

Role of Informal Laws in Tackling the Plastic Crisis

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Abstract

Plastic pollution is a global catastrophe, simultaneously contaminating ecosystems through chemical leaching and physically through structural disruptions. To reverse this crisis in a coordinated and cooperative manner, the United Nations Environment Assembly (UNEA) adopted a resolution in 2022 to negotiate and develop a legally binding treaty addressing the plastic pollution, including in the marine environment. While the envisaged treaty and state laws that will implement the treaty once adopted (collectively formal laws) will be pivotal in tackling plastic pollution, this paper argues that these formal laws will inevitably operate alongside an often overlooked yet influential body of informal norms and practices comprising among others, customs, ethics, beliefs and religious practices. Thus, while formal laws' authority, clarity, and enforceability is critical to addressing the crisis, embracing and utilizing these informal norms provides an important opportunity to ending the plastic crisis as their interplay with formal frameworks will shape societal responses and significantly influence the implementation and effectiveness of plastic related laws. Further, given the pervasiveness and ubiquity of plastics in our modern life, the associated effects of plastic pollution on daily human lives and the radical behavioral change required to end the crisis, informal norms (unofficial laws) may provide more powerful and effective incentives or frameworks to deal with plastic pollution than official law.

Keywords: Informal laws, plastic pollution, pluralistic systems, interplay, environmental governance

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I. Introduction

Globally, plastic pollution has escalated to critical levels. Annually, the globe produces four hundred and thirty million tons of plastics,¹ two thirds of which have a short lifespan. Every day, an equivalent of two thousand garbage trucks full of plastics find their way into water resources.² Once in the environment, plastics alters natural ecosystems, destabilizes aquatic life, reduces climate change adaptation capabilities and negatively affects people's environmental, social and economic life.³ Recent studies have found plastics in remote areas such as Antarctica,⁴ Mariana Trench⁵ and at the snow cap of Mount Everest.⁶ This transboundary movement of plastics disproportionately affects the vulnerable communities.⁷

The plastic crisis, like many global environmental challenges, is beyond the capacity of any single state to address it effectively. Thus, an urgent, coordinated and collective response is required. To this end, UNEA, the universal assembly of member states on environmental matters, adopted a resolution in 2022 to negotiate and develop a legally binding treaty addressing plastics.⁸ Once adopted, the treaty will play a critical role in managing the production, use and disposal of plastics. States will domestically adopt laws and policies to implement their commitments under the envisaged treaty.

The treaty and state backed national laws (formal laws) passed to implement

¹ United Nations Environmental Programme (UNEP), "Everything you Need to Know About Plastic Pollution: Everything you Need to Know About Plastic Pollution" April 2023 available at— < <https://www.unep.org/news-and-stories/story/everything-you-need-know-about-plastic-pollution> > accessed on November 28, 2023.

² UNEP, "Knowing Plastics" available at—< <https://www.unep.org/plastic-pollution> > accessed on November 28, 2023. On climate change, global plastic manufacturing processes generates approximately four percent of carbon emissions becoming an important contributor to climate crisis.

³ Fuller, S., Ngata, T, Borrelle, S.B, Farrelly, T, 'Plastics Pollution as Waste Colonialism in Te Moananui', 29(1) *Journal of Political Ecology*, 2022, 534-560.

⁴ Aves A, Revell L, Gaw S, Ruffell H, Schuddeboom A, Wotherspoon N, LaRue M, McDonald A, 16(6) 'First evidence of Microplastics in Antarctic Snow' *The Cryosphere*, 2022, 2127-2145.

⁵ Chiba S, Saito H, Fletcher R, Yogi T, Kayo M, Miyagi S, Ogido M, Fujikura K, 96, Human Footprint in the Abyss: 30 Year Records of Deep-sea Plastic Debris, *Marine Policy*, 2018, 204-212.

⁶ Napper E, Davies F, Clifford H, Elvin S, Koldewey J, Mayewski A, Miner R, Potocki M, Elmore C, Gajurel P, Thompson C, 2020, 621-630.

⁷ For instance, see a study showing that plastics in Seychelles beache comes from Indonesia, China and other far-off countries in Vogt-Vincent, N.S., Burt, A.J., Kaplan, D.M., Mitarai, S., Turnbull, L.A. and Johnson, H.L., 2023. Sources of Marine Debris for Seychelles and Other Remote Islands in the Western Indian Ocean. *Marine Pollution Bulletin*, 187, p.114497.

⁸ UNEP/EA.5/Res.14 Resolution adopted by the United Nations Environment Assembly on 2 March 2022.

it will be critical in tackling the plastics crisis. However, these formal laws will neither be enough nor will they be the only “laws” at play in ending this problem. The effectiveness of formal laws is often limited, particularly in societies characterized by plural legal systems,⁹ a feature shared by many countries.¹⁰

Formal laws do not have overall control of people’s lives and their affairs.¹¹ Indeed, besides these formal codes, there exist deep rooted and prevalent social practices and rules of convenience of greater appeal and influence over societies. These informal laws emanate from among others, ethics, religion, customs and culture and play a fundamental role in shaping or regulating human behaviors. The influence of these informal norms is prevalent in environmental governance.¹² In many societies, there exists a close and intricate relationship between human beings and nature and often these societies’ social, cultural, economic rules reflect a socialization that sustainably utilizes environmental resources but also a responsibility to maintain environmental integrity.¹³ Plastics have a social life,¹⁴ with cultural, spiritual, social identity, economic and environmental disruptions¹⁵ and these informal norms will be at play in promoting the end of the plastic crisis. This article argues that the pervasive and ubiquitous nature of plastics makes these informal norms more powerful in regulating plastic pollution in society than formal laws. They will not only play a crucial role in shaping narratives about the impacts of plastic pollution but also offer a unique opportunity to

⁹ Kameri-Mbote, P, ‘Contending Norms in a Plural Legal System: The Limits of Formal Law,’ *University of Nairobi School of Law*, 2021.

