



UNIVERSITY OF IBADAN LIBRARY

LAW AND POLICY THOUGHTS IN NIGERIA



Edited by:
Adeniyi Olatunbosun, PhD

Law and Policy Thoughts in Nigeria

ISBN: 978-978-974-900-3

Copyright © Faculty of Law, University of Ibadan, Nigeria

Published by

Faculty of Law
University of Ibadan
Ibadan, Nigeria

Printed by

HIRAS PUB LTD
0803 349 5663

Designed by:

DavidolladWox
wox.davidollad.com
Email: wox@davidollad.com
Phone: +234 703 8406 891

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior permission of the copyright owner.

CONTENTS

Dedication	
Preface	
Acknowledgements	
Table of Content	
List of Contributors	
Insight into Labour Law and Industrial Relations in Nigeria <i>Professor A.I. Olatunbosun</i>	1-26
Redress Options Open to Consumers of Products and Services in Nigeria <i>Professor Felicia Monye</i>	27-56
Corporate Finance and Management Issues in Nigeria Company Law: Need for Reforms <i>Dr. Kunle Aina</i>	57-92
Copyright Issues in Indigenous Knowledge <i>Jadesola Lokulo-Sodipe</i>	93-122
Legal Perspective of Ascertainment and Computation of Companies Income Tax in Nigeria <i>Peter Kayode Oniemola</i>	123-146
Juvenile Justice System in Nigeria <i>Oluyemisi Adefunke Bamgbose</i>	147-202
Nigerian Police Force and the Criminal Justice Administration <i>K.O. Olaniyan</i>	203-225
Outline of the Historical Development of Laws for Environmental Protection in Nigeria <i>Dr. Ruth B. Akibola</i>	227-255

Actualising Right to Development in Nigeria Muyiwa Adigun	257-300
Return of Cultural Property to Countries of Origin and the Emerging Issues Afolasade A. Adewumi	301-323
Classification of International Institutions A.I. Olatunbosun	325-346
Principles and practice of International Commercial Arbitration S. Akinlolu Fagemi	347-379
Conceptual Framework of Civil Litigation Process in Nigeria S. Akinlolu Fagemi	381-418
Redefinition and Changing Dynamics of Marriage in Nigeria Omolade Olomola	419-447
Sources of Nigerian Health Law Folake Morenike Tafita	449-486

CHAPTER FOUR

COPYRIGHT ISSUES IN INDIGENOUS KNOWLEDGE

Jadesola Lokulo-Sodipe *

Introduction

Intellectual property (IP), refer to the legal rights which result from intellectual activities in the industrial, scientific, literary and artistic fields. Put in another way, IP are creations of the mind. Intellectual property law aims at safeguarding creators and other producers of intellectual goods and services by granting them certain time-limited rights to control the use made of those productions. Those rights do not apply to the physical object in which the creation may be embodied but instead to the intellectual creation, thereby making it a right which subsists in an intangible property.

According to the World Intellectual Property Office Convention,

*intellectual property shall include rights relating to, literary, artistic and scientific works, performances of performing artists, phonograms and broadcasts, inventions in all fields of human endeavor, scientific discoveries, industrial designs, trademarks, service marks and commercial names and designations, protection against unfair competition, and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.*¹

IP rights can be categorized into two broad heads, namely, Industrial Property Right, which includes patents for inventions, trademarks, industrial designs and geographical indications, while, Copyright in

* Senior Lecturer, Department of Commercial and Industrial Law, University of Ibadan, Ibadan.

¹ Article 2 (viii) WIPO Convention 1967

its part, covers literary works (such as novels, poems and plays), films, music, artistic works (e.g., drawings, paintings, photographs and sculptures) and architectural design². With respect to indigenous knowledge, copyright is applicable to folklore. Therefore this chapter will focus on how copyright in folklore can be enforced.

Concept of Copyright

Copyright has been described as the exclusive right granted by law to the author of a work to disclose it as his own creation, to reproduce it and distribute or disseminate it to the public in any manner or by any means, and also to authorise others to use the work in specified ways³.

The Copyright Act⁴ defines "copyright" to mean, copyright under the Act. Consequently, copyright protection in Nigeria can only derive from what the Act says and no copyright claims exist outside the Act⁵. This is grossly insufficient and it has been noted that it "does not enable laypersons to really understand what copyright means"⁶. Section 1 of the Act, however lists works that are eligible for copyright. These include literary works, musical works, artistic works, cinematograph films, sound recordings, broadcasts.

Copyright in relation to eligible work is the exclusive right to control, to do or authorise the doing of any of the acts restricted to the copyright owner⁷.

The United Kingdom Copyright, Designs and Patent Act⁸, gives a clearer definition. It defines copyright is defined as:

a property right which subsists in accordance with their part in the following descriptions of work –

² See S.1 Copyright Act, 2004

³ WTO definition.

⁴ Copyright Act 2004 Section 51 (1).

⁵ *ibid*

⁶ Uge R O. 2000. Originality and Fixation as Basis for Copyright in Music *University of Maiduguri Law Journal-U.Maid.L.J.*, vol 5, at 23-24.

⁷ See I. J Adenuga V Ilesanmi Press Sons (Nig) Ltd (1991) 5NWLR (PT 189) 82.

⁸ Section 1(1) Copyright, Designs and Patents Act, 1988.

- a. *original literary, dramatic, musical or artistic works,*
- b. *sound recordings, films or broadcasts, and*
- c. *the typographical arrangement of published editions.*

Copyright has also been described as an area of the law that provides protection to “original works of authorship” including paintings, sculpture, music, novels, poems, plays, architecture, dance, instruction manuals, technical documentation, and software, among other items⁹. Legal protection, therefore, it flows from the fact that an author independently creates the work and that his or her “expression” of an original idea. It is pertinent to note that copyright covers only the expression of ideas and concepts, and not to the ideas or concepts themselves¹⁰.

According to Black’s Law Dictionary, copyright is the right to copy. It is a property right in an original work of authorship (including literary, musical, dramatic, choreographic, pictorial, graphic, sculptural, and architectural works, motion pictures and other audiovisual works; and sound recordings) fixed in any tangible medium of expression, giving the holder the exclusive right to reproduce, adopt, distribute, perform, and display the work¹¹.

