Three Centuries and Counting: The Emergence and Development of Intellectual Property Law in Africa

Caroline B Ncube
Professor, Faculty of Law, University of Cape Town

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Abstract: This chapter provides an historical account of the development of IP on the African continent which highlights how the introduction of IP systems and their transposed legislation displaced existing knowledge governance systems and entrenched a primarily extractor-biased IP system. It discusses how this entrenchment in the post-TRIPs era led to compliance confidence crisis in which ill-equipped African states were overwhelmed by the political dynamics leading to a compliance overdrive manifested in developing countries and LDCs enacting provisions they were not required to, under prevailing transitional periods. In this context, it canvasses the continent's attempt to fully leverage TRIPS flexibilities. The current continental IP system is marked by multiplicity and fragmentation, consisting of two IP organisations, numerous RECs and a proposed continental IP organisation all jostling to regulate IP and often moving in different directions and at different speeds. It also briefly considers the protection of Traditional Knowledge and Plant Varieties as exemplars of aspects of IP that are critical to the continent due to the nature of the primacy of a traditional way for life for a significant portion of its population.

1. Introduction

The African continent is vast and diverse as it consists of fifty-five recognised and two disputed states.[1] A Chapter of this nature cannot offer a comprehensive overview of IP governance on the continent, so its scope is sparingly delineated as follows. Many accounts have been given of the introduction of intellectual property (IP) law to individual African states[2] and of their current status.[3] Therefore the Chapter does not focus on this primary stratum; instead it focuses on the secondary and tertiary strata of regional continental arrangements respectively. The secondary stratum of IP governance is populated by regional IP organisations and regional economic communities (RECs). Much has been written about the regional IP organisations, the African IP Organization (ARIPO) and the African IP Organisation/*Organisation Africaine de la Propriete Intellectuelle* (OAPI), particularly from a global milestone tracking perspective.[4] In contrast, relatively little has been written about the RECs' IP initiatives, and this Chapter will accordingly seek to provide an account of IP developments in this sector. Finally, the African Union (AU) intends to implement its proposal for a Pan-African IP Organisation (PAIPO) and thus introduce a tertiary stratum of IP governance. This proposal and its merits or otherwise have also been discussed widely, hence this Chapter will only seek to provide an update on the most recent developments pertaining to PAIPO. The Chapter concludes by referencing how Africa has contended with the big questions of IP, such as the protection of plant varieties and traditional knowledge (TK). It also makes some remarks about lessons that can be drawn from the historical development of IP on the continent.

The Chapter considers IP developments in Africa from an historical perspective. The

emergence and development of IP in Africa progressed through the following periods: pre-colonial; colonial (15th century onwards); post-colonial (20th century) onwards; and post-TRIPS (1995 onwards). These phases are loosely delineated[5] and a few milestones are recounted here to contextualize the Chapter. Colonisation was pioneered by the arrival of the Portuguese in the early 1400s.[6] Other early explorers were the Dutch who docked at the Cape of Good Hope in 1652[7] to establish what Young has called 'the Dutch maritime mercantile empire'.[8] The height of colonialism in Africa was the 19th century, during which many European countries annexed territories in Africa.[9] Even the American Colonization Society, a non-state actor, placed Liberia under its tutelage from 1820 to 1847.

South Africa is recorded as the first African country to have obtained its independence in 1910 when the Union was formed. However from 1948 to 1990 it languished under the racially discriminative policy of Apartheid and only achieved a constitutional democracy in 1997 with the certification of its Constitution.[10] Other African countries attained their independence throughout the 20th century, with the last colony, Zimbabwe, attaining her independence in April 1980. The discussion of the post-colonial[11] IP developments in Section 4 covers developments with regard to each relevant state's date of independence.

As Carolyn Deere Birkbeck's later Chapter in this volume underlines, the adoption and coming into force of the TRIPS Agreement in 1994 and 1995 respectively constituted a seismic shift in global IP governance, with particular importance for least developed countries (LDCs). Accordingly, Section 5 outlines IP developments since 1995. It shows that a TRIPS-induced compliance confidence crisis has resulted in the early adoption of IP protection standards that are not necessarily appropriate for African states at particular levels of development. Section 6 discusses the dynamics between IP and development in Africa. It also notes the localization of access debates and the protection of plant varieties and TK. Finally, the conclusion in Section 6 asks whether IP has truly served Africa and questions the lessons she has/should have learnt from her past entanglement with IP that may be useful in the future.

2. The Pre-Colonial Period

IP rights as conceived of in the current IP framework did not exist in pre-colonial Africa. However, customary law provided, and continues to, provide knowledge governance systems, which are briefly outlined below. Such systems are relevant and required because there are records of African creativity and innovation on both a small and grand scale ranging from the production of agricultural implements to architectural marvels such as the Great Zimbabwe monument that dates back to the 15th century.[12] Similarly, extensive knowledge was held about the therapeutic or medicinal value of plant and biological materials, which is referred to today as traditional medicinal knowledge (TMK). Further, the continent's rich cultural life manifested in a variety of art, artefacts, song and dance, which are now commonly categorised as traditional cultural expressions (TCE) or folklore. The then prevailing governing system of customary law would have regulated such expressions, knowledge, skill and its products.

Customary law or 'indigenous people's legal regimes'[13] are 'established system[s] of immemorial rules which had evolved from the way of life and natural wants of the

people.'[14] Customary law is living in the sense that communities adapt the rules to their changing circumstances and needs.[15] This organic nature is distinct from ossified customary law, which first emerged in the colonial era, when some of these living laws were recorded by the state in codes, birthing an official or codified version.[16] Other sources of official customary law include case law and accounts or records of customary law by scholars and commentators.[17]

Each indigenous community has its customary law and whilst there are many commonalities between the regimes of each community they are all unique.[18] Each community also had its own rules that pertained to knowledge governance, the bulk of which are not reduced to writing or even disclosed orally beyond that community. It is thus not possible to provide a comprehensive or detailed overview of what these norms were; suffice it cite a few examples. Ouma notes that in East Africa TMK is held and practiced exclusively by the Olaibo, a sub-group of the Maasai, that specific composers are regarded to be the custodians of their music compositions and that some types of artwork and designs are owned by specific community members.[19] These examples show aspects of exclusivity and internal appropriation of traditional knowledge (TK). It is for this reason that many scholars have suggested that customary law continues to have an important role in the regulation of TK and should be considered in crafting appropriate protection regimes.[20] In particular, it is suggested that customary law should form the root of *sui generis* means of protecting TK.[21] Such proposals have been made not only in relation to African TK but in relation to indigenous communities' TK regardless of the community's location.[22]

3. The Colonial Period

During the colonial era customary law's coverage shrunk to 'family matters and associated property and inheritance issues'[23] and was soon overtaken by imperial laws in the domain of knowledge governance as new forms of rights were created by 'extractive' IP laws. Drahos explains this characteristic as follows: '[T]he concept of an extractive property order refers to property systems in which the systems allow one group (the extractor group) to obtain control of assets belonging to the second group without the extractor group obtaining consent and offering proper compensation for the asset transfer'.[24] The extractor group is the outsider or outsiders who colonised African states and then introduced a new system of law that enabled them to extract knowledge and ideas from the colonised territory without consent or compensation.