¹⁰ Shimray G, ‘Legal pluralism in Southeast Asia: insights from Nagaland’ in Marcus Colchester & Sophie Chao (eds), *Divers Paths to Justice: Legal pluralism and the rights of indigenous peoples in Southeast Asia (Forest Peoples Programme (FPP) and Asia Indigenous Peoples Pact (AIPP)*, 2011), Hern A, ‘When Do Women Win in Legally Plural Systems? Evidence from Ghana and Senegal’ 60(4), *The Journal of Modern African Studies*, 2022, 527-546.

¹¹ Kameri-Mbote, P, *Contending Norms in a Plural Legal System: The Limits of Formal Law*, *University of Nairobi School of Law*, 2021.

¹² See for instance, Redvers N, Aubrey P, Celidwen Y, Hill K (2023) ‘Indigenous Peoples: Traditional knowledges, climate change, and health’ 3(10), *PLOS Glob Public Health*, 2023, pp. 1-20 for for a discussion on the conceptualization of nature by indigenous peoples and Kameri-Mbote, P, *Contending Norms in a Plural Legal System: The Limits of Formal Law*, *University of Nairobi School of Law*, 2021.

¹³ Okyere-Manu B, Morgan N, Nwosimiri O, Cultural, ethical, and religious perspectives on environment preservation, 85 *Best Practice & Research Clinical Obstetrics & Gynaecology*, 2022, 94-104.

¹⁴ University of Cambridge Energy Interdisciplinary Research Centre, *The Cultures Behind Plastic Waste Around the World*, available at —<https://www.energy.cam.ac.uk/Plastic_Waste/culture-global-plastic-waste#:~:text=Findings%20showed%20that%2C%20like%20people,about%20us%20is%20constantly%20changing> accessed on November 28, 2023.

¹⁵ Fuller, S., Ngata, T., Borrelle, S.B., Farrelly, T., 2022. Plastics pollution as waste colonialism in Te Moananui, *Journal of Political Ecology*, 534-560.

leverage ethics, morality, cultural norms, religious principles, and value systems for enforcement, thereby maximizing their potential in changing behavior.

II. Nature of formal and informal laws in legal pluralist contexts

To appreciate the existence, place and role of informal laws in governing human behavior and in plastic pollution specifically, we must grapple with the question, what is law?¹⁶ Unfortunately, despite the consensus that law is an indispensable tool for ordering societies, its meaning is contested.¹⁷ There are also many unsettled jurisprudential debates about the nature, function, origin and power of law. This section briefly discusses the nature of law from two jurisprudential schools. By way of comparison, the nature of informal norms is also discussed to provide differences between them and their interfaces.

(i) Nature of formal laws

To distinguish what is law from what is not law, the analysis of the nature of law proceeds on the premise that law is a special social phenomenon, with defining features.¹⁸ Even then and as pointed out above, its defining characteristics are contested. These contests have engaged scholars of various jurisprudential schools' overtime, with each school attempting to explore the nature of law.¹⁹ These schools often conflict,²⁰ yet each strives to shape and influence the understanding and development of legal systems. Their differing conceptions of what constitutes law carry profound and complex social implications concerning law's legitimacy, function, force and attendant obligation to be obeyed.

While there exist many schools of analytical jurisprudence,²¹ each of them concludes with the inclusion of some practices as law and exclusion of others. This paper does not attempt to provide an exhaustive discussion of the differing

¹⁶ Here, the term law, as is generally used in legal circles is taken to mean formal laws.

¹⁷ Kameri-Mbote, P, *Contending Norms in a Plural Legal System: The Limits of Formal Law*, *University of Nairobi School of Law*, 2021.

¹⁸ Marmor A, Sarch A, "The Nature of Law", *The Stanford Encyclopedia of Philosophy* (Fall 2019 Edition) available —<<https://plato.stanford.edu/entries/lawphil-nature/>> accessed November 28, 2023.

¹⁹ Uzomah M, 'The Concept, Meaning and Nature of Law: Toward A General Conceptual and Ontological Configuration of Law', 5(1) *Ekpoma Review*, 2018.

²⁰ Wahlgren P, *The purpose and usefulness of jurisprudence*, *Stockholm Institute for Scandinavia Law*, 2010, 506-515.

²¹ Postema, G.J. and Postema, G.J., *Analytic jurisprudence established. A Treatise of Legal Philosophy and General Jurisprudence: Volume 11: Legal Philosophy in the Twentieth Century: The Common Law World*, 2011, 3-42.

positions and only uses two schools of thought to illustrate the nature of law to explain the place and the role of informal norms. First, the natural law school throughout its various strands argues that beyond human law (man-made law) there is basic, universal, objective and immutable rules of reason discernible through human reason-the true law.²² Thus, human law-making process is not limitless as it must remain consistent with these natural and universal rules if it is to be valid. These rules may be either procedural or substantive or both.²³

Positivism school of thought discounts the natural law theory's source and validity of law. As a school influenced by science, it explains the existence and character of law as a social fact discernible from human behavior and intentions.²⁴ Unlike natural law, the merits or demerits of law is not a defining feature for positivists.²⁵ While there are many strands in this theory, its defining feature is its argument that law is what is promulgated by a legal human authority as a social fact.²⁶ It therefore follows that any social rules and practices not passed by the formal authority as law are not law properly so called.

Despite the differences between these two schools, there is commonality in their attempt to define those social rules that qualify as law. Thus, while natural law asserts that laws derive from pre-existing, immutable, and objective rules set forth by a higher deity, positivism contends that laws are social constructs, enacted by human authority. In addition, in natural law, the validity of law depends on a higher authority, discovered through human reason, while in positivism, it derives from human authorities, such as parliaments or courts. Norms that do not follow this formulation path do not qualify as law under the schools.

A difference between positivism and informal norms must be made. An argument may be made that there is no difference between positive law and the informal norms if positive law is derived from societies and elevated into formal laws. Such an argument proceeds on the belief that since positive law is derived from human behavior by the formal authority, the law is then part of informal norms that graduate to formality through some action. While this argument is plausible, it fails on two fronts. First, while informal norms may well be formal

²² Noonan H, 'Natural Law', 3, *Marq. L. Rev.*, 1919, 91-95.

²³ Kameri-Mbote, P, 'Contending Norms in a Plural Legal System: The Limits of Formal Law', University of Nairobi School of Law.

²⁴ Sevel M, 'Legal positivism and the rule of law', 34, *Australasian Journal of Legal Philosophy*, 2009, 53-68.