Copyright is an intangible but exclusive legal right vested in the creator of a work, to copy, reproduce, publish, sell or transfer his creative works. It gives the author a legal right to have his works preserved in its original form and to object to any reproduction, alteration or mutilation¹². The implication of this is that, copyrighted works are protected against unauthorized use. This right also confers on the creator of the work, the right to share in any earnings from the use of the public as well as the right to claim

⁹ Idris K. 2003. Intellectual Property: A Tool Economic Growth. WIPO Publication No.888.p.23. Retrieved from www.wipo.int accessed on 12th August, 2016.

¹⁰ Babafemi, F.O. 2007. Intellectual Property The Law and Practice of Copyright, Trade Marks, Patents and Industrial Designs in Nigeria 1st Edition. Ibadan. Justinian Books Ltd. P. 7 note 1.

¹¹ Bryan A. 2004. Black’s Law Dictionary. Thomson West, USA. p.361.

¹² Yerima, T F. 2002. Copyright Protection Of Computer Programmes and the Question of Idea/Expression Dichotomy. University of Ibadan Journal of Private and Business Law. UIJPL, VOL.3. P.146.

authorship and respect for the essential character or integrity of the protected works.

Copyright is, however, not a monopoly right in the sense that it does not prevent others from creating works that are identical, provided the identical work is conceived of independently. Furthermore, it is a negative right to prevent the appropriation of the work of one man by another¹³. The essence of copyright has been noted to be the advancement of knowledge through the encouragement of production and distribution of new works¹⁴. The exclusive right granted to authors, to reproduce and distribute their works, is the incentive. Another function of copyright is to prevent other people from enjoying the fruit of the creator's labour¹⁵.

It is worthy of note that in Nigeria, there are no formalities for copyright to subsist on a work.

Subsistence of Copyright

In order for a work to be eligible for copyright protection, it must be original and fixed in a medium of expression¹⁶. Originality in this instance refers to the fact that it is not copied. A work is original, if the author expended his own skill, judgment, effort and labour to create the work. In *University of London Press Ltd. vs. University Tutorial Press Ltd.*¹⁷, the court noted,

the word, 'original' does not in this connection mean that the work must be the expression of original or inventive thought. Copyright Acts are not concerned with the originality of ideas but with the expression of thought, and in the case of 'literary work', with the expression of the thought in print or writing. The originality which is required relates to the expression of the thought, but the Act does not require that the expression must be in an

¹³ *Coreli V Gray* (1913) 29 TLR 570,571; Halburys: Statutes of England. 1962. 3rd Ed, Butterworths & Co. London, Vol 7. p 130.

¹⁴ *Gero vs. Seven -Up*. 535 F.Supp.212

¹⁵ *Oladipo Yemitan .v. Gbenga Odusanya* (1980) FHCRC 180.

¹⁶ WIPO Intellectual Property Handbook, 2nd Edition, Geneva, WIPO. P.42.

¹⁷ (1916) Ch. 610; see also, *ICIC (Directory Publications) Ltd. vs. Ekko Delta (Nig) Ltd & Anor* (1977) FRCR 346.

original or novel form but that the work must not have been copied from another work, that is, it should originate from the author.

Fixation in its part means that the work must be in a tangible form. Consequently, the work must be capable of being perceived, communicated, and reproduced directly or with the aid of any device. This is necessary due to the fact that, in order to prove the existence of a work and/or its infringement, both works must be capable of being compared.

In addition, for copyright to subsist in a work in Nigeria, the work must have connection with Nigeria, by virtue of the fact that the author is a national or domiciled in Nigeria as provided for under Section 2(1) of the Nigerian Copyright Act, which provides as follows;

Copyright shall be conferred by this section on every work eligible for copyright of which the author or, in the case of a work of joint authorship, any of the authors is at the time when the work is made, a qualified person, that is to say-

- (i) *an individual who is a citizen of, or is domiciled in Nigeria; or*
- (ii) *a body corporate incorporated by or under the laws of Nigeria.*

Where the author is neither a national of or domiciled in Nigeria, copyright will subsist on the work if, the work is a literary, musical or artistic work or a cinematograph film, which is first published in Nigeria; or a sound recording, which is made in Nigeria¹⁸, and which has not been the subject of copyright conferred by section 2 of this Act.

In Nigeria, works eligible for copyright protection are provided for by the Act¹⁹.

¹⁸ Section 3 (1) Copyright Act cap C28, LFN, 2004.

¹⁹ Section 1(1), Copyright Act, Cap C28, LFN 2004.

Subject to this section, the following shall be eligible for copyright –

- a. Literary works;
- b. Musical works;
- c. Artistic works;
- d. Cinematograph films;
- e. Sound recording; and
- f. Broadcasts.

By virtue of Section 51 of the Act, “Literary work” includes, irrespective of literary quality, any of the following novels, stories and poetical works, plays, stage directions, film scenarios and broadcasting scripts, choreographic works, computer programmes, text-books, treaties, histories, biographies, essays and articles, encyclopaedias, dictionaries, directories and anthologies, letters, reports and memoranda, lectures, address and sermons, law reports, excluding decisions of courts, written tables or compilations.

Musical work “means any musical composition, irrespective of musical quality and includes works composed for musical accompaniment²⁰.” According to World Intellectual Property Office (WIPO), the musical work maybe serious or light, it could be songs, choruses, operas, musicals, or operettas, whether composed for one instrument (solos), a few instruments (sonatas, chamber music, etc.), or many (bands, orchestras).²¹

The Act defines ‘artistic work’ to include “irrespective of artistic quality, any of the following works or works similar thereto –

- a. paintings, drawings, etchings, lithographs, woodcuts, engravings and prints;
- b. maps, plans and diagrams;
- c. works of sculpture;

²⁰Ibid.

²¹Intellectual Property Hand Booksupranote 21 at 42.

- d. photographs not comprised in a cinematograph film;
- e. works of architecture in the form of building models; and
- f. works of artistic craftsmanship and also (subject to subsection (3) of Section 1 of this Act)²² pictorial woven tissues and articles of applied handicraft and industrial art.²³

Cinematograph film on its part includes the first fixation of sequence of visual images capable of being shown as a moving picture and being the subject of reproduction and includes the recording of a sound track associated with the cinematograph film²⁴.

Sound recording is the fixation of a sequence of sound capable of being perceived aurally and of being reproduced but does not include a sound track associated with a cinematograph film²⁵.

