration of Human Rights, the United Nations Declaration of Right to Development, the Covenant on Economic, Social and Cultural Rights and the African Charter on Human and Peoples' Rights, which recognise the human right to an adequate standard of living and the continuous improvement of the living conditions of all mankind. Unfortunately, these legal instruments merely provide guidelines and remain largely inadequate for the protection of intellectual property within the African context. The RTD has both individual and collective dimensions, which amounts to an integrated approach to development that identifies the individual as the ultimate beneficiary of this right. It creates a link between economic development and human rights, where economic development represents the freedom to innovate indigenous knowledge and states are imposed with the obligation to provide legal protection or recognition to any such innovation. The legal justification for innovation of indigenous knowledge in Africa is rooted in the fact that this knowledge is not produced by people for the purpose of concluding expensive sales, but to meet the imperative of knowledge production.¹¹⁷

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