²⁵ Lobban M, Austin J, *The Cambridge Companion to Legal Positivism*. Cambridge Companions to Law, *Cambridge University Press*, 2021, 225-247.

²⁶ Fabra-Zamora L, 'Legal Positivism as a Theory of Law's Existence: A Comment on Margaret Martin's Judging Positivism', 55 *Isonomia*, 2021, 193-211.

law, informal norms only become law after adoption by a formal authority. Thus, there exists a dozen informal laws that otherwise govern human behavior but have not yet qualified as law. Secondly, this argument assumes a homogenous society with agreed social norms. But given the diversity of societies within states with different life values, priorities, preferences and cultures, formal law can at best only remain normative, each time grappling with complex social dynamics of the societies and at worst exclude some societies' social norms. Thus, in any society informal norms will always exist.

Another important defining feature of law, whether formal or informal, is its coercive enforcement character.²⁷ Again, while there is consensus that law requires some force to be effective, the source of this force is contested. Some scholars believe that law has an internal coercive force enforced through the state while to others, this force is external and is enforced through morality, culture, religious beliefs among others.²⁸ Formal law is characteristically coercive. The need to attach a consequence of violating each law is based on the presumption that to shape and influence human acts into desirable behavior, law must be accompanied by incentives; rewarding those that follow it while punishing those that violate it.²⁹ Without consequences, law is a mere suggestion, advise or best practice. Any law must be designed to create incentives to induce compliance.³⁰ Thus, the law clothes a state with detection, investigatory, prosecutorial and punishment powers.³¹

Another lens through which to understand the nature of law is the concept of rule of law. This is a political doctrine that requires government and the governed to be bound and abide by the law.³² The rule of law concept has three important organizing principles: limited government, formal legality and government of laws.³³ Of relevance for this paper are the last two principles. On formal legality, laws should be publicly passed in advance and must be capable of being complied with and applied to everyone. This element seeks to create stability and predictability.³⁴ On government of laws, all persons, including the state should be governed by laws. It seeks to ensure that there is no differentiation

²⁷ Gkouvas T, 'The Place of Coercion in Law', Cambridge University Press, 2023.

²⁸ Friedrich H, "The Road to Serfdom", Chicago: University of Chicago Press, 1994, 80.

²⁹ Cook P, 'The Economics of Criminal Sanctions' in *Sanctions and Rewards in the Legal System: A Multidisciplinary Approach* M.L. Friedland (eds), University of Toronto Press, 1989, 50–78.

³⁰ Kameri-Mbote, P, 'Contending Norms in a Plural Legal System: The Limits of Formal Law'.

³¹ Kameri-Mbote, P, 'Contending Norms in a Plural Legal System: The Limits of Formal Law'.

³² Tamanaha Z, 'The history and elements of the rule of law', 232-247.

³³ Tamanaha Z, 'The history and elements of the rule of law,' 247-232.

³⁴ Friedrich H, "The Road to Serfdom", Chicago: University of Chicago Press, 1994, 80.

in terms of the applicability of law to government, its officials and the governed.³⁵ Does it mean that those rules that regulate and influence human behavior have to meet these features? We will address the nature of informal laws in the next section.

(ii) *Nature of informal laws*

Informal laws or unofficial laws refer to set of rules or norms that are not established by an official body or authority but nonetheless regulate or influence human behavior.³⁶ In addition to prescribing the rights, duties and the accepted code of conduct, informal laws have social institutions that enforce them.³⁷ Their coming into being, socialization and implementation does not rely on formal institutions established under formal laws. However, these informal norms may be incorporated into formal laws overtime, albeit with some nuances where they become formal laws and benefit from the state instrumentalities.³⁸ Unlike formal norms, informal norms are not homogenous, as they vary widely across societies, religions, ethical frameworks, and cultural contexts.

Informal laws emanate from different sources. For instance, before colonization, many communities were governed by customary rules established over a long period of time. These customary rules governed the conduct of community members in their interpersonal relations, economic activities, political organization, and interactions with the environment.³⁹ In environmental governance, many societies' customary rules required sustainable utilization of natural resources and shunning pollution as it interferes with cultural lifestyles and institutions.⁴⁰ Other sources of informal norms include ethics, religions, value systems.⁴¹

Informal norms exhibit important characteristics that explain their pervasive influence, a feature that this article seeks to leverage. Informal norms

³⁵ Tamanaha Z, 'The history and elements of the rule of law', 232-247.

³⁶ Friedman M, Hayden M, *American law: An introduction*, Oxford University Press, 2017.

³⁷ Drechsler D, 'In Focus: The OECD Gender, Institutions and Development Data Base' in Johannes, J., Denis, D. and Sebastian, B. (eds) *Development Centre Studies Informal Institutions How Social Norms Help or Hinder Development: How Social Norms Help or Hinder Development*, OECD, 2007.

³⁸ Fiori S, Formal and informal norms: Their relationships in society and in the economic sphere. 76(2) *Review of Social economy*, 2018, 198-226.

³⁹ Allott N, Customary Law in East Africa. 4(3), *Africa Spectrum*, 1969, 12-22.

⁴⁰ Okyere M, Beatrice, Morgan S, Nwosimiri O, "Cultural, ethical, and religious perspectives on environment preservation." 85, *Best Practice & Research Clinical Obstetrics & Gynaecology*, 2022, 94-104.

⁴¹ Brennan A, Norva L, "Environmental Ethics", *The Stanford Encyclopedia of Philosophy*, 2022.

unlike formal rules, “percolate from below, emerging out of social practice and becoming normative overtime”.⁴² Individuals are born and exist in social contexts. In these contexts, they develop and adopt cultures, customs, language, thoughts, religion and traditions from social relations.⁴³ They become members of a society, religion, a country and a community who relate to the structures of their society through diverse social relations. “How an individual appropriates, internalizes, and lives his relations, which ones he chooses, help constitute his human individuality”.⁴⁴ It is these characteristics of informal norms that are most powerful as identity is largely shaped by social structures. Thus, the environment, for example, including oceans, air and forests are not mere modern-day factors of production, people have deeply embedded social relations with them, notwithstanding what modern development agenda provides or advocates for.