Broadcast refers to sound or television broadcast by wireless telegraph or wire or both or by satellite or cable programme and includes a re-broadcast²⁶.

Rights Conferred By Copyright

While the concept of a "right" generally connotes the legal power or liberty to do something, on the contrary, the right conferred by copyright is the power to "stop others from doing something,"²⁷. Consequently, it is a negative right, that is, one that is to prevent the exploitation of a work by unauthorized persons. This is in line with the essence of copyright, which is to enable the owner of the work to reap the fruits of his/her labour.

²² S.1(3) provides that an artistic work shall not be eligible for copyright, if at the time when the work is made, it is intended by the author to be used as a model or pattern to be multiplied by any industrial process.

²³ Section 51. Copyright Act, Cap C28, LFN 2004.

²⁴ See Section 51 Copyright Act, Cap C28 LFN 2004.

²⁵ Section 51.

²⁶ Section 51.

²⁷ *Adeniji v. 3C Promotions and Consultancy Services Ltd.* (Suit No. FHC/L/26/89), at 10.

Rights conferred by copyright can be classified into two (2), namely, moral and economic rights. Economic rights include reproduction right, distribution rights, rights to prepare derivative works and public performance/ display rights.

By virtue of Sections 6,7 and 8 of the Copyright Act ²⁸, subject to appropriate exceptions in the 2nd, 3rd and 4th Schedule of the Act²⁹, Copyright confers exclusive right to do and authorize the doing in Nigeria of the acts specified under each category of works:

1. literary works³⁰
 - (a) reproduce the works in any material form;
 - (b) publish the work;
 - (c) perform the work in public;
 - (d) reduce, reproduce, perform or publish any translation of the work;
 - (e) make a cinematograph film or a record in respect of the work;
 - (f) distribute copies of the work to the public by a loudspeaker or any other similar device;
 - (g) broadcast or communicate the work to the public by a loud speaker or any other similar device;

²⁸ Cap 28 LFN, 2004.

²⁹ Ibid

³⁰ Ibid, section 6(1)a

- (h) make any adaption of the work;
- (i) o In relation to a translation or an adaption of the work any of the acts specified in (a) and (b) above.

2. artistic works³¹

- (a) reproduce the work in any material form;
- (b) publish the work;
- (c) include the work in any cinematograph film;
- (d) make any adaptation of the work;
- (e) o in relation to a adaptation of the work any of the acts specified in (a) to (c) above.

3. cinematograph films:³²

- (a) make a copy of the film;
- (b) cause the film, in so far as it consist of visual images to be seen in public and, in so far as it consists of sound to be heard in public;
- (c) make any record embodying the recording in any part

³¹ Ibid, section 6(1)b

³² Ibid, section 6 (1)c

of the soundtrack associated with the film by utilizing such sound tracks

- (d) distribute to the public, for commercial purposes, copies of the works, by way of rental, lease, hire, loan or similar arrangement.

4. Sound recordings³³

- (a) the direct or indirect reproduction, broadcasting or communicating to the public of the whole or a substantial part of the recording either in its original form or in any form recognizably derived from the original.
- (b) the distribution to the public for commercial purposes of copies of the work by way of rental, lease, hire, loan or similar arrangements.

5. Broadcasts³⁴

- (a) the recording and rebroadcasting of the whole or a substantial part of the broadcast;
- (b) the communication to the public of the whole or a substantial part of a television broadcast, either in its original form or in any form recognizably derived from the original; and
- (c) the distribution to the public for commercial

³³ Ibid section 7

³⁴ Ibid section 8

purposes, of copies of the work, by way of rental, lease, hire, loan or similar arrangement;

(d)

in the case of a television broadcast, the right to control the taking of still photographs from the broadcast.

Consequently, any person who, without the licence or authorization of the copyright owner, does or cause any other person to do any of the acts enumerated above will be liable for infringement.

Moral Rights allow the author to preserve the personal link between him and the work. These rights include, the right to claim authorship of the work, the right to have the name of the author mentioned when work is reproduced, the right to object to any distortion or modification of the work which would be prejudicial to the author's honour or reputation. Moral rights are however non-transferable and are perpetual^{35,36}.

The next part of the work deals with indigenous knowledge, what it is, who are the indigenous people, what constitutes indigenous intellectual property and the challenges to protecting the intellectual property rights of indigenous people.

Indigenous Knowledge

According to Flavier, et.al, Indigenous Knowledge (IK), also known as traditional knowledge (TK), is the "information base for a society, which facilitates communication and decision-making. Indigenous Knowledge (IK) has also been defined as a systematic body of knowledge acquired by local people through the accumulation of experiences, informal experiments and intimate understanding of the environment in a given culture.³⁷ Indigenous

³⁵Section 12 (1) & (2) Copyright Act, Cap C28, LFN 2004.

³⁶ For the purposes of section 12, the term, "author" includes his heirs and successors in title. See S.12(3).

³⁷Rajasekan .B and Aren M. 1992. A Framework for Incorporating Indigenous Knowledge Systems into Agricultural Extension Organisations into

information systems are dynamic, and are continually influenced by internal creativity and experimentation as well as by contact with external systems³⁸. The knowledge is “tradition based.” It is created, preserved and disseminated in a manner that reflects the traditions of the communities. IK is handed down from one generation to another, either orally or by imitation. It reflects a community’s cultural and social identity and consists of characteristic elements of a community’s heritage. It is made by ‘authors unknown’ and/or by communities and/or by individuals communally recognized as having the right responsibility or permission to do so. It is often not created for commercial purposes, but as vehicles for religious and cultural expression, and is constantly evolving, developing and being recreated within the community. It is pertinent to note that IK is embedded in community practices, institutions, relationships and rituals.³⁹

Indigenous knowledge can be classified into two, namely, “traditional cultural expression” (TCE)/“folklore” and “genetic resources”. TCE is the form in which traditional culture is expressed and may be tangible or intangible or both. It consists of traditional customs, tales, sayings, or art forms preserved among a people. Genetic resources on its part, consist of genetic material, which include any material of plant, animal, microbial or other origin containing functional units of heredity, of actual or potential value. As noted earlier, the focus of this chapter is folklore, being that which is relevant to copyright.