Various methods of introducing colonial IP laws were utilized, such as simply extending the colonising state's laws and the applicability of international agreements to which they were party to the colony, as well as the enactment of colony-specific laws.[25] The main critique of such an approach is that it inevitably resulted in IP regimes which were ill-suited to the colonies. This is because they were not crafted with due regard for the colonies' conditions and needs. Administration of IP rights was provided by the colonising state, often from its home territory. For instance, the French National Patent Rights Institute (INPI) administered patents on behalf of French colonies and the Administrator General of the Ministry of Foreign Affairs of Belgium granted patents for Belgian colonies.[26]

During this era, African states began to co-operate with the aim of strengthening their fight against colonization. Where possible they provided safe houses for exiles and

military training facilities for those actively involved in armed struggle.[27] In some instances such support was provided by individual states and in others, such support was given as a collective, such as the Frontline States,[28] which supported South Africa in its fight against Apartheid.[29] As will be shown below, this mutual support has not ended with the demise of colonisation and Apartheid, but has continued to inform African states' continental initiatives[30] and their foreign policy positions on a variety of matters including IP.[31] Informed by equity and public interest prerogatives which find expression in the metanorm of Ubuntu (discussed below in Section 6), African states have coalesced into an influential group (the Africa Group) which advances its members' interests. For instance, the group is active at the World Health Assembly (WHA), [32] the World Trade Organisation (WTO) [33] and the World Intellectual Property Organisation (WIPO).[34] Its efforts to bring global attention to the plight of the continent in the face of inaccessibility of essential medicines and other key knowledge assets has resulted in a 'global counter-discourse on the appropriate regulation of intellectual property'.[35]

4. The Post-Colonial Period

After a critical mass of African states had attained their independence, they consolidated their regional co-operation by forming a continental organisation, the Organisation of African Unity (OAU) in 1963, that later became the AU in 2001.[36] At about the same time many states were grappling with how to set up their own IP administrative structures. In view of their limited resources and expertise, it was prudent to leverage economies of scale by setting up regional IP organisations. Legislative reform was a long time coming and many states continue to implement colonial era IP laws today. However, OAPI Member States all subscribe to uniform IP laws contained in the Bangui Protocol and its Annexes,[37] and ARIPO's Protocols have played a significant role in the rejuvenation of IP legislation through their harmonizing function. Similarly, some of the RECs have provided leadership, particularly in relation to patent-related TRIPS flexibilities.

The Sections that follow outline OAPI, ARIPO and REC developments, bearing in mind that they occurred within the context of Pan-Africanism as expressed through formation of the OAU, now the AU. Consequently, it is important to view membership of the regional organisations against the backdrop of the AU and the countries' colonial past. Fifty-four of the recognised African states are AU Member States. The fifty-fifth state, Morocco, is not an AU Member State. It formally withdrew its membership of the AU's predecessor, the OAU, in 1985 because of a dispute relating to the recognition of the Sahrawi Arab Democratic Republic (SADR).[38]

The AU has divided the continent into five regions. These regions are depicted below, together with the regional IP organisation membership of its members. The official languages of the AU Member States are also shown as a proxy for colonial heritage. Several countries have multiple official languages, but for present purposes it is only necessary to indicate languages that were introduced to a country by colonization. REC membership is not indicated in the table because of their multiplicity and the overlapping memberships held by many AU Member States. Instead, it is outlined further below in a separate Section 4.1.3 dedicated to discussing RECs.

Central	Burundi Fr *ARIPO Obs* Cameroon Fr En OAPI Central African Republic Fr OAPI	Chad Fr Ar OAPI Congo Fr OAPI DR Congo Fr	Equatorial Guinea Sp OAPI Gabon Fr OAPI São Tomé and Príncipe Po ARIPO
Eastern	Comoros Fr Ar OAPI Djibouti Fr Ethiopia *ARIPO Obs* Eritrea Ar *ARIPO Obs* Kenya En ARIPO	Madagascar Fr Mauritius Fr *ARIPO Obs* Rwanda Fr ARIPO Seychelles Fr En *ARIPO Obs* Somalia Ar ARIPO	South Sudan En Ar Sudan Ar ARIPO Uganda En ARIPO Tanzania En ARIPO
North	Algeria Ar, Fr *ARIPO Obs* Egypt Ar, *ARIPO Obs*	Libya Ar *ARIPO Obs* Mauritania OAPI	Sahrawi Republic Tunisia Ar *ARIPO Obs*
South	Angola Po *ARIPO Obs* Botswana En ARIPO Lesotho En ARIPO Malawi En ARIPO	Mozambique Po ARIPO Namibia En ARIPO South Africa En *ARIPO Obs*	Swaziland En ARIPO Zambia En ARIPO Zimbabwe En ARIPO
West	Benin Fr OAPI Burkina Faso Fr OAPI Cape Verde Fr OAPI Côte d'Ivoire Fr OAPI Gambia En ARIPO	Ghana En ARIPO Guinea Bissau Po OAPI Guinea Fr OAPI Liberia En ARIPO Mali Fr OAPI	Niger Fr OAPI Nigeria En *ARIPO Obs* Senegal Fr OAPI Sierra Leone En ARIPO Togo Fr OAPI

Figure 1: IP regional organisation by AU region

Languages: Am Amharic, Ar Arabic, En English, Fr French, Po Portuguese, Sp Spanish

IP regional organisation membership: ARIPO, ARIPO observer (*ARIPO Obs*), OAPI

As is evident from the above, Francophone states and one Lusophone state, Guinea Bissau, from the central, eastern, northern and western AU regions form the membership of OAPI. The majority of its membership is drawn from the central and western regions. ARIPO draws its membership from Anglophone, Francophone, Lusophone and Arabic states from the eastern, southern and western regions of the AU. However, most of its membership is drawn from the eastern and southern regions. With the exclusion of Mauritania, states in the northern region, do not belong to either ARIPO or OAPI. However, four of these states have ARIPO observer status. In the Southern and Western regions only South Africa and Nigeria are not members of a regional IP organisation, although both have observer status at ARIPO. In total ARIPO has twelve observer states. The incomplete coverage of the continent by the two regional IP organisations has fuelled calls for a continental IP organisation, as discussed in Section 5 below.

4.1 The Formation of the Regional Intellectual Property Organisations and their Mandates

4.1.1 The African and Malagasy Office of Industrial Property (OAPI)

In 1962 newly independent Francophone states[39] adopted a constitutive agreement[40] at Libreville, Gabon that created the African and Malagasy Office of Industrial Property/*Office Africaine et Malgache de la Propriété Industrielle* (OAPI).[41] OAPI focused only on industrial property. It was replaced by OAPI in 1977 upon the adoption at Bangui, Central African Republic of the Agreement relating to the creation of OAPI, known as the Bangui Agreement. [42] The Bangui Agreement came into force on 8 February 1982.

As noted above, the Bangui Agreement serves a uniform code of laws for OAPI Member States. It currently has ten annexes, namely: Annex I: Patents; Annex II: Utility Models; Annex III: Trademarks and service marks; Annex IV: Industrial Designs; Annex V: Trade Names; Annex VI: Geographical Indications; Annex VII: Literary and artistic property; Annex VIII: Unfair Competition; Annex IX: Layout Designs of Integrated Circuits; and Annex X: New Varieties of Plant. Notably, the Annexes do not cater for the protection of TK. The Agreement was updated in 1999 and the revisions and Annexes I to IX became effective on 28 February 2002. Annex X, which adopted the 1991 International Union for the Protection of New Varieties of Plants (UPOV) Convention's approach to protecting plant varieties, came into force on 1 January 2006 and OAPI became a member of the UPOV Convention in 2014.[43] The OAPI Secretariat administers IP rights on behalf of its Member States and undertakes both formal and substantive examinations for the registration of rights.