Related to the informal norms’ embedment of social norms into the human person is their legitimacy. Generally, legitimacy is entrenched in ‘collective audience’s shared belief, independent of observers, that “the actions of an entity are desirable, proper, or appropriate within socially constructed systems of norms, values, beliefs and definitions’.⁴⁵ Informal norms are “solidarity forces” agreed generally by members of society as desirable in shaping and reinforcing their social relations. And since there is “constant interaction with social purposes and goals”,⁴⁶ informal rules, for example norms on environmental protection, are legitimate and valid. This eliminates legitimacy concerns often raised in relation to formal laws.

As informal norms arise from social relations, they are ubiquitous.⁴⁷ In every social interaction, there exists generally accepted norms regulating human behavior. This is unlike formal laws that regulate specific social interactions. Often, formal laws regulate interactions long after informal laws have taken shape and often borrows from them.⁴⁸ For instance, while formal law may not prohibit cutting down of certain trees, some communities, out of religious and cultural convictions do not allow the cutting down of trees which they

⁴² Schauer F, “The force of law” Harvard University Press, 2015, 140.

⁴³ De George, Richard T. ‘Social Reality and Social Relations’ 37(1) *The Review of Metaphysics*, 1983, 3–20.

⁴⁴ De George, Richard T. ‘Social Reality and Social Relations’, 3–20.

⁴⁵ Bernstein S. ‘Legitimacy in global environmental governance’ J. Int’l L & Int’l Rel. 1, 2004, 139.

⁴⁶ Bernstein S. ‘Legitimacy in global environmental governance’, 139.

⁴⁷ Bicchieri C, *The Rules We Live By. In The Grammar of Society: The Nature and Dynamics of Social Norms* Cambridge: *Cambridge University Press*, 2005, 1-54.

⁴⁸ Kameri-Mbote, P, *Contending Norms in a Plural Legal System: The Limits of Formal Law*.

consider significant for their religious ceremonies.⁴⁹ In addition, long before laws regulating hunting emerged, in some communities, one could not hunt in what were considered sacred places.⁵⁰ Informal laws on fishing, hunting, coconut tree harvesting and other sectors often contain taboos proscribing certain actions and more detailed and complex rules than formal ones.⁵¹

Enforcement of informal norms presents yet another peculiar feature. Unlike formal laws, informal laws do not attract formal sanctions.⁵² Instead, informal norms present sanctions anchored on people's acceptability in socialization and social relationships. These include "censure, disapproval, shaming, loss of face or reputation".⁵³ While these sanctions may not appear punitive as formal sanctions, social acceptability and socialization are important in social relations. While one may not go to jail, being shunned by a community, of which you are a member may be a more severe punishment. The fear of the Armageddon may be greater than a fine and a curse greater than the death penalty. One of the major reasons people obey the law is "because it is consistent with and fits with their own conscience and their personal internal values."⁵⁴ As informal norms emanate from the accepted and agreed social conscience, beliefs and values in which individuals are socialized, informal norms receive wide obedience and enforcement scores.

(iii) *Formal vs informal laws in plural legal systems*

Despite the jurisprudential variations on the meaning and nature of law, there is a general consensus that the essence of laws in societies is to constrain and guide human actions by structuring incentives, creating predictability and estimation of human interactions.⁵⁵ As noted above, the origin and source of

⁴⁹ Karangi, Matthew M. "Revisiting the roots of Gikūyū culture through the sacred Mūgumo tree" 20(1) *Journal of African Cultural Studies*, 2008, 117-132. Amots, "On the typology and the worship status of sacred trees with a special reference to the Middle East." 2(1) *Journal of Ethnobiology and Ethnomedicine*, 2006, 1-14.

⁵⁰ Fraser B, Conservation by another Name: Traditions, Taboos and Hunting available —<<https://for-estsnews.cifor.org/40317/conservation-by-another-name-traditions-taboos-and-hunting?fnl=en>> accessed November 29, 2023.

⁵¹ Colding J, Folke C, "Social taboos: 'invisible' systems of local resource management and biological conservation." 11(2) *Ecological applications* 2001, 584-600.

⁵² Kameri-Mbote, P, 'Contending Norms in a Plural Legal System: The Limits of Formal Law'

⁵³ Kameri-Mbote, P, 'Contending Norms in a Plural Legal System: The Limits of Formal Law'

⁵⁴ Finckenauer J, "Why people obey or do not obey the law" Newsletter on the Results of Scholarly Work in Sociology, Criminology, 4(2), *Philosophy and Political Science*, 2023, 36-45. Friedman M, "Impact: How Law Affects Behavior", *Harvard University Press*, 2016.

⁵⁵ Peng, Yusheng. "When formal laws and informal norms collide: Lineage networks versus birth control policy in China." 116(3) *American Journal of Sociology*, 2010, 770-805.

formal laws may be contested but an authority, whether social, deity or political is involved in their making. On the other hand, while some informal norms may eventually become formal laws, these two sets of laws evolve and emerge independently.⁵⁶ Further, the two sets of laws may regulate the same social relationships, at times conflicting or complementing one another. They may also govern distinct issues, with one set occasionally acting as a gap filler where the other is absent. They may also overlap in their regulatory scope.⁵⁷

The demonstrable variance in the nature of formal and informal laws above present a fundamental question as to the value and place of each set of laws in the society. The contemporary understanding of formal laws, even among jurisprudence scholars, centers on their effort to distinguish between what constitutes law and what does not. It is assumed that law has specific features such that those rules that do not possess those characteristics are not considered proper law. Taking the example of natural law, any rule that defies human reason is not law.⁵⁸ Unjust laws are not laws at all.⁵⁹ For positivism, rules not sanctioned by a human authority such as a legislature are not considered law and for pure legal theory, they would be regarded as impurities.⁶⁰

Despite the self-purifying nature of formal laws, from a functionality view, informal rules, whether recognized by the formal legal systems or not, control and influence human behavior.⁶¹ Similarly, informal norms may be ensconced in “semi-autonomous social fields” which resist infiltration by “alien” norms, be they formal norms or informal norms from a different source.⁶² The determination of which law applies to a given set of facts can vary depending on the forum where the facts are presented and analyzed. In a court of law, the applicable rules are typically the promulgated formal laws. Conversely, in informal settings such as councils of elders, churches, or gatherings led by spiritual or community leaders, informal laws often apply. However, there are instances where both formal and informal laws may be applicable, particularly

⁵⁶ Kameri-Mbote, P, *Contending Norms in a Plural Legal System: The Limits of Formal Law*, *University of Nairobi School of Law*, 2021.