Sustainable Agricultural Development in India. Being Paper presented at the 9th Annual Conference of the Association for International Agricultural and Extension Education, Arlington, Virginia, USA. Referred to, in Msuya J. 2007. Challenges and Opportunities in the Protection and Preservation of Indigenous Knowledge in Africa. *International Review of Information Ethics*. Vol.7. p.3.

³⁸Flavier, et al. 1995. The Regional Program for the Promotion of Indigenous Knowledge in Asia. P.479-487, referred to in Warren D M et al (eds) *The Cultural Dimension of Development. Indigenous Knowledge Systems*. London. Intermediate Technology Publications.

³⁹Msuya J. 2007. Challenges and Opportunities in the Protection and Preservation of Indigenous Knowledge in Africa. *International Review of Information Ethics*. Vol.7. p.3.

Indigenous knowledge is knowledge belonging to indigenous people. One may ask who the indigenous people are and what their rights are.

Indigenous Peoples and Their Rights

Considering the diversity of indigenous peoples, the United Nations (UN)-system body, has developed a modern understanding of this term based on the following⁴⁰:

- *Self-identification as indigenous peoples at the individual level and accepted by the community as their member.*
- *Historical continuity with pre-colonial and/or pre-settler societies*
- *Strong link to territories and surrounding natural resources*
- *Distinct social, economic or political systems*
- *Distinct language, culture and beliefs*
- *Form non-dominant groups of society*
- *Resolve to maintain and reproduce their ancestral environments and systems as distinctive peoples and communities.*

The term indigenous is a generic term. These people have also been referred to as “tribes”, “aboriginals”, or “ethnic” and are basically hunter-gatherers, nomads, peasants or hill-people. Indigenous peoples are the holders of unique languages, knowledge systems and beliefs and possess invaluable knowledge of practices for the sustainable management of natural resources. They have a special relation to and use of their traditional land. Their ancestral land has a fundamental importance for their collective physical and cultural survival as peoples. Indigenous peoples hold their own diverse

⁴⁰ “Who are Indigenous People”? UN Permanent Forum on Indigenous Issues. *Indigenous People, Indigenous Voices Factsheet*. Retrieved from www.un.org on 16th September, 2015.P.1.

concepts of development, based on their traditional values, visions, needs and priorities⁴¹.

According to the International Work Group for Indigenous Affairs (IWGIA), there are over 370 million indigenous people in Africa, the Americas, Asia, Europe and the Pacific, who are usually marginalised and victimised⁴².

Indigenous peoples' rights, like all other fundamental human rights, are founded in human rights enshrined in the United Nations Charter and various international human rights treaties and instruments. They are also contained, as fundamental rights, in the constitutions and other domestic laws of various nation States.

In recognition of the indigenous peoples' rights, the UN in 2007 adopted the UN Declaration on the Rights of the Indigenous Peoples. The UN Declaration defines the minimum standards necessary for the survival, dignity and well-being of indigenous peoples of the world.⁴³ The document makes provision for a wide range of basic human rights and fundamental freedoms of indigenous peoples. These include the right to unrestricted self-determination, an inalienable collective right to the ownership, use and control of lands, territories and other natural resources, their rights in terms of maintaining and developing their own political, religious, cultural and educational institutions along with the protection of their cultural and intellectual property.

Article 31 recognised the Intellectual Property rights of indigenous people. It provides thus⁴⁴,

⁴¹Ibid, p.2.

⁴²The UN Declaration on the Rights of Indigenous Peoples. A publication of the International Work Group for Indigenous Affairs. Retrieved from www.iwgia.org accessed on 15th September, 2015.

⁴³Implementing the UN Declaration on the Rights of Indigenous Peoples. Handbook for Parliamentarians No. 23 of 2014. p.3. Retrieved from www.ipu.org accessed on 12th April, 2016.

⁴⁴Art 31 United Nations Declaration on the Rights of Indigenous Peoples. (2008). United Nation. Retrieved from, www.un.org on 14th April, 2016.

1. *Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions.*
2. *In conjunction with indigenous peoples, States shall take effective measures to recognize and protect the exercise of these rights.*

PROTECTION OF FOLKLORE UNDER THE INTELLECTUAL PROPERTY SYSTEM

Folklore has been defined as a living phenomenon, which evolves overtime. A basic element of our culture which reflects the human spirit thus a window of a community's cultural and social identity, its standard and values transmitted orally, by imitation and other means⁴⁵. It is a basic element of our culture which reflects the human spirit, it is therefore a window of a community's cultural and social identity, its standard and values transmitted orally, by imitation and other means.⁴⁶ By its very nature, it will be difficult to

⁴⁵KanwalPuri, quoted in Berryman, C A 'Towards More Universal Protection of Intangible Cultural Property' 1994 Journal of Intellectual Property Law. 293.

⁴⁶KanwalPuri, quoted in Berryman, C A. 1994. Towards More Universal Protection of Intangible Cultural Property. Journal of Intellectual Property Law. 293.

arrive at one single all-embracing definition, which will enjoy universal acceptance. However, it is the identity of every ethnic group. It is the root of a country's cultural tradition or national civilization. For all mankind, it is the rich and varied but non-regenerative resources, as well as the incomparably valuable heritage of human society.⁴⁷

WIPO/UNESCO defines folklore (or traditional and popular culture) as the totality of traditional-based creation of a cultural community, expressed by a group of individual and recognized as reflecting its cultural and social identity; its standards and values are transmitted orally, by imitation or by other means. Its forms are, among others, language, Literature, music, dance, games, mythology, rituals, customs, handicrafts, architecture and other arts. It has been observed that the WIPO/UNESCO definition unnecessarily limited folklore to verbal expression, musical expression, expression by action and tangible expression leaving out important items like folk medicine, agriculture, techniques of manufacture, designs, and so on.⁴⁸

Folklore has been widely exploited. This is evident in the various designs in cloths, rugs, work of art, carvings which have their roots in the folklore of one community or the other. In the same vein, many musical works and film works have their origin in folklore.⁴⁹ Nearly all these reproductions are done without permission. Unfortunately, these unauthorized reproduction not only denies indigenous community economic benefit but offend their religious believes.⁵⁰ Art, has been noted, to be central to the practice of

⁴⁷Terlun A Yagba. 1999. 'Protection of Folklore in Nigeria: Issues of Administration and Enforcement'. Being an unpublished Paper delivered at the Nigerian Copyright Forum. Port-Harcourt Nigeria. Referred to in Adewopo A. 2006. Protection and Administration of Folklore in Nigeria. Script-ed. Vol 3 Issue 1. P.2.