4.1.2 The African Industrial Property Organisation (ARIPO)

Fourteen years after the formation of OAPI, newly independent Anglophone states established the Industrial Property Organization for English-speaking Africa (ESARIPO), [44] with technical and administrative assistance from UNECA and WIPO.[45] Its constitutive agreement, the Agreement on the Creation of ESAPIRO Africa, was adopted at a Diplomatic Conference held in Lusaka, Zambia on 9 December 1976. The Agreement, which is commonly known as the Lusaka Agreement, came into force on 15 February 1978.

Seven years later Article 4 of the Lusaka Agreement was amended in order to expand the pool of states eligible for membership beyond Anglophone states to all members of UNECA or the OAU (now the AU).[46] This necessitated a name change to the African Industrial Property Organization (ARIPO) to remove its reference to the English language.[47] Another name change was occasioned by the Organization's broadening of its mandate from industrial property to other forms of IP and although its acronym remained constant, its full name changed to the African Regional IP Organization in 2004.[48]

In addition to its constitutive act, the Lusaka Agreement, ARIPO has the following protocols: the Harare Protocol on Patents and Industrial Designs of 1982, the Banjul Protocol on Marks of 1993, [49] the Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore of 2010, [50] and the Arusha

Protocol for the Protection of New Varieties of Plants.[51] Of these Protocols, the latter two have bore the brunt of some criticism, which is summarized below in Section 5 as part of the discussion of post-TRIPS developments.

ARIPO's protocols serve a harmonizing function and are not binding in its Member States unless they are domesticated. Its membership therefore has a patch-work IP framework as compared to OAPI's unified one. Member States are at liberty to choose which Protocols to accede to or ratify and thereafter domesticate. The ARIPO secretariat administers patents, utility models and industrial design applications on behalf of states party to the Harare Protocol. ARIPO undertakes substantive examination of patent applications[52] and utility models[53] but only undertakes a formality examination of designs.[54] However, in each instance the national office is afforded an opportunity to consider the application and to indicate to ARIPO whether it will grant national protection for it.[55] ARIPO also receives and processes trademark applications on behalf of states party to the Banjul Protocol.[56] However, it only conducts a formal examination[57] and then forwards the application to national offices for substantive examination.[58] It has a Board of Appeal that hears appeals against decisions made by its office.[59]

The ARIPO Office does not perform any registration function under the Swakopmund Protocol as there are no formalities for obtaining protection. However the Protocol provides that the Office may maintain a database or registry of protected works 'in the interests of transparency, evidence and … preservation'.[60] In addition, the Office is tasked with 'awareness-raising, education, guidance, monitoring, registration, dispute resolution, enforcement' and related activities.[61] When the Arusha Protocol comes into force, ARIPO will serve as registry for plant breeders' rights.[62] It will undertake both formal and substantive examinations of applications[63] or outsource them.[64]

4.1.3 Regional Economic Communities

One of the AU's objectives is the creation of the African Economic Community (AEC),[65] which will be constituted by the amalgamation of RECs.[66] There are currently fourteen RECs,[67] however only eight of these will constitute the AEC.[68] Listed chronologically according to their dates of formation, the relevant eight RECs are: the Economic Community of West African States (ECOWAS), formed in 1975;[69] the Economic Community of Central African States (ECCAS/CEEAC), formed in 1983;[70] the Arab Maghreb Union (AMU/UMA), formed in 1989;[71] the Southern African Development Community (SADC),[72] formed in 1992 and replacing the Southern African Development Coordination Conference SADCC formed in 1980; the Common Market for Eastern and Southern Africa (COMESA),[73] formed in 1994 and replacing the Preferential Trade Area (PTA) formed in 1981; the Inter-Governmental Authority of Development (IGAD),[74] formed in 1996 and replacing the Intergovernmental Authority on Drought and Development (IGADD) formed in 1986; the Community of Sahel-Saharan States (CEN-SAD) formed in 1998;[75] and the East African Community (EAC) formed in 1999.[76]

The RECs derive their IP mandate from their constitutive agreements,[77] or trade-related protocols.[78] However, for the most part they have not adopted any IP specific regulatory instruments. As is evident from the above list, five of the eight RECs shortlisted to constitute the AEC predate the TRIPS Agreement. Since the coming

into force of TRIPS, some of the RECs have been actively assiting their members to be TRIPS-compliant. These initiatives are outlined in Section 5 below. Some scholars find the RECs' approach to IP to be more robust than that of ARIPO or OAPI because the former is within a regional trade context which takes cognisance of a 'broad policy framework on research, technology development and innovation' that the latter often overlooks.[79]

5. Since the TRIPS Agreement

The TRIPS Agreement, discussed by Sam Ricketson in his Chapter in this volume, has been criticized for being neo-colonial and for failing to adequately cater for the unique position of developing countries.[80] Perhaps motivated by Pan-Africanism and strong bonds of mutual support, African states have rallied together at the WTO, WIPO and WHO to contribute to important initiatives that have sought to ameliorate the harsh effects of the TRIPS Agreement. Examples of this include African leadership in the crafting of the Doha Declaration and the WIPO Development agenda.

In a sense, the TRIPS Agreement created a crisis of confidence amongst many African states as they set about achieving compliance with its provisions. Many African states had transposed IP laws that were merely extended from the colonizing state and their local IP expertise and administrative capacity was minimal.[81] The primary reason for this was that colonial administrators were simply parachuted in to administer IP or the local IP offices simply served as a 'clerical outpost'[82] for the colonial IP office and simply served to rubber-stamp or extend IP rights granted in the colonizing state to the colonised state. Following TRIPs, African states' 'political dynamics' of IP decision making,[83] pressure from former colonizers, global north-based donors and the global IP infrastructure (such as WIPO, WTO and UPOV) coupled African states' limited technical expertise and national capacity led to a compliance over-drive.[84]

These compliance efforts appear to have been overdone because many LDCs have gone above and beyond what is required of them. The most glaring example of this is OAPI's extensive revision of the Bangui Agreement in 1999[85] to incorporate TRIPS standards during the currency of an LDC transition period. This period was initially set to expire in 2005 and has been extended twice with a current expiry date of 1 July 2021 or sooner if a country ceases to become an LDC before that date.[86] OAPI's early adoption of TRIPS standards has been attributed to various factors, including inappropriate advice and persuasion and pressure to adopt the standards, coupled with resource and expertise constraints which led to a less than full appreciation of what was at stake.[87] The following Section presents the provisions concerning the protection of plant varieties provided for by ARIPO, OAPI and SADC as an example of the early adoption of TRIPS standards by African states.

5.1 Plant Variety Protection

Annex X of the Bangui Protocol, the Arusha Protocol and the SADC's Draft Plant Variety Protection (PVP) Protocol[88] are based primarily on the 1991 Act of the UPOV Convention (UPOV 1991).[89] They afford plant breeders' rights (PBRs) to plant varieties that are new, distinct, uniform and stable.[90] This adoption of a UPOV

1991 approach, which Africa eschewed in 2000,[91] is inappropriate because it may facilitate biopiracy, does not protect farmers' rights, and includes PBR eligibility criteria that are ill-suited to the region,[92]as further elaborated below. In addition, the majority of all three organisations' Member States are LDCs and are accordingly not yet required to protect plant varieties. It has also been pointed out that there are better alternatives for protection such as a hybrid approach employed in Malaysia, the Philippines and Zambia[93] or the *sui generis* approach presented by the AU Model Law.[94]

A major criticism of the UPOV approach (as found in both its 1978 and 1991 version) is its disjoinder of plant breeding from its farming context, which is critically important and is infused with TK in Africa.[95] Other frameworks provide the requisite comprehensive framework which contextualizes plant breeding within farming, biological conservation and the protection of TK.[96] These frameworks include the Convention on Biological Diversity (CBD), [97] its guidelines [98] and its Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (Nagoya ABS Protocol)[99] and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRA).[100] Many African countries are party to these agreements and protocols,[101] thereby signaling their support for their holistic approach.