⁵⁷ Kameri-Mbote, P, ‘Contending Norms in a Plural Legal System: The Limits of Formal Law’

⁵⁸ Bradley R, *The Relation Between Natural Law and Human Law in Thomas Aquinas*. 21 *Cath. Law*, 1975. 42.

⁵⁹ Soper P, *In Defense of Classical Natural Law in Legal Theory: Why Unjust Law is No Law at All*, 20(1) *Canadian Journal of Law & Jurisprudence*, 2007, 201-223.

⁶⁰ Cohen, J, *The Political Element in Legal Theory: A Look at Kelsen's Pure Theory*, 88(1) *The Yale Law Journal*, 1978, 1-38.

⁶¹ Kameri-Mbote P, ‘Contending Norms in a Plural Legal System: The Limits of Formal Law’.

⁶² Moore S, ‘Law and Social Change: The Semi-Autonomous Social Field as an Appropriate Subject of Study’, 7 *Law & Society Review*, 1963, 719-720.

when formal laws explicitly recognize informal laws as gap fillers, provided they meet an established criteria.⁶³

Another important variance between formal and informal laws is the nature of coercive character. As noted above, formal law is supported by sanctions such as fines and imprisonment carried out by the instrumentalities of the state. In contrast, informal laws have their coercive power derived from social acceptability and are socially sanctioned. However, both formal laws and informal laws converge in attaching a coercive character to the laws despite their different enforcement pathways. Again, both these systems fulfil their essence in society, being constraining and guiding human actions by structuring incentives.

In relation to the rule of law, formal legal systems create homogenous laws for all persons in each jurisdiction. These laws proclaim and are rooted in equality of all persons before the law. Similarly, all community members of a given social group are expected to adhere to the rules of that society. A problem arises when formal and informal laws regulate the same issue and conflict in their content leaving individuals exposed to liability by either of the systems. Therefore, adhering to the formal laws may prevent one from incurring a civil or a penal liability but expose him or her to perpetual fear of the “sword of Damocles”.⁶⁴

The incompatibility and resistance to infiltration of a legal systems by the other system creates plural legal systems whereby several legal systems coexist in the same field.⁶⁵ Usually in such societies, formal laws will have unsuccessfully attempted to erase informal norms, a classical case being the impact of colonization on traditional legal systems. In Africa, for instance, customary laws and religious laws have defied formal laws’ attempt to erase them. However, formal laws have partially succeeded in subjugating customary laws to a lower place in the hierarchy of laws.⁶⁶ Formal laws assert their superiority over informal norms⁶⁷ and prescribe this hierarchy with recognized informal legal systems being only applicable upon meeting certain conditions such as not offending “repugnancy clauses”.⁶⁸ Notwithstanding these conflicts, formal and informal laws may complement each other.

⁶³ Kameri-Mbote P, ‘Contending Norms in a Plural Legal System: The Limits of Formal Law’

⁶⁴ Kameri-Mbote P, ‘Contending Norms in a Plural Legal System: The Limits of Formal Law’ .

⁶⁵ Kameri-Mbote P, ‘Contending Norms in a Plural Legal System: The Limits of Formal Law’ .

⁶⁶ Kameri-Mbote, P, Odote, C., Musembi, C, Kamande W, Ours by right, *Strathmore University Press*, 2013.

⁶⁷ Kameri-Mbote, P, Odote, C., Musembi, C, Kamande W, ‘Ours by right’.

⁶⁸ Taiwo, E.A., 2009. Repugnancy clause and its impact on customary law: Comparing the South African and Nigerian positions-some lessons for Nigeria. *Journal for Juridical Science*, 34(1), pp.89-115.

III. Examples of informal laws in environmental governance

Informal norms have traditionally played an underappreciated role in environmental governance. This underappreciation, particularly in formulating and enforcing formal laws, has sometimes led to conflicts. For instance, in Kenya and many African countries, public and private land tenure systems were introduced through colonization. Before that, land was owned communally where every member had a right to use the property.⁶⁹ In wildlife management, communities with the communal land system had devised ways of conserving the wildlife and providing space for it alongside their livestock.⁷⁰ However, designing wildlife conservation efforts around private and public land tenure and disregarding the communal land tenure introduced conflicts between what communities had always done and the newly introduced tenure systems. The result is that wildlife conservation is hampered as private landowners “intent on maximizing returns from their land are engaged in crop production and urban development, which are incompatible with wildlife conservation”.⁷¹ People have social and cultural relations with the environment. Thus, when formal law or any other activity destabilizes these social relations or people’s way of life, “social networks function to increase the formal enforcement costs by “bending the iron bars” of formal rules.”⁷²

While the contestation is undesirable, it points to a probable complimentary role between the two. At the heart of the contestation is the desire to regulate human behavior as it relates to the environment. Acknowledging that formal laws don’t have overall control of humans and that informal laws play an important role would be the starting point to closing ranks. Thus, if the aim is to use formal law to exclusively regulate environmental management, one must be cognizant of existing informal norms and include their attributes where feasible. Alternatively, it may regulate by providing principles while at the same time allowing informal institutions to co-exist.

Religion is a powerful social institution backed by strong principles and norms among adherents. Iyad argues that people derive values from religion that

⁶⁹ Kameri-Mbote, P, *Contending Norms in a Plural Legal System: The Limits of Formal Law*. University of Nairobi, School of Law. 2021, 6.

⁷⁰ Sifuna N, “The future of traditional customary uses of wildlife in modern Africa: a case study of Kenya and Botswana” 2(1) *Advances in Anthropology*, 2012, 31.

⁷¹ Kameri-Mbote P, ‘Contending Norms in a Plural Legal System: The Limits of Formal Law’ 6.