⁴⁸Gopalakrishnan N S. 2002. Protection of Traditional knowledge: the Need for a Sui Generis Law in India. *The Journal of World Intellectual Property* Vol. 5 No 5.

⁴⁹An example is the "Mbube Song". In its original Indigenous version it is traditionally sung with a Zulu refrain. It was incorporated into the theme song of Disney's "Lion King".

⁵⁰Adewopo A. 2006. Protection and Administration of Folklore in Nigeria. Script-ed. Vol 3 Issue 1.p.3.

religion in most indigenous communities. Most spiritual rituals involve visual displays, dance, and/or music and song.⁵¹

Among the indigenous communities, art serves multiple purposes. Firstly, knowledge is passed well as the basis for spiritual teaching. Secondly, it is central to the practice of religion in most indigenous communities.⁵² Spiritual rituals, more often than not, involve visual displays, dance, and/or music and song. Consequently, there is, within the communities customary laws controlling production, use and access. These characteristics of indigenous art, makes its protection germane. This is because inappropriate use violates the principles governing its use and creation. For instance, if a non-designated person reproduces the work, it may be done inaccurately, or the work viewed by an uninitiated, thereby revealing sacred or secret information and trivialising the significance of the art.

Unlike the western system of dissemination of knowledge, through publication, IK systems exist in the form of songs, proverbs, stories, folklore, community laws, common or collective property and inventions, practices and rituals. The knowledge is transmitted through specific cultural mechanisms and often through designated community knowledge holders, such as the elders.⁵³

The rationale for protecting IK is based on fundamental justice and the ability to protect, preserve and control one's cultural heritage.⁵⁴ Secondly, is the right to receive a fair return on what is developed by the indigenous people. It is worthy of note that IK has lucrative applications. Consequently, it is important to ensure the fair use of IK considering that such knowledge has much to offer the

⁵¹ Farley C H. 1997. 'Protecting Folklore of Indigenous People: Is Intellectual Property the Answer?' *Connecticut Law Review* Vol. 30. No. 1 page 9.

⁵² Martin M. 1995. What is in a Painting? The Cultural Harm of Unauthorised Reproduction: *Milpurruru and Ors .v. Indofum Properties Ltd and Ors. 17 Sydney Law Review.* 591 at 593.

⁵³ Simone T. 2004. Indigenous Traditional Knowledge and IP Rights. A Publication of the Political and Social Affairs Division. Library of Parliament, Canada. (PRB 03-386). p.1.

⁵⁴ Resolution No. 27/2003 of the Assembly of First Nations. Retrieved from <http://www.afn.ca/resolutions/2003.htm> accessed on 27th June 2016.

society.⁵⁵The opponents on the other hand, have argued that according IP protection to IK would destroy the social basis for generating and managing the knowledge. Protection, they argue, would privatize IK. This may deprive future generation's access to it.⁵⁶

Western intellectual property regimes, by their nature, are not suitable for the protection of folklore because folklore will not meet its prescribed prerequisites. IP regimes have been based on notions of individual property ownership. This is however, not only alien to IK, but can be detrimental to traditional communities.⁵⁷Protection in intellectual property rights is usually for a period of time while folklore is timeless. Fixation is also required which is not available in folklore works. Furthermore, ownership of intellectual property is to a given author while folklore generally belongs to the community. The WIPO Fact Finding Mission on Traditional Knowledge conducted in 1998 and 1999 conceded that Intellectual Property Rights are unsuitable for TK protection because they protect only the right of individuals and do not recognize collective rights. The collectivity of TK certainly poses challenges for the IP system⁵⁸.

Difficulties in applying copyright to the protections of folklore

It appears that copyright law may not be the right, or certainly the only, means for protecting expressions of folklore. This is because, whereas an expression of folklore is the result of an impersonal, continuous and slow process of creative activity exercised in a given

⁵⁵There is evidence to show that IK is being used for policy on food security, human and animal health, education, natural resources management and other community-based activities. See Best Practices on IK. A joint publication of the Management of Social Transformation Programme.[MOST] and the Centre for International Research and Advisory Network. Available on www.unesco.org/most. accessed on

⁵⁶Nabhan et al. 1996. Valuing Local Knowledge: Indigenous Peoples and IP Rights. Brush and Stabinsky. (Eds). Island Press. Covelo. p. 193.

⁵⁷Sackey E K A and Kasilo O M J. IP Approach to the Protection of Traditional Knowledge in the African Region .African Health Monitor. Special Issue No. 14. p.90.

⁵⁸Wendland W B. 2002. 'Intellectual Property, Traditional Knowledge and Folklore: WIPO's Exploratory Program' *International Review of Industrial Property and Copyright Law* Vol. 33, p. 606.

community by consecutive imitation, works protected by copyright must, traditionally bear a mark of individual originality. Traditional creations of a community, such as the so-called folk tales, folk music, folk dances, folk designs or patterns, may often not fit into the notion of literary and artistic works. Copyright is author-centric and, in the case of folklore, an author - at least in the way in which the notion of "author" is conceived in the field of copyright - is absent.

PROTECTION OF FOLKLORE UNDER THE NIGERIAN COPYRIGHT ACT

. The Nigeria Copyright Act in Section 31 protects expression of folklore against reproduction, communication to the public by performance, broadcasting, distribution by cable or other means, adaptations, translations and other transformation when such expressions are made either for commercial purpose or outside their traditional or customary context.

These rights were however, subjected to certain exception which include, the doing of any of the acts by way of fair dealing for private and domestic use, subject to the condition that, if the use is public it shall be accompanied by an acknowledgement of the title of the work and its source; the utilisation for purpose of education; utilisation by way of illustration in an original work of an author provided that the extent of such utilization is compatible with fair practice; the borrowing of expressions of folklore for creating an original work or an author provided that the extent of such utilization is compatible with fair practice and the incidental utilization of expression of folklore.