By overlooking the contextual elements of plant breeding encapsulated in these other frameworks, the UPOV approach fails 'to adequately account for smallholder [indigenous and local community] ILC farmers'.[102] Among other shortcomings, UPOV's technical eligibility criteria for protection 'exclude the pattern of agricultural production and innovation in Africa's ILCs'.[103] These factors result in the vulnerability of farmers' varieties which are then left unprotected under the UPOV scheme.[104]

Another contested aspect of the UPOV approach is its provision for so-called farmers' privilege, which is 'the agricultural tradition of farmers saving part of their harvest for the seeding or propagation of the next crop.'[105] UPOV 78 provides for an exemption for 'private and non-commercial use' which does not provide for the farmers' right to re-sow seed harvested from protected varieties and leaves it to Member States to include or exclude it from domestic legislation.[106] However, all Member States opted to include the re-sowing right.[107] Article 15(2) of UPOV 91 provides for farmers' privilege as an optional exception 'to permit farmers to use for propagating purposes, on their own holdings, the product of the harvest which they have obtained by planting, on their own holdings, the protected variety'. In addition, this optinal mechanism is subject to some limitations and is considered to be very narrow because farmers' use of the varieties is constrained by breeders' terms.[108]

It has thus proven difficult to justify or support the adoption by ARIPO, OAPI and SADC of the UPOV 1991 approach. Such adoption has been partially explained by scholars such as Oguamanam as due to pressure from the United States.[109] OAPI Member States are already bound by the UPOV 1991 approach. ARIPO's Arusha Protocol has not yet entered into force. It will do so once four States have ratified or acceded to it. However, since the ARIPO's IP framework serves a harmonizing function, its protocols have a potentially less devastating effect as they may not be domesticated by member states. It is hoped that LDC Member States will carefully consider their position prior to ratifying and domesticating the Arusha Protocol. The SADC's Draft PVP Protocol has not yet been adopted, but once it is, it will also need

to be taken up by member states, hopefully only after much reflection.

5.2 The Protection of Traditional Knowledge

The protection of TK is contested and there is the constant tension between what rightfully belongs to indigenous communities and what ought to form part of the public domain.[110] The protection of TK has vexed IP organisations and scholars for a long time, as evidenced by the slow progress of the WIPO Inter-Governmental Committee (IGC), which has been grappling with the issue for almost 15 years. As outlined above, some African organisations have crafted their own legal instruments to provide for such protection. In view of the international inertia, one would expect the regional IP organisations to step up and find solutions for their constituents.

OAPI's IP framework does not extend to the protection of TK. In contrast, ARIPO's Swakopmund Protocol provides for *sui generis* protection of TK[111] and folklore.[112] It draws on customary law for the purposes of defining protectable works, determining their ownership and settling disputes.[113] There are no formalities attendant upon the acquisition of protection[114] which lasts for as long as the relevant work meets the eligibility criteria when it is owned by a community and for '25 years following the exploitation of knowledge beyond its traditional context' when it is owned by an individual.[115] For TK these criteria are that the TK must be: (a) generated, preserved and transmitted in a traditional and intergenerational context; (b) distinctively associated with a local or traditional community; and (c) integral to the cultural identity of a local or traditional community that is recognized as holding the knowledge through a form of custodianship, guardianship or collective and cultural ownership or responsibility. Such a relationship may be established formally or informally by customary practices, laws or protocols. [116]For expressions of folklore the eligibility criteria are that they must be: (a) the products of creative and cumulative intellectual activity, such as collective creativity or individual creativity where the identity of the individual is unknown; and (b) characteristic of a community's cultural identity and traditional heritage and maintained used or developed by such community in accordance with the customary laws and practices of that community.[117]

The Swakopmund Protocol has been lauded as being clear and an excellent *sui generis* model.[118] However, it been criticized for vesting 'control of third party use of expressions of folklore' in member states and their national competent authorities, rather than in their originating indigenous communities.[119] It has also been criticized for granting ownership rights in respect of TK and folklore to individuals as this is considered to be contrary to the practices of indigenous communities.[120] However, as noted above in Section 2, Ouma states that some communities in East Africa grant custodianship and ownership of TK to some community members. It is not clear whether this means an individual can hold such rights or whether this is a reference to a sub-group of the community.

5.3 RECs and the Implementation of TRIPS Flexibilities

Several RECs have been providing leadership to their member states with regard to their implementation of TRIPS flexibilities.[121] They have probably been spurred on by the 2012 AU Pharmaceutical Manufacturing Plan for Africa (PMPA) Business

Plan's stark call 'to fully exploit the TRIPS flexibilities and accelerate the ongoing negotiations for an extension to the 2016 transition period or face the prospect of paying more for drugs in the future'.[122] This Business Plan was prepared and adopted by the AU pursuant to its PMPA which was endorsed by the 2007 AU Heads of State and Government Summit. It is accordingly a government document, rather than a pharma document. Its purpose is to 'advance the local pharmaceutical sector as a key contribution towards sustaining the supply of quality, safe and efficacious medical products across all essential medicines.' [123] Its primary focus therefore is on developing state-owned domestic manufacturing capacity. Due to capacity and resource constraints, such efforts would usually require some kind of collaboration with private entities and donor support. The Business Plan constitutes a process by which to enhance domestic pharmaceutical manufacturing capacity. The following paragraph briefly sets out its genesis.

Following the adoption of the PMPA in 2007, the 4th session of the AU Conference of Ministers of Health held in 2009 instructed the AU Commission to prepare the Business Plan.[124] This directive was confirmed in 2011 at the 5th session of the AU Conference of Ministers of Health. [125] Thereafter, the AU Commission in collaboration with the United Nations Industrial Development Organization (UNIDO) proceeded to prepare the Business Plan. [126] The Business Plan is currently under implementation and specifically tasks ARIPO and RECs to spearhead efforts to maximize TRIPS flexibilities.[127]

The EAC has taken up this challenge by adopting a Regional IP Policy on Public Health-Related WTO-TRIPS Flexibilities in 2013.[128] In addition, it has adopted the Regional Protocol on Health-Related WTO-TRIPS Flexibilities that gives the policy force of law.[129] However, the Protocol needs to go through a signature and ratification process before it will become effective. The EAC has also adopted a Regional Pharmaceutical Manufacturing Plan of Action (RPMPoA) and the Federation of East African Pharmaceutical Manufacturers (FEAPM) is actively pursuing its goals.[130]Similarly, ECOWAS adopted a TRIPS Policy[131] and Guidelines[132] in October 2012. It adopted the ECOWAS Pharmaceutical Manufacturing Plan in April 2014.[133]

The EAC and ECOWAS policies and regulatory instruments were based on reviews of their Member States' then current IP law provisions that found that states were making sub-optimal use of the flexibilities. [134] Concrete recommendations were made for improving this situation. Examples of these include enacting provisions for Bolar and research exceptions;[135] international exhaustion;[136] and the requirement of the disclosure of the best mode of implementing an invention in patent applications.[137] Further, both the EAC and ECOWAS have provided detailed legislative drafting input in their Protocol and Guidelines respectively. Therefore their Member States have templates upon which to base their legislative provisions.