⁷² Peng, Y, ‘When formal laws and informal norms collide: Lineage networks versus birth control policy in China’, 116(3) *American Journal of Sociology*, 2010, 770-805.

influence their behaviors.⁷³ Religious activities and rituals are interlinked with the natural ecosystems. Religions hold the earth as sacred and call for responsible and sustainable utilization.⁷⁴ They also have the convening and convincing power.⁷⁵ They have, for instance, been an important organizational platform for political, social and economic mobilization. In shaping behavior, religions teach human responsibility, recognizes the interlinkage between human life and nature, stewardship, neighborliness, nature comprehension among others. Religion also shapes the conceptualization of the relationship between human beings and the environment. For instance, Pope Francis in the letter *Laudato Si: On Care for Our Common Home* in 2015 conceptualize the human-earth relationship like stating “our common home is like a sister with whom we share our life and a beautiful mother who opens her arms to embrace us. “Praise be to you, my Lord, through our Sister, Mother Earth, who sustains and governs us, and who produces various fruit with colored flowers and herbs”.⁷⁶ In addition, *Al-Mizan - A Covenant for the Earth*, a restatement of the principles from Islamic faith that explain the Islam’s duty “religious and civilizational duty to confront environmental challenges”. Convened in collaboration with UNEP, the initiative demonstrate how Islam can be a driving force for sustainable development and environmental care. *Al-Mizan* also highlights the importance of culture and religion in driving behavioral change, along with scientific, technical and political solutions.⁷⁷ These are very critical attributes to environmental conversation. Considering that approximately eighty four percent of world population subscribe to some form of a religion, it presents a great opportunity to deploy religious and faith norms to recalibrate people’s behavior on environment generally and plastics specifically.

Religion has traditionally played an important role in environmental conservation. Chandra in discussing the role of religion and biodiversity conservation argues that religion provides “ethical and social models for living respectfully with nature”, “provides protection for biodiversity” and “religion ties the non-human residents of the cosmos to the divine or to the overall meaning

⁷³ Abumoghli I, *Reimagining the Human Environment Relationship*, International Development Research Centre, 2022, available at —<http://collections.unu.edu/eserv/UNU:8838/UNUUNEP_Abumoghli_RHER.pdf> accessed November 29, 2023.

⁷⁴ Many religious books including the Bible and Quran contain provisions that hold earth as sacred and imposing a responsibility on humanity to care for it.

⁷⁵ Abumoghli I, *Reimagining the Human Environment Relationship*, International Development Research Centre, 2022, available at http://collections.unu.edu/eserv/UNU:8838/UNUUNEP_Abumoghli_RHER.pdf accessed November 29, 2023.

⁷⁶ Si L, ‘On Care for Our Common Home’ *London: Catholic Truth Society*, 2015.

⁷⁷ ‘Al Mizan A Covenant for the Earth’ —<<https://www.almizan.earth/>> accessed November 29, 2023.

of human existence, which gives the biota a value that science alone cannot provide”.⁷⁸ In relation to investments, faith based organizations have provided ethical and faith compliant investment forums.⁷⁹ Religion has also shaped social acceptability of bioethics, genetically modified organisms and other innovations.⁸⁰ Taking cognizance of the religious norms which though not recognized by law but nonetheless govern human conduct more intricately would unleash the much needed impetus into tackling environmental problems including plastic pollution.

Environmental problems raise ethical and moral questions. Beyond science-policy solution-based interventions, environmental crises require ethics to shape human behavior.⁸¹ Environmental ethic scholars have emphasized the ethical and moral significance of the environment to human beings. For instance, there is need to “ensure we [people] spend time dwelling in situations of intrinsic value”⁸² and “re-creation” of the human soul by meditating in the wilderness”.⁸³ These ethical and moral connections with the environment harbor impactful behavior shaping power.

Formulation of what is right and wrong, like other informal norms, is a result of dense social relations. Morality and ethical considerations, at very personal levels, delineate right and wrong. “Morality aims at the interior and not at the simple exterior conformity of ideals; it applies to every person and to all humanity.”⁸⁴ This highlights the ability of ethics and morals to influence human behavior at individual and community levels given their formulation through socialization processes.

⁷⁸ Negi C, ‘Religion and biodiversity conservation: not a mere analogy’ 1:2 *The International Journal of Biodiversity Science and Management*, 2005, 85-96

⁷⁹ Christopher I, How faith Can Inspire Environmental Action available at —<<https://theconversation.com/how-faith-can-inspire-environmental-action-195594>> accessed on November 29, 2023.

⁸⁰ Omobowale, B, Singer A, Daar, S, ‘The three main monotheistic religions and gm food technology: an overview of perspectives’ 9, *BMC international health and human rights*, 2009, 1-8.

⁸¹ Makokha K, Muthiani, ‘The Role of Ethics in Environmental Protection’, in Fuchaka Waswa, Samuel Otor, Daniel Mugendi (eds) *Environment and Sustainable Development: A Guide for Tertiary Education in Kenya*, *School of Environmental Studies and Human Sciences, Kenyatta University*, 2006.

⁸² Brennan A, Norva L, “Environmental Ethics”, *The Stanford Encyclopedia of Philosophy* (2022) at <<https://plato.stanford.edu/archives/sum2022/entries/ethics-environmental/>> accessed November 9, 2023.

⁸³ Laal M, A brief history of enviroethics and its challenges. *Journal of Medical Ethics and History of Medicine*, 2009, 2.

⁸⁴ Makokha K, Muthiani, ‘The Role of Ethics in Environmental Protection’, in Fuchaka Waswa, Samuel Otor, Daniel Mugendi (eds) ‘*Environment and Sustainable Development: A Guide for Tertiary Education in Kenya.*’

The environment is not just a factor of production.⁸⁵ People have religious, cultural, ethical and value relations with it. The social institutions around these relations shape norms on viewing, utilizing and conserving the environment. Some of these norms may end up [either as people understand them or with variations] being formal law while others remain within the realm of social norms. However, whether formalized or not, they exert an equal influence in shaping human behavior in interactions with the environment.