The section, further provides that, in all printed publications and in connection with any identifiable expression of folklore, its source shall be indicated in an appropriate manner, and in conformity with fair practice, by mentioning the community or place from where the expression utilised has been derived. The right to authorise acts referred to in the law is vested in the Nigerian Copyright Commission. Section 31 (5) defines folklore as a group - oriented and traditional-based creation of groups or individuals reflecting the expectation of the community as an adequate expression of its cultural and social identity, its standards and

values as transmitted orally by imitation or by other means including folklore, folk poetry, folk dance, folk plays and productions of folk arts in particular drawings, paintings, carvings, sculptures, poetry, terracotta, mosaic, woodwork, metal ware, jewelry, handicrafts, costumes and indigenous textile.

Section 32 provides that any person, who without the consent of Nigerian Copyright Commission uses an expression of folklore in a manner not permitted by Section 31 shall be in breach of statutory duty and liable to the Commission in damages, injunction and any other remedies as the court may deem fit to award in the circumstances. By the provision of section 33 (a), the violation of expression of folklore, gives rise to criminal liability. It stated that any person who does any of the acts set out in Section 31 without the consent or authorization of the Commission or willfully misrepresents the source of an expression of folklore or distort the expression in a manner prejudicial to the honour, dignity or cultural interest of the community in which it originate commits an offence. A court before which the said offence is tried may order that the infringing or offending article be delivered to the Commission.

The administration of folklore in Nigeria raises a number of questions. Firstly, determining the community that owns a given expression of folklore is often difficult. Culture and consequently folklore of certain communities could be very similar. It is not uncommon to observe similar songs, craft, or painting in a given area covering a collection of communities. In the northwest and southwest part of Nigeria, similar cultures exist amongst communities stretching even as far as the neighbouring countries. It will therefore be difficult to single out the particular community from where a folklore work emanates. Even where ownership is shared between certain communities, delimiting such communities will still be difficult. In some occasions the meaning and usage of a particular folklore will differ in these communities. This makes it even more difficult to protect the moral right.

Secondly, the Nigerian Copyright Commission has the exclusive right to grant authorization for usage of expressions of folklore. This will include some expressions that have spiritual connotation in the community of origin. This difficulty is coupled by the fact that the

believes relating to a particular expression in a given area may not be the same as that applicable to a similar work in another community. Arriving at the right decisions may therefore be challenging at times.

Ownership and exercise of right of ownership remain unsettled. While the Nigerian Copyright Commission grants licenses for usage of an expression of folklore, it is deemed to hold that right in trust for the several communities. There is a presumption that the decisions of the Commission will be taken in consultation with the community concerned. However, where this power is not administered to the satisfaction of a given community, can the community challenge or compel the Commission to change its decision? The Act provides that the Commission is entitled to legal remedy for wrongful usage of folklore, however, given that the Commission holds the right on trust, it would be accountable to the community for remitting monetary compensation.

Finally it is noted that the right given to the Commission to grant licenses for exploitation of folklore does not authorise her to charge fees for such license. Consequently, the communities may not benefit thereby. This may explain why the administration of the folklore rights is vested in the Commission and not in the communities and can be seen as a kind of public service. Though this argument appears sound on the surface but it is hardly conceivable that the rationale given is tenable given that other reasons could emerge such as the fact that WIPOs' model for national laws allows for such.

HOW TO PROTECT?

Five key areas of concern have been identified in the bid to protect IK.⁵⁹ These are,

- Unauthorized copying of works;
- Infringement of copyright of individual artists;
- Appropriation of themes and images;

⁵⁹WIPO Round-table on IP and TK.WIPO/IPTK/RT393.p.4. Retrieved from www.wipo.org on 26/6/2016.

- Cultural appropriation of indigenous themes, images and styles by non-indigenous artists;
- Expropriation of IK without compensation.

Given the above, at the international level, attempts were made to protect folklore, using copyright. A major one was the 1967 Stockholm Diplomatic Conference for revision of the Berne Convention, which resulted in the promulgation of Article 15(4) of the Stockholm (1967) and Paris (1971) Acts of the Berne Convention. These legislative instruments provides thus,

(a) In the case of unpublished works where the identity of the author is unknown, but where there is every ground to presume that he is a national of a country of the Union, it shall be a matter for legislation in that country to designate the competent authority which shall represent the author and shall be entitled to protect and enforce his rights in the countries of the Union.

(b) countries of the Union which make such designation under the terms of this provision shall notify the Director General [of WIPO] by means of written declaration giving full information concerning the authority thus designated. The Director General [shall] at once communicate this declaration to all other countries of the Union."

This article of the Berne Convention, according to the intentions of the revision conference, implies the possibility of granting protection for expressions of folklore.

SUI GENERIS OPTION

In 1978, it was felt that, despite concern among developing countries as to the need to protect folklore, few concrete steps were being taken to formulate legal standards. Due to the fact that the existing system of copyright protection was not adequate for the

protection of folklore, attention turned to the possibilities of a *sui generis* system.⁶⁰

A *sui generis* system is simply a system that is one of its own kind.⁶¹ It is a term applicable to multiple fields in law and other areas. However, with regards, intellectual property right, it refers to a special form of protection outside the known framework. It is a regime tailored to meet a certain need.⁶²

The extent of a *sui generis* system for protecting indigenous knowledge is not clear cut. In a sense, it can be the modification of some features of intellectual property system so as to properly accommodate the special characteristics of its subject matter (traditional knowledge) and the specific policy need which led to the establishment of a different system.⁶³ It may consist of a combination of intellectual Property law, customary law, equitable benefit sharing provisions, provisions for the rights of farmers and breeders, provisions of prior informed consent, provisions of contractual agreements and provisions of disclosure of origin of biological/genetic resources.⁶⁴ A *sui generis* system for protecting indigenous knowledge need not be totally novel in its components. It has been stated that, "many elements of *sui generis* systems are not novel or in a class of their own, but refer to customary laws and practices that may have existed for hundreds or thousands of years."⁶⁵

Sui generis systems aim at protecting folklore by working in conjunction with existing Intellectual Property Rights or by

⁶⁰The protection of the expressions of folklore: the attempt at International level – being paper prepared by the International bureau of WIPO. Retrieved from www.wipo.int on 12th January, 2016.

⁶¹ Garner, B. Ed. 2009. *Black Law's Dictionary*. USA: Thomas Reuters. 1572.