Other RECs such as COMESA and SADC have not yet followed suit but all appearances are that they intend to do so. SADC's Pharmaceutical Business Plan (2007–2013) prioritizes the use of the TRIPS flexibilities as a strategy to make quality medicines more affordable to citizens in Member States.[138] COMESA has adopted a general regional IP policy[139] which expressly states that one of its objectives is to fully exploit available flexibilities 'to facilitate access to medicines for all people particularly the marginalised of society.'[140] Moreover both COMESA and EAC have

recently launched a tripartite Free Trade Area (T-FTA)[141] and the T-FTA Agreement commits them to concluding negotiations relating to their IP Agenda within a period of two years.[142] Article 27(3) of the 2010 draft of the Agreement provided that 'tripartite Member States shall co-operate and develop capacity to implement and utilise the flexibilities in all relevant international agreements on intellectual property rights'.[143] It also included Annex 9 which provided further detail on how this objective was to be met.[144] It is likely that this approach will be carried through in the current negotiations. This view is buttressed by the fact that the EAC has already gone ahead and provided for this in its Policy and Protocol. Therefore it is not improbable that the T-FTA will simply adopt the EAC's instruments.

5.4 The Proposal of the Formation of a Continental Intellectual Property Organisation

Scholars have mooted the creation of a continental IP organisation since the mid-1990s.[145] Whilst early proposals contemplated that this organisation would have competence in all areas of IP, more recent proposals have isolated competence in trademark law as more appropriate.[146] In view of the continent's very strong Pan-African agenda, it is perhaps unsurprising that the AU has now turned substantial attention to implementing its proposal for PAIPO. This proposal was first mooted in the early 2000s[147] and much of the leg-work was done in that period.[148] This entailed consultative workshops in each AU,[149] undertaking studies[150] and incorporating the proposal in the AU's Science and Technology Consolidated Plan of Action of 2006. In that year, a formal recommendation was made for the establishment of PAIPO at a meeting of the African Group.[151] Thereafter a concept paper was tabled at the extra-ordinary African Ministerial Conference on Science and Technology (AMCOST),[152] which argued that PAIPO would ensure 'continental inclusiveness',[153] leverage economies of scale and better link IP to economic development, thereby encouraging political will and action on this front.[154]

In January 2007 the AU Assembly adopted a decision which mandated the creation of PAIPO.[155] Thereafter, the AU's Scientific, Technical and Research Commission (AU-STRC) was charged with primary responsibility for implementing this decision.[156] It then commissioned an expert to draft a situation analysis[157] and to draft Constitutive Articles. These were discussed at several workshops[158] and at AMCOST IV in 2010.[159] AMCOST IV directed that the draft should be revised and further consultations undertaken, which are reported to have been undertaken in 2011.[160]

In 2012 a draft PAIPO statute was published in anticipation of its consideration by AMCOST V in November of that year. The draft statute was heavily criticised[161] and a petition was mobilised against it.[162] In view of this response AMCOST V referred the draft back to the AU-HRST for further consultation, including a stakeholders' meeting.[163] This direction was confirmed by the 20th Ordinary Session of the AU Summit held in January 2013 which also called for the stakeholders' meeting to be convened in May 2013.[164] However, this meeting was not held at that time and in April 2014, the ARIPO and OAPI Secretariats publicly called for this meeting to be convened, with their participation.[165]

When AMCOST met at Brazzaville a few days after this public call, it approved a revised Draft of the PAIPO Statute[166] and the Science, Technology and Innovation

Strategy for Africa 2024 (STISA-2024), a component of the AU's Agenda 2063. The STISA-2024 identified PAIPO as a constituent of the AU Commission.[167] Since then, the AU Assembly's 23rd Ordinary Session held in 2014 has adopted STISA-2024 and directed that the revised draft PAIPO statute be referred to the Specialized Technical Committee (STC) on Justice and Legal Affairs.[168] The Assembly also endorsed Tunisia as the host of the headquarters and secretariat of PAIPO and called for the AU-HRST and Tunisia to prepare a 'road map for [the] implementation of PAIPO'. A progress report on the preparation of the road map was not tabled at the AU's 2015 Summit and it is not clear when such a report will be forthcoming. However, it is clear that a lot of headway has been made towards operationalising PAIPO and it is likely to become a reality soon.

The approved revised Draft Statute was not detailed as it is a constitutive document and further detail will be provided for in seondary instruments.[169] However, it depicted the AU's vision. It envisages that PAIPO will not register IP rights as that will continue to be done by ARIPO and OAPI. Instead, it will serve as a high-level continental policy formulation plattform. Therefore lack of reference to public interest imperatives and the WIPO Development Agenda in the first draft of the statute was cause for concern because it appeared that the AU had not taken on board significant perspectives and developments.[170] If this proved to be true, then the gains that the African Group at international fora, such as the Doha Declaration,[171] would be lost. Fortunately, the revised draft makes reference to the WIPO DA, 'international human rights law and international agreements on sustainable development and the protection of indigenous knowledge.'[172] However, it still does not refer to TRIPS flexibilities or the Doha Declaration. This omission will hopefully be rectified by PAIPO's integration of the extensive work that has been done by RECs in relation to fully leveraging the flexibilities. This draft of the statute has been criticized for practical shortcomings, such as its failure to not make provision for membership of PAIPO.[173]

The 2013 draft has been superseded by the final PAIPO Statute that was adopted by the AU on 31 January 2016 at its 26th Summit. The final statute carries forward the tenor of the modified preamble from the 2013 draft. It refers to 'the cultural and socio-economic development of Africa'; recognises 'international human rights laws and international agreements on sustainable development and the protection of indigenous knowledge' and refers to the WIPO Development Agenda, Sustainable Development Goals and the AU's Agenda 2063. In other ways, it is markedly different from the 2013 revised draft. For instance, its art 2 characterizes PAIPO as a specialized AU agency and art 25 makes provision for the filing of reservations by party states, which was prohibited by earlier drafts. In addition, its art 9 changes the organs of the institution by replacing the Experts Committee with the Conference of State Parties and re-introduces the Board of Appeal. The Board of Appeal had been omitted from the 2013 revised draft statute because PAIPO's registration function was removed. Its re-introduction to the final statute in the continued absence of a registration function is puzzling. The final statute expressly provides for Tunisia as the organization's headquarters. It also includes new provisions pertaining to the official language of the organization (art 26), popularization of the statute (art 18), a safeguard clause (art 22), signature, ratification and accession (art 23), registration of the statute (art 27) and the authentic texts of the statute (art 30). Some of these provisions overcome some shortcomings such the failure to provide for a mechanism for the acquisition of PAIPO membership through accession, signature and

ratification.

6. Conclusion: Intellectual Property, Development and Lessons From History

The historical account of the development of IP on the African continent has shown that there are a number of themes at play. First, one sees the external to internal flow of IP law from outside the continent into it which displaced exiting knowledge governance systems as it entrenched the primarily extractor-biased IP system. Secondly, this introduction of IP law and its entrenchment particularly in the post-TRIPs era led to compliance confidence crisis which was seen as ill-equipped African states grappled with updating transposed IP systems to comply with TRIPs. The political dynamics of IP decision making overwhelmed many states leading to compliance overdrive manifested in developing countries and LDCs enacting provisions they were not required to, under prevailing transitional periods. Thirdly, another aspect of this compliance focused trajectory is multiplicity and fragmentation. Africa has two IP organisations, numerous RECs and a proposed continental IP organisation all jostling to regulate IP and often moving in different directions at different speeds.