IV. Nature of plastic pollution

Plastics pervade modern life. They are integrated into and permeate every aspect of life.⁸⁶ UNEP notes that their low cost makes them convenient to use and ubiquitous, rendering them one of the greatest environmental challenges.⁸⁷

This paper does not discount the fact that major industries, especially those producing and using fossil fuels, contribute significantly to the plastic phenomenon and consequently to pollution related thereto. It acknowledges that both producers and consumers have a responsibility in reversing plastic pollution and acknowledges that concepts such as circularity⁸⁸ and extended producer responsibility⁸⁹ are important in addressing the plastic menace. However, a significant part of plastic pollution is also partly dependent on individual behavior. Thus, there is potential in appealing to individuals to alter behavior in the use or disposal of plastics.

Plastics are used in many sectors including in healthcare, energy conservation, material preservation, construction, fashion, transportation to agriculture.⁹⁰ For instance, almost every packaged product in the world has plastic

⁸⁵ Appleyard D, "The environment as a social symbol: Within a theory of environmental action and perception." 45(2) *Journal of the American Planning Association*, 1979, 143-153.

⁸⁶ Carpenter E, Wolvertson S, Plastic litter in streams: The behavioral archaeology of a pervasive environmental problem, 84, *Applied geography*, 2017, 93-101.

⁸⁷ UNEP, 'Single-Use Plastics: A Roadmap for Sustainability' <<https://www.unep.org/resources/report/single-use-plastics-roadmap-sustainability>> accessed November 29, 2023.

⁸⁸ Forrest A, Giacobazzi L, Dunlop S, Reisser J, Tickler D, Jamieson A, Meeuwig, J, 'Eliminating plastic pollution: how a voluntary contribution from industry will drive the circular plastics economy' *Frontiers in Marine Science*, 2019, 627.

⁸⁹ Tumu, K, Vorst, K, Curtzwiler, G, Global plastic waste recycling and extended producer responsibility laws. 348, *Journal of Environmental Management*, 2023, 119242.

⁹⁰ Andrady L, Neal A, Applications and societal benefits of plastics, 364(1526) *Philosophical Transactions of the Royal Society B: Biological Sciences*, 2009, 1977-1984.

components, especially in business to consumer applications.⁹¹ They are found in the environment, in the following order based on their magnitude- cigarette butts, drinking bottles, bottle caps, wrappers, grocery bags, plastic lids, straws and stirrers.⁹² Yet, UN General Assembly President notes that there is a “throwaway culture” of these plastic wastes,⁹³ contributing to approximately 47% of the plastic waste. Much of these plastics are thrown away a few minutes after use.⁹⁴ Research demonstrates that plastic pollution requires “fundamental changes in infrastructures and lifestyles, as well as cultural and economic transformation processes.”⁹⁵ Informal law provides an important conscious driven behavioral change in communities.

V. Role of informal norms in ending plastic pollution

Undoubtedly, plastic pollution impacts our lives either positively or negatively. While formal laws may regulate plastic production, use and disposal, this part in discussing the role of informal norms in plastic pollution argues that in fact, informal laws may well be more powerful catalysts of ending the crisis than formal laws. This conclusion is supported by combining the features of informal norms and the nature of plastic pollution discussed above.

Plastic pollution negatively impacts the environmental, social and economic lives of people.⁹⁶ It is destabilizing cultural institutions, kinship ties, people’s identity and is causing rapid changes to people’s way of life and traditions.⁹⁷ The role of culture in societies cannot be gainsaid. It creates cohesive institutions and

⁹¹ UNEP, ‘Single-Use Plastics: A Roadmap for Sustainability’ <<https://www.unep.org/resources/report/single-use-plastics-roadmap-sustainability>> accessed November 29, 2023.

⁹² UNEP, ‘Single-Use Plastics: A Roadmap for Sustainability’ <<https://www.unep.org/resources/report/single-use-plastics-roadmap-sustainability>> accessed November 29, 2023.

⁹³ Kőrösi C, PGA remarks to World Environment Day commemoration, President of the 77th session of the General Assembly, World Environment Day Commemoration, 5 June 2023 —<<https://www.un.org/pga/77/2023/06/05/pga-remarks-to-world-environment-day-commemoration/>> accessed November 23, 2023.

⁹⁴ UNEP, ‘Single-Use Plastics: A Roadmap for Sustainability’ —<<https://www.unep.org/resources/report/single-use-plastics-roadmap-sustainability>> accessed November 29, 2023.

⁹⁵ Wiefek, J, Steinhorst J, Beyerl K, Personal and structural factors that influence individual plastic packaging consumption—Results from focus group discussions with German consumers. *Cleaner and responsible consumption*, 2021, 100022.

⁹⁶ UNEA Resolution 5/14, End Plastic Pollution: Towards an International Legally Binding Instrument (2022) available at —<<https://digitallibrary.un.org/record/3999257?ln=en>> accessed October 20, 2023.

⁹⁷ Yose P, Thondhlana G, Fraser G, 194, Conceptualizing the socio-cultural impacts of marine plastic pollution on human well-being—a perspective. *Marine Pollution Bulletin*, 2023, 115285.

institutionalizes acceptable behavior. As cultural systems change, communities are engaged in constant adaptation.⁹⁸ In addition to legal adaptation rules, societies had developed their tools either before arrival of formal rules or in complementarily with formal rules. Recognizing these cultural attributes of environmental conservation is important to addressing environmental challenges.

Solving environmental problems requires focused and sustained efforts. Targeted responses utilize localized cultural dynamics to achieve a desired objective. People's culture often demonstrates their relationships with the environment. Thus, targeting environmental solutions through people's culture not only incorporates them in conservation constituencies, but it also reinforces their relationships with nature. Interventions that "ignores social norms [culture] and imposes a new of the world external to the target group be[is] particularly ineffective."⁹⁹

The power of ethics and morality in influencing human behavior lies in their convincing power and narrative formulation. In relation to land, Leopold argues that "[A] thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise".¹⁰⁰ This turns unsustainable land use from a mere legal issue, to one of deep-rooted ethical considerations. Phrased this way, plastic pollution is not only a legal wrong, but also unethical and morally reprehensible. Admittedly, there is no consensus on what is right or wrong. However, a large part of humanity agrees on basic rights and wrongs. For instance, the authors of this paper are not aware of any moral justification for littering.