⁶²Wekesa. M. 2006. What is *sui generis* system of intellectual Property Protection? Nairobi: *The African Technology Policy Studies Network*. 3

⁶³Kalaskar. B. S. 2012. Traditional Knowledge and *sui-generis* law. *International Journal of Scientific & Engineering Research*. 3.7: 1-8. 2.

⁶⁴*Ibid* at 7.

⁶⁵Hardison.P. (Tulalip Tribes of Wasington).2013. *Sui Generis or Business as Usual?Co-Protecting Traditional Knowledge and Biodiversity*.*Eco*.46.3: 1-4. 1

replacing them.⁶⁶ *Sui generis* systems have been incorporated in the existing copyright laws of some countries,⁶⁷ while, other have enacted them as stand-alone legislation.⁶⁸

The International Bureau of WIPO prepared a first draft of sui generis model provisions for intellectual-property-type protection of folklore against certain unauthorized uses and against distortion and in 1982, it adopted what are called "Model Provisions for National Laws on the Protection of Expressions of Folklore Against Illicit Exploitation and Other Prejudicial Actions" (the Model Provisions). Other examples of the sui generis systems include the Tunis Model Law on Copyright, the Bangui Agreement of OAPI and the South Pacific Model Law.

Compared to the existing IPR regime, sui generis systems afford greater protection to folklore. They however still fall short of providing adequate level of protection. Given that they are based on existing IPRs, they are burdened with the same limitations as existing IPR.⁶⁹ *Sui generis* systems are regional in their reach and that WIPO/UNESCO Model Provision, has become defacto a strictly regional instrument.⁷⁰

CUSTOMARY LAW

It has been argued that indigenous customary laws ensure effective protection of the traditional cultural expressions of indigenous

⁶⁶ Consolidated Analysis of the Legal Protection of Traditional Cultural Expressions at Annex 2, Annex 17, WIPO Doc. WIPO/GRTKF/IC/5/3 (May 2, 2003). Available at www.wipo.int/documents/en/meetings/2003/igc/pdf/grtkf/ic_5_3.pdf. Refer red to in RaoRane.Ibid. p.840.

⁶⁷ An example is the Nigerian Copyright Act. Cap C28, LFN 2004.

⁶⁸ An example is the Panama Law No. 20

⁶⁹ RaoRane M. 2006. Aiming Straight: The Use of Indigenous Customary Law to Protect Traditional Cultural Expressions. Pacific Rim Law and Policy Journal Association.p. 840.

⁷⁰ Daes E. 2001. Intellectual and Indigenous People.95 *American Society International Proc.* 143 at 145. Referred to in RaoRane.Ibid. p.840.

peoples.⁷¹ Looking at the principles of western intellectual property based regimes; they are incompatible with the goals underlying the protection of traditional cultural expressions and give rise to ineffectual solutions. However, indigenous customary law is law, and it is satisfactorily being used by communities to protect their expressions.⁷² It is therefore, a flexible solution, in that communities can apply their particular customary laws to protect their cultural expressions.

The application of indigenous customary law has been said to be the most effective resolution, given the inadequacies of solutions based on incompatible Western intellectual property regime⁷³. As above, the western intellectual property regime is unsuitable for the protection of folklore. Indigenous customary law is law that, over the years, has been used satisfactorily by indigenous peoples. They have proved satisfactory to the indigenous groups that apply them and should therefore be seriously considered.

Customary law is the "A rule or body of rules regulating rights and imposing correlative duties."⁷⁴ This law derives from a set of traditions and practices that have evolved over the years. As it is not static, it accounts for the changes in the needs of the peoples it seeks to govern. It derives its legitimacy from social acceptance by the members of the community it governs⁷⁵ and is based on norms that may be understood only by members of the community.⁷⁶ In *Zaidan .v. Mohosen*,⁷⁷ it was noted that customary law is not an enacted law. It is however binding between the parties subject to it. It is the oldest source of Nigerian law, having existed before the advent of

⁷¹RaoRane M. 2006. Aiming Straight: The Use of Indigenous Customary Law to Protect Traditional Cultural Expressions. *Pacific Rim Law and Policy Journal Association*. p. 827.

⁷² *Ibid.*

⁷³ RaoRane M. *ibid.* p.843.

⁷⁴ Section 2 Customary Courts Law. Cap. 49 Revised Laws of Anambra State of Nigeria, 1979..

⁷⁵ RaoRane. *Ibid.* p.845.

⁷⁶ *Ibid.*

⁷⁷ (1973) 11 F.S.C. 1

the colonial regime⁷⁸. In Oyewunmi Ajagunbade III .V. Ogunesan, customary law was described as,

The organic or living law of an indigenous people of Nigeria regulating their lives and transactions. It is organic in that it is not static. It is regulatory in that it controls the lives and transactions of the community subject to it. It is said that custom is a mirror of the culture of the people. I would say that customary law goes further and imports justice to the lives of all those entire subject to it.

Indigenous customary law differs from tribe to tribe. Though the general rules obtained within a particular tribe may be similar, they very often differ on points of detail. It is therefore safe to assume that there are as many customary laws as there are independent traditional communities⁷⁹. Consequently, a single solution cannot ensue. Customary law is therefore community-specific, giving rise to flexible solution opposing the one-size fits all approach. This has been an argument against its use for protection of folklore. The point being that, which customary law will be applicable, where the parties are from different communities or even countries?

To enforce these laws, indigenous communities put in place institutions and mechanisms. Indigenous customary law is entrenched into the way of life of indigenous peoples, and an integral part of their culture. It has, independent of the customs it governs, been claimed to be deserving of protection as an element of the culture.⁸⁰ Indigenous customary law has governed the use of folklore amongst indigenous communities. It determines the powers and duties of the custodians of the folklore.

Thus, indigenous customary law focuses on a “bundle of relationships rather than [the] bundle of economic rights,” which

⁷⁸ Asein J O. 2005. *Introduction to Nigerian Legal System*. 2nd Ed. Ababa Press ltd. Lagos.p. 114.

⁷⁹ *Ibid*. p.115

⁸⁰ Von Lewinski S 2003. The Protection of Folklore. *11 Cardozo Journal of International and Comparative Law*. 747 at 765.

Western intellectual property laws emphasize.⁸¹ In addition, it focuses on community ownership and involvement rather than on personal rights.⁸²

Indigenous customary law has satisfactorily governed the use of folklore, and is flexible enough to protect the diverse cultural expressions of indigenous communities around the world.