Whilst there is a growing body of literature on IP with an African focus, there is still much to learn about the synergies between innovation, creativity, IP and development in the region.[174] Recent studies have highlighted how IP systems may be both undervaluing and undermining African innovation because innovation is not easily measured by prevailing metrics and IP laws are not sufficiently calibrated to motivate or support it.[175] The elusiveness of some African innovation is due to it being primarily 'pragmatic' in nature – that is, it being needs-driven and incremental and mostly located in the so-called 'informal' (unregulated) economy.[176] This is not to say that formal sector innovation does not occur, far from it. As shown by conventional indices that typically undervalue African innovation, such as WIPO's Innovation Indices, for example, countries such as Kenya and Uganda show significant levels of innovation.[177] It has also been shown that focusing on 'dominant preconceptions of IP as involving mainly patent, copyright and trademark protections' is misplaced and cognizance needs to be taken of trade secrets and other flexible legal mechanisms which are better suited to African informal-sector innovation.[178]

As several of the other Chapters in this volume suggest, including those focused on IP and development specifically, the analysis of the relationship between the robustness of a national IP framework and economic development is one fraught with controversy. Different views have emerged, reflecting at least three distinct approaches.[179] First, some scholars contend that a strong IP system leads to inflows of foreign direct investment and consequent economic development. Secondly, others argue that such links are tenuous at best and that the historical evidence suggests that robust IP systems only become relevant as a country becomes more developed, such that developing countries and LDCs are better off with less robust systems. Thirdly, a mid-point argument is that the relationship between IP and economic development flows both ways or is much more nuanced than being one directional.

In addition, Africa has had to contend with the other big questions or issues of IP such

as access debates in the context of both patent[180] and copyright law,[181] cultural appropriation and protection of TK. The AU's African Model Law of 1998 and ARIPO's Swakopmund Protocol of 2000 are instances of such independent solutions. As noted in Section 2 above, there are growing calls for a reversion to customary law principles in search of *sui generis* TK protection models, and the world will continue to look to developing states to provide leadership on this front.

It appears that in the short to medium term the African continent will continue to consolidate its efforts to integrate its IP framework in an effort to craft an appropriately nuanced system to meet its unique circumstances.

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[1] The two disputed states are the Sahrawi Arab Democratic Republic and Somaliland. For a history of the Sahrawi Arab Democratic Republic see E Jensen, *Western Sahara: Anatomy of a Stalemate* (Lynne Rienner Publishers 2005) and T Shelley, *Endgame in the Western Sahara: What Future for Africa's Last Colony?* (Zed Books 2004).

[2] RL Okediji, 'The international relations of intellectual property: narratives of developing country participation in the global intellectual property system' (2003) 7 Singapore Journal of International & Comparative Law 315, 323; T Kongolo, 'Historical evolution of copyright legislation in Africa' (2014) 5(2) The WIPO Journal 163, 168–70; T Kongolo, 'Historical developments of industrial property laws in Africa (2013) 5(1) The WIPO Journal 105, 115–16.

[3] E du Plessiss, S Brown & DF Tanziani Adams, *Practical Guide to Intellectual Property in Africa* (Pretoria University Press 2012).

[4] A Adewopo, 'The Global Intellectual Property System and Sub-Saharan Africa. A Prognostic Reflection' (2001-2002) 33 University of Toledo L Rev 749; A Adewopo, 'Developments In Intellectual Property In Africa' <www.atrip.org/.../Adewopo%20Dev.%20of%20IP%20in%20Africa.doc>.

[5] They roughly coincide with the multilateralisms – 1500 to 1945, 1945 to 1999, and 1994 to the present – as set out in Okediji (n 2).

[6] For an account see J Duffy, *Portugal in Africa* (Harvard University Press 1962); RO Collins & JM Burns, *A History of Sub-Saharan Africa* (2nd edn, Cambridge University Press 2014) 175–89; C Young, *The African Colonial State in Comparative Perspective* (Yale University Press 1994) 49–52.

[7] For an overview see R Elphick & H Giliomee, *The Shaping of South African Society, 1652–1840* (Wesleyan University Press 1979).

[8] Young (n 6) 61.

[9] AA Boahen (ed), *Africa Under Colonial Domination, 1880-1935* (University of California Press 1990).

[10] The years 1990 to 1996 are generally considered to be a transition period with democratic elections being held in 1994.

[11] Some authors contest the use of this phrase but it is used due to its widespread currency. For such critiques see, eg, C Young, 'The End of the Post-Colonial State in Africa? Reflections on Changing African Political Dynamics' (2004) 103(410) African Affairs 23. Young himself continues to use the term: see, eg, C Young, *The Postcolonial State in Africa: Fifty Years of Independence, 1960-2010* (University of Wisconsin Press 2012).

[12] W Rodney, *How Europe Underdeveloped Africa* (Zimbabwe Publishing House 1972) 65.

[13] B Tobin, *Indigenous Peoples, Customary Law and Human Rights – Why Living Law Matters* (Routledge 2014) 1.

[14] JC Bekker, *Seymour's Customary Law in Southern Africa* (5th edn, Juta 1959) 11.

[15] C Himonga & T Nhlapho (ed) *African Customary Law in South Africa: Post-Apartheid and Living Law Perspectives* (Oxford University Press, South Africa 2014) 27.

[16] F du Bois (with C Himonga), 'Sources of Law: Customary and other sources' in F du Bois (ed), *Willies's Principles of South African Law* (9th edn, Juta 2007) 100, 103.

[17] Himonga & Nhlapho (n 15) 33.

[18] Tobin (n 13) 2.

[19] M Ouma, 'The Policy Context for a Commons-Based Approach to Traditional Knowledge in Kenya' in J de Beer, C Armstrong, C Oguamanam & T Schonwetter (eds), *Innovation & Intellectual Property Collaborative Dynamics in Africa* (University of Cape Town Press 2014) 132.

[20] WIPO, *Customary Law, Traditional Knowledge and Intellectual Property: An Outline of the Issues* (WIPO 2013) < http://www.wipo.int/export/sites/www/tk/en/resources/pdf/overview_customary_law.pdf>; WIPO *Report on Fact-finding Missions on Intellectual Property and Traditional Knowledge* (WIPO 1998-1999) < http://www.wipo.int/edocs/pubdocs/en/tk/768/wipo_pub_768.pdf>; P Kuruk, 'The Role of Customary Law under Sui Generis Frameworks of Intellectual Property Rights in Traditional and Indigenous Knowledge' (2007) 17 Indiana International & Comparative L Rev 67, 81-83.

[21] G Dutfield, 'Traditional Knowledge, Intellectual Property and Pharmaceutical Innovation What's left to discuss?' in M David & D Halbert (eds), *The Sage Handbook on Intellectual Property* (Sage 2014); DM Conway, 'Indigenizing Intellectual Property Law: Customary Law, Legal Pluralism, and the Protection of Indigenous Peoples' Rights, Identity, and Resources' (2009) 15 Texas Wesleyan L Rev 207.

[22] See, eg, T Janke & R Quiggin, 'Indigenous cultural and intellectual property and customary law' *Aboriginal Customary Laws–Background Paper 12* < http://www.acpcultures.eu/_upload/ocr_document/Janke_BackgroundPaper12_IndigenousCultAndIntellectPropertyAndCustomaryLaw.pdf>; Tobin (n 13); P Drahos, *Intellectual Property, Indigenous People and their Knowledge* (Cambridge University Press 2014); M Rimmer (ed), *Indigenous Intellectual Property. A Handbook of Contemporary Research* (Edward Elgar Publishing 2016).

[23] F du Bois (with C Himonga), 'Sources of Law: Customary and other sources' in F du Bois (ed), *Willies's Principles of South African Law* (9th edn, Juta 2007) 100, 101.

[24] Drahos (n 22).

[25] Okediji (n 2) 323; Kongolo 2013 (n 2) 106–108; T Kongolo, 'Historical evolution of copyright legislation in Africa' (2015) 5(2) The WIPO Journal 163, 163–65.

