

## Environmental Justice Framework Based on Local Wisdom Model

Imamulhadi<sup>a</sup>, Idris<sup>b</sup>, Eva Nuriyah H.<sup>c</sup>

### ABSTRACT

Indonesia's environmental justice system currently does not provide environmental law objectively. The philosophy, paradigm, approach, and objectives of environmental law as a regulatory basis are not applied by judges as intended by environmental law theories and concepts. This article aims to find an ideal environmental justice model. By applying a normative-empirical approach and a comparative method, as well as being based on qualitative juridical analysis, this article explores the values and principles contained in the local wisdom of indigenous communities that are relevant to becoming the basis for an environmental court model. This article concludes that the main problem that hampers environmental law enforcement at the court level is that the philosophy, paradigm, and methods of environmental law are marginalized due to the barriers of civil, criminal, and state administrative law regimes. The ideal environmental justice model is one that is based on the local wisdom values of indigenous communities, where environmental courts should be integrated, judged by certified competent judges, independent, and able to accommodate core environmental law theories and concepts.

**Keywords:** customary law; environmental justice; environmental law; local wisdom.

### INTRODUCTION

As a social institution aimed at protecting the environment, environmental law possesses unique characteristics that distinguish it from other legal subsystems. Environmental law regulates not only human-to-human relationships but also human-to-environment relationships within the context of humans as components of nature, as a consequence of the interdependence between humans and the environment within the ecosystem.<sup>1</sup> Therefore, environmental law has different philosophies