Narratives underlying a rule that constrains human behavior influence its acceptability and obedience.¹⁰¹ Thus, a successful law always has a convincing narrative as human beings insist on knowing why it exists. For instance, while climate change law formulates climate change as a scientific concept requiring scientific solutions, conceptualization of climate change as a social phenomenon, as a partly cultural phenomenon or as a disruptive phenomenon ecologically, socially and politically collapsing traditional institutions, as a complex, multifaceted phenomenon makes it "at once a reality, an agenda, a problem, a context, a

⁹⁸ Bremer S, Glavovic B, Simon Meisch, Paul Schneider, and Arjan Wardekker. 'Beyond rules: How institutional cultures and climate governance interact' 12(6) *WIREs Climate Change*, 2021, 1-20.

⁹⁹ Sen A, 'How does culture matter?' In Rao, V and Walton, M. (Eds) *Culture and Public Action*, Stanford University Press, Stanford, 2004.

¹⁰⁰ Leopold, A., 1949. *A Sand County Almanac*, Oxford: Oxford University Press, 1949.

¹⁰¹ Bremer S, Glavovic B, Meisch S, Schneider P, Wardekker A, 'Beyond rules: How institutional cultures and climate governance interact' 12(6) *WIREs Climate Change*, 2021, 1-20.

narrative and a discourse [...] that allows for different ways of knowing to play a legitimate part in framing our personal, social and institutional responses”.¹⁰² This formulation has been shown to change peoples’ attitudes towards climate change.¹⁰³ Thus, using informal norms to reframe plastic pollution through the lenses of rhetoric, emotions, ethics, religion intersecting beliefs, values and cultures allows people to view plastic pollution through normativity of socially delineated and held values about desirability of handling plastic waste. While the law may ban dumping of plastics in forests because wild animals are likely to ingest them and die, it may be less effective compared to when religion prohibits dumping plastics in forest because those places are holy, or animals are sacred, or dumping is immoral.

At the center of plastic pollution is irresponsible human actions. This places human beings, at an individual level or a relatively small group, an important unit in addressing plastic pollution. The next common items are used at an individual level amplifying the role of an individual in stemming plastic pollution. Further, re-using, simple recycling and proper disposal requires intervention from an individual and perhaps a relatively small group. While formal law may be a useful tool in regulating use, disposal, re-use and recycling, it inherently has three limitations. It can only regulate so much, faces cultural resistance¹⁰⁴ and its effectiveness is only dependent on robustness of enforcement measures. For instance, while several African countries have banned use of plastics in varying products, plastics continue to be pervasive, and enforcement of the proscriptions remains a challenge.¹⁰⁵

The most prevalent feature of formal law is its coercive power enforced through state instrumentalities. The threat of punishment and consequences from legal violations contribute to its obedience. However, coercion is only effective with robust enforcement throughout the detection, investigation, prosecution and conviction continuum. A slip in any of these makes coercion a

¹⁰² Geoghegan H, Leyson C, ‘On climate change and cultural geography: farming on the Lizard Peninsula, 113, Cornwall,’ UK, *Climatic Change*, 2012, 55-66.

¹⁰³ Geoghegan H, Leyson C, ‘On climate change and cultural geography: farming on the Lizard Peninsula,’ 55-66.

¹⁰⁴ Nicholls J, ‘Ban on Plastics in Africa – a Story of Smuggling and Success’ available at <<https://www.safaribookings.com/blog/ban-on-plastics-africa-story-smuggling-success#:~:text=Plastic%20bans%20to%20date%20have,three%20are%20changing%2C%20and%20fast>> accessed November 14, 2023.

¹⁰⁵ Nicholls J, ‘Ban on Plastics in Africa – a Story of Smuggling and Success’ available at <<https://www.safaribookings.com/blog/ban-on-plastics-africa-story-smuggling-success#:~:text=Plastic%20bans%20to%20date%20have,three%20are%20changing%2C%20and%20fast>> accessed November 14, 2023.

mere suggestion depriving the law of its most important character. Enforcement relationship between formal law and informal norms is dependent on congruency. “When informal norms are congruent with formal rules, social networks function to reduce the enforcement costs of formal rules. Normative control benefits of social networks obtain by subsuming the costs of formal enforcement”¹⁰⁶. Further, when “informal norms conflict with formal rules, then social networks function to increase the formal enforcement costs by “bending the iron bars” of formal rules”.¹⁰⁷ Conversely, “the normative capacity of social networks is vitiated by formal institutions.”¹⁰⁸ Thus, informal norms present an important enforcement partner in stemming plastic pollution.

Informal norms are important pre-requisites of effective formal laws. Often, formal rules are heavily reliant on informal institutions. A study conducted by Cooter examined how formal laws are dependent on informal institutions and concluded that expressive language of a law determines and increases its effectiveness in the society if the expression resonates with social norms.¹⁰⁹ Additionally, internalization of a law depends largely on the level of compatibility with accepted informal norms. Finally, he observed that formal deterrence aligned with informal sanctions complement each other attaining a greater deterrence. Thus, in laws seeking to root out plastic pollution, informal norms provide an institutional framework on which formal rules can be used.

VI. Conclusion

Formal law does not control all aspects of human life. In enforcement of the any treaty and the derivative national laws, parallel informal norms continues to influence people’s behavior shaped by their religion, culture, values, ethics among others. The plastics treaty will be no different. It will have to interact with informal laws, which are pervasive and govern almost every aspect of human life. The ability to prescribe acceptable behavior even in their most intimate settings where law is absent, and the self-enforcing advantage presents a great opportunity for stemming plastic pollution.

¹⁰⁶ Peng, Y., 2010. ‘When formal laws and informal norms collide: Lineage networks versus birth control policy in China’ 116(3) *American Journal of Sociology*, 770-805.

¹⁰⁷ Peng, Y., 2010. ‘When formal laws and informal norms collide: Lineage networks versus birth control policy in China’, 770-805.

¹⁰⁸ Peng, Y., 2010. ‘When formal laws and informal norms collide: Lineage networks versus birth control policy in China’, 770-805.

¹⁰⁹ Samuyimen E, Eghosa O. Ekhatior ‘Improving Environmental Protection in Nigeria: A Reassessment of the Role of Informal Institutions’ 13(1), *The Journal of Sustainable Development, Law and Policy*, 2022, 162-199.