Due to the fact that the principles underlying the protection of folklores are embodied in the indigenous customary laws themselves, their application eliminates the possibility of misunderstandings that lead to ineffective solutions.

Given that the Indigenous people desire to take control over their cultural expressions and define how these expressions can be used, applying indigenous customary law will allow them to do so.⁸³ It will afford them the opportunity of controlling the fate and development of their cultures, which has been argued to be the most effective way to counter forces that threaten to destroy the customary practices of indigenous peoples.⁸⁴

BREACH OF CONFIDENCE

The action of breach of confidence has been proposed as an alternative framework for protecting indigenous folklore, particularly sacred designs.⁸⁵ Breach of confidence is characterized by three elements, namely, the information must be of a confidential nature; there must be an obligation of confidence; and there must have been an unauthorised use of the information.⁸⁶ With regard to

⁸¹ *Ibid.* pp. 765-66

⁸² RaoRane. *Loc cit.* p.845.

⁸³ Global Intellectual Property Rights: Boundaries of Access and Enforcement, Panel II: The Law and Policy of Protecting Folklore, Traditional Knowledge, and Genetic Resources, 12 *FORDHAM INTELLECTUALPROPERTY.MEDIA & ENT. L.J.* 753, 762-63 (2002).

⁸⁴ Hadjioannou M. 2005. The International Human Right to Culture: Reclamation of the Cultural Identities of Indigenous Peoples Under International Law, 8 *CHAP. L. REV.* 201, 227.

⁸⁵ Gray, Stephen. 1991. Aboriginal Designs and Copyright: Can the Australian Common Law expand to meet Aboriginal Demands? 9 (4) *Copyright Reporter*, 8 at p.16.

⁸⁶ *Coco .v. Clark* (1969) RPC 41

the first element, the mere ability of the public to inspect a confidential document does not in itself eliminate its confidential nature.⁸⁷ Consequently, with regards indigenous art, it may be argued that the publication or public scrutiny of an indigenous design should not render the sacred information embodied in the designs any less confidential. The confidentiality quality should be retained so long as its secrets are known only to those authorised by indigenous community's law.

In determining whether or not there has been a breach of confidence, customary law of the indigenous community will be applied.⁸⁸ This can be compared with trade secrets law, whereby particular trade usage and practices determine existence or otherwise of a breach of confidence.⁸⁹

With regards, the second element, it is not necessary for the recipient of the information to actually know that it is confidential in.⁹⁰ The test for obligation of confidence is an objective one, that is, 'was the information communicated in circumstances in which a reasonable person would know that the information is confidential?'⁹¹

CONCLUSION

Copyright is a personal right in a property, which is intangible in nature. It is a creature of statute, which is vested in the author or originator of protectable work. Lastly, it confers exclusive right in relation to an eligible work.

The quest to protect indigenous knowledge has been on the increase. Reasons for this increase include the rising value of indigenous works and properties, the increased exploitation of traditional medicine by pharmaceutical companies, the heightened visibility of indigenous people's concerns globally, growing human/ indigenous peoples' rights movements, to mention a few. The rights of

⁸⁷ Gray. *Ibid.* p.18

⁸⁸ Githaiga J. 1998. Intellectual Property Law and Protection of Indigenous Folklore and Knowledge. *MurUEJL Vol.5 No. 2.Para 45.*

⁸⁹ Gray, *loc. cit.* p.18

⁹⁰ *Coco .v. Clark* (1969) RPC 41 at 48

⁹¹ *Ibid.*

indigenous people, are hinged on rights such as the right to self-determination, right to own land, right to intellectual and cultural property, among others.

Generally, there have been arguments for and against the protection of indigenous knowledge. Those in support propose using existing intellectual property laws or adapting cum expanding its contours to accommodate indigenous knowledge. Those against an intellectual property kind of protection for indigenous knowledge base their arguments onto two schools of thoughts. First, there is notion that indigenous knowledge does not fall into the category of protectable property, consequently, they should not be afforded protection. The other group opined that a typical western IP regime will not adequately protect folklores. It will therefore be necessary to develop a *sui generis* regime. Though a strong argument has been canvassed for a *sui generis* form of protection, however, it has not been possible to arrive at a uniform *sui generis* system.

Developing an IP regime for indigenous knowledge raises issues such as property rights, human rights, and cultural as well as anthropological angles. Issues such as originality requirement, catering for the spiritual aspect of indigenous knowledge, the public domain issue, the fair use doctrine and fixation requirement, among others, illustrate the difficulty in fitting indigenous knowledge into the western IP regime.

Three main options for protecting folklores have been suggested, namely, western IP regime, a customary law system and a *sui generis* model- each having their strengths and challenges. The western IP regime is saddled with the challenges outlined above. The second option is the customary law option, which is the customary ways and practices by which, among others, the indigenous people have protected their cultural heritage long before the emergence of western influence. Hence, it is no surprise that indigenous people will and do seek out any option that projects or retains their age long customary protection model. However, customs are often times subjected to validity tests before they are upheld. Secondly, they are largely unwritten, and difficult to prove or establish. It is for this reason the law generally allows for experts in a particular custom to prove its existence. Consequently, if customary law were to protect folklores, indigenous people may

well have their interests at the mercy of a much more forceful western IP regime in the event of conflict between the rights and liabilities advanced by both forms of protection.

Lastly, a *sui generis* model is the third option. It has however been described as vague and uncertain. A *sui generis* model must incorporate the customary law of the people, benefit sharing arrangement, prior informed consent mechanism, to mention a few. It may incorporate various approaches such as, declarations, protest, negotiations, court' precedents as well as legislations either as laws or codes. A *sui generis* regime is better seen as any form of protection outside a typical western IP regime or a typical customary regime.

Comparing the three options for protection using tripartite indices, strength of law, flexibility and native suitability, the *sui generis* model appears to be the most appropriate. This is because, in the author's opinion, the problem is the fundamental clash in world-views. Consequently, any attempts at moulding existing copyright laws to accommodate the idiosyncrasy of indigenous intellectual property may result in an unsatisfactory compromise of both systems. This, does not mean that the current western-based systems should not apply where the relevant criteria is met. A *sui generis* legislation would, however, allow the law-makers to deal with the problem much more comprehensively, while at the same time avoiding the need for major overhaul of current regimes.