[26] A Adewopo, 'Developments in Intellectual Property In Africa' <http://nlipw.com/wp-content/uploads/2013/06/Adewopo-Dev.-of-IP-in-Africa-1.pdf> 7; Kongolo 2013 (n 2) 107–108.

[27] G Bauer & SD Taylor, *Politics in Southern Africa: State and Society in Transition* (Lynne Rienner Publishers 2005) 5.

[28] Angola, Botswana, Mozambique, Tanzania, Zambia, and Zimbabwe.

[29] R Loewenson, M Modisenyane & Mpearcey, 'African perspectives in global health diplomacy' (2014) 1(2) Journal of Health Diplomacy 1, 8; Bauer & Taylor (n 27) 5.

[30] LJ Farmer, 'Sovereignty and the African Union' (2012) 4(10) Journal of Pan- African Studies 93, 97.

[31] Loewenson, Modisenyane & Pearcey (n 29).

[32] Ibid., 7.

[33] For a discussion see RE Mshomba, *African Yearbook of International Law* (Martinus Nijhoff Publishers 2009); E Kessie & Y Apea, 'The participation of African Countries in the Multilateral Trading System' in AA Yusuf (ed), *African Yearbook of International Law: Africa and the International trading System* (Martinus Nijhoff Publishers 2004) 9.

[34] T Kongolo, *African Contributions in Shaping the Worldwide Intellectual Property System* (Routledge 2013); D Shabalala, *A Citizen's Guide to WIPO* (Center for International Environmental Law 2007) 32; SF Musungu, 'International Intellectual Property Standard- Setting: A review of the Role of Africa in Shaping the Rules for the Regulation of the Knowledge Economy' in Yusuf (n 33) 169, 181.

[35] RL Okediji, 'Africa and the Global Intellectual Property System: Beyond the Agency Model' in Yusuf (n 33) 207, 215.

[36] For a historical account of this development see K Gottschalk, 'The African Union and its sub-regional Structures' 2012 1(1)*Journal of African Union Studies* 9–39; R.N Kouassi 'The itinerary of the African integration process: an overview of the historical landmarks' 2007 1(2) *African Integration Review* 1–23.

[37] Kongolo (n 34) 83.

[38] Shelley (n 1); T McNamee, G Mills & JP Pham, 'Morocco and the African Union: Prospects for Re-engagement and Progress on the Western Sahara', *Brenthurst Foundation Discussion Paper 1/2013*.

[39] Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Republic of Congo, Cote d'Ivoire, Gabon, Malagasy, Mauritania, Niger, and Senegal.

[40] The Agreement relating to the creation of an African and Malagasy Office of Industrial Property.

[41] Kongolo (n 34) 82; ES Nwauche, 'An evaluation of the African Regional Intellectual Property Rights Systems' (2003) 6(1) The Journal of World Intellectual Property 101, 105; Adewopo (n 26) 7.

[42] Kongolo (n 34) 82; Nwauche (n 41) 105; Adewopo (n 26) 7.

[43] C Oguamanam, 'Breeding Apples for Oranges: Africa's Misplaced Priority Over Plant Breeders Rights' (2015) 18(5) The Journal of World Intellectual Property 165.
[44] Kongolo (n 34) 75; Adewopo (n 26); Nwauche (n 41) 123.
[45] MH Chirambo, *The African Regional Industrial Property Organization (ARIPO) as an Example of Regional Cooperation in the Field of Patents* (WIPO 2002) para 6. This legacy is honoured by article 5 of the Lusaka Agreement which mandates that ARIPO 'shall establish and maintain close and continuous working relationships' with these two organizations and the African Union.
[46] Chirambo (n 45) para 7; Adewopo (n 26) 2.
[47] Ibid.; Nwauche (n 41) 128.
[48] Kongolo (n 34) 75; Amendment to the Lusaka Agreement adopted by the Council of Ministers on 13 August 2004.
[49] Banjul Protocol on Marks within the Framework of the ARIPO (opened for signature 19 November 1993, entered into force 6 March 1997) as amended.
[50] Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore within the Framework of the ARIPO (opened for signature 9 August 2010, entered into force 11 May 2015).
[51] The Arusha Protocol for the Protection of New Varieties of Plants (opened for signature 6 July 2015).
[52] Harare Protocol, s 3(3).
[53] Ibid., s 3*ter* (4)–(5) & (7)–(8).
[54] Ibid., s 4(2)(a).
[55] Ibid., ss 3(6) & 4(2)(c).
[56] Banjul Protocol, s 1.1.
[57] Ibid., s 5.1.
[58] Ibid., ss 5.3 & 6.2.
[59] Harare Protocol, s 4*bis* (1) & (5)(a).
[60] Ibid., s 5.2.
[61] Ibid., s 14.1.
[62] Arusha PVP Protocol, art. 4(1)–(2).
[63] Draft PVP Protocol, art 17
[64] Ibid., art 18(1).
[65] Abuja Treaty Establishing the AEC (opened for signature 3 June 1991, entered into force 12 May 1994) art. 6. See also the Kinshasa Declaration, 1976; the Monrovia Declaration of Commitment of the Heads of State and Government, of the OAU on Guidelines and Measures for National and Collective Self-Reliance in Social and Economic Development for the Establishment of a New International Economic Order, 1979; the Lagos Plan of Action and the Final Act of Lagos 1980; and the Sirte Declaration, 1999. For discussion see HK Mutai, *Compliance with International Trade Obligations: The Common Market for Eastern and Southern Africa* (Kluwer Law International 2007); B Thompson, 'Economic integration efforts in Africa: A milestone – The Abuja Treaty' (1993) 5 African Journal of International and Comparative Law 743; R Mukisa & B Thompson, 'Prerequisites for economic integration in Africa: an analysis of the Abuja Treaty' (1995) 42(4) Africa Today 56.
[66] Protocol on Relations between the AU and the RECs (2007).
[67] AU, *Study for the Quantification of RECs: Rationalization Scenarios* (AU 2009) 34.
[68] B Kolbeck, 'Legal Analysis on the Relationship between the AU/AEC and RECs: Africa Lost in a 'Spaghetti Bowl' of Legal Relations?' (LLM Thesis, University of Cape Town 2014) 3; JT Ghathii, *African Regional Trade Agreements as Legal Regimes* (Cambridge University Press 2011) 362; AU Decision on the Moratorium on the Recognition of RECs DOC.EX.CL/278 (IX), AU Doc Assembly/AU/Dec 111–132 (VII).
[69] Its members are Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo.
[70] Its members are Angola, Burundi, Cameroon, Central Afrian Republic, Chad, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Rwanda, Sao Tome & Principe.
[71] Its members are Algeria, Libya, Mauritania, Morocco, and Tunisia.
[72] Its members are re Angola, Botswana, Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe.

[73] Its members are Burundi, Comoros, DR Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Seychelles, Swaziland, Madagascar, Malawi, Mauritius, Rwanda, Sudan, Uganda, Zambia, and Zimbabwe.
[74] Its members are Somalia, Djibouti, Eritrea, Sudan, Ethiopia, Kenya and Uganda.
[75] Benin, Burkina Faso, Central African Republic,Chad, Côte d'Ivoire, Djibouti, Egypt, Eritrea, The Gambia, Ghana, Guinea Bissau, Liberia, Libya, Mali, Morocco, Niger, Nigeria, Senegal, Sierra Leone, Somalia, Sudan, Togo, and Tunisia.
[76] Its members are Burundi, Kenya, Tanzania, Rwanda, and Uganda.
[77] See, eg, Treaty Establishing COMESA (opened for signature 5 November 1993, entered into force 8 December 1994) arts 104(1)(d) & 128(e); Treaty for Establishment of the EAC (opened for signature 30 November 1999, entered into force 7 July 2000) arts 5(3)(k) &43; Economic Community of West African States, Revised Treaty (1993) art. 27(10) (c).
[78] See, eg, Protocol on Trade of 1996, art. 24; SADC Protocol on Science, Technology and Innovation (STI) 2008, art. 2(m).
[79] SF Musungu, S Villanueva & R Blasetti, *Utilizing Trips Flexibilities For Public Health Protection Through South-South Regional Frameworks* (South Centre 2004) 55–56.
[80] K Aoki, 'Neocolonialism, Anticommons Property, and Biopiracy in the (Not-So-Brave) New World Order of International Intellectual Property Protection' (1998-1999) 6 Indiana Journal of Global Legal Studies 11; A Rahmatian, 'Neo-Colonial Aspects of Global Intellectual Property Protection' (2009) 12(1) The Journal of World Intellectual Property 40.
[81] CB Ncube, *Intellectual Property Policy, Law and Administration in Africa: Exploring Continental and Sub-regional Co-operation* (Routledge 2016) 14.
[82] I Mgbeoji, 'African patent offices not fit for purpose' in J de Beer, C Armstrong, C Oguamanam & T Schonwetter (eds), *Innovation & Intellectual Property Collaborative Dynamics in Africa* (University of Cape Town 2014) 234, 236.
[83] C Deere, 'The Politics of Intellectual Property Reform in Developing Countries: The Relevance of the World Intellectual Property Organization' in N Weinstock Netanel (ed), *The Development Agenda: Global Intellectual Property and Developing Countries* (Oxford University Press 2008) 111.
[84] C Deere, *The TRIPS Agreement and the Global Politics of Intellectual Property Reform in Developing Countries* (Oxford University Press 2008) 241–42.
[85] Nwauche (n 41) 110.
[86] WTO Decision of the Council for Trade-Related Aspects of Intellectual Property Rights Extension of the Transition Period under Article 66.1 for Least Developed Country Members (11 June 2013) IP/C/64. For an overview of the genesis and extent of the original extension period as well as the latest extension request made in 2012, see FM Abbott *Technical Note: The LDC TRIPS Transition Extension and the Question of Rollback, Policy Brief No 15* (Geneva: International Centre for Trade and Sustainable Development 2013).
[87] C Deere, *The Implementation Game: The TRIPS Agreement and the Global Politics of Intellectual Property Reform in Developing Countries* (Oxford University Press 2008).
[88] Draft Protocol for the Protection of New Varieties of Plants (Plant Breeders' Rights) in the Southern African Development Community Region (2012) <www.ip-watch.org/weblog/wp-content/uploads/2013/04/SADC-Draft-PVP-Protocol-April-2013.pdf>.
[89] International Convention for the Protection of New Varieties of Plants (UPOV) (opened for signature 2 December 1961, entered into force 10 August 1968).
[90] Draft SADC PVP Protocol, art. 6; Arusha Protocol, art. 6; Bangui Agreement, Annex X, art. 4. The Bangui Agreement adds a fifth requirement namely that the variety must be 'given a denomination devised in accordance with the provisions of Article 23'. Article 23 provides that these denominations are generic designations.
[91] Oguamanam (n 43).
[92] HM Haugen, 'Inappropriate Processes and Unbalanced Outcomes: Plant Variety Protection in Africa Goes Beyond UPOV 1991 Requirements' (2015) 18(5) The Journal of World Intellectual Property 196; B de Jonge, 'Plant variety protection in Sub-Saharan Africa: balancing commercial and smallholder farmers' interests' (2014) 7(3) Journal of Politics and Law 100, 101.
[93] De Jonge (n 92) 106–107.
[94] African Model Law for the Protection of the Rights of Local Communities, Farmers, Breeders and Regulation of Access to Biological Resources (African Model Law) adopted by Council of Ministers of the Organization of African Unity (OAU) in June 1998. For commentary see L Feris, 'Protecting

traditional knowledge in Africa: considering African approaches' (2004) 4(2) African Human Rights LJ 242.
[95] Oguamanam (n 43) 14.
[96] Ibid.
[97] Convention on Biological Diversity (opened for signature 5 June 1992, entered into force 29 December 1993) 1760 UNTS 79.
[98] Bonn Guideline on Access and Benefit-sharing of the Benefits Arising out of their Utilization (2002).
[99] Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization (opened for signature 2 February 2011, entered into force 12 October 2014) XXVII8.b UNTS.
[100] International Treaty on Plant Genetic Resources for Food and Agriculture (opened for signature 3 November 2001, entered into force 29 June 2004) 2400 UNTS 303.
[101] As of 10 June 2016 the following countries are party to the CBD: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Camerron, Central African Republic, Chad, Comoros, Congo, Cote d'Ivoire, Democratic Republic of Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Malawi, Mali, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, South Africa, South Sudan, Sri Lanka, Sudan, Swaziland, Togo, Uganda, Tanzania, Zambia, and Zimbabwe. See <www.cbd.int/information/parties.shtml>.
As of 10 June 2016 the following countries are party to the Nagoya Protocol: Benin, Botswana, Burkina Faso, Burundi, Comoros, Congo, Cote d'Ivoire, Democratic Republic of the Congo, Djibouti, Egypt, Ethiopia, Gabon, the Gambia, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Malawi, Mauritius Mozambique, Namibia, Niger, Rwanda, Senegal, Seychelles, South Africa, Sudan, Togo, and Uganda. See <www.cbd.int/abs/nagoya-protocol/signatories/>.
[102] Oguamanam (n 43) 15.
[103] Ibid.
[104] Ibid.
[105] NC Netnou-Nkoana, JB Jaftha, MA Dibiloane & J Eloff, 'Understanding of the farmers' privilege concept by smallholder farmers in South Africa' (2015) 111(1/2) South African Journal of Science 47, 47.
[106] Ibid.
[107] Ibid.
[108] Ibid.; Oguamanam (n 43) 15–16.
[109] Oguamanam (n 43).
[110] Aoki (n 80) 46.
[111] Defined as 'any knowledge originating from a local or traditional community that is the result of intellectual activity and insight in a traditional context, including know-how, skills, innovations, practices and learning, where the knowledge is embodied in the traditional lifestyle of a community, or contained in the codified knowledge systems passed on from one generation to another. The term shall not be limited to a specific technical field, and may include agricultural, environmental or medical knowledge, and knowledge associated with genetic resources'.
[112] Defined as 'are any forms, whether tangible or intangible, in which traditional culture and knowledge are expressed, appear or are manifested, and comprise the following forms of expressions or combinations thereof:
i. verbal expressions, such as but not limited to stories, epics, legends, poetry, riddles and other narratives; words, signs, names, and symbols;
ii. musical expressions, such as but not limited to songs and instrumental music;
iii. expressions by movement, such as but not limited to dances, plays, rituals and other performances; whether or not reduced to a material form; and
iv. tangible expressions, such as productions of art, in particular, drawings, designs, paintings (including body-painting), carvings, sculptures, pottery, terracotta, mosaic, woodwork, metal ware, jewelry, basketry, needlework, textiles, glassware, carpets, costumes; handicrafts; musical instruments; and architectural forms'.
[113] Ss 4, 6, 18, 20, 21. For commentary see LY Ngombe, 'The Protection of Folklore in the Swakopmund Protocol Adopted by the ARIPO (African Regional Intellectual Property Organization)' (2011) 14(5) The Journal of World Intellectual Property 403, 404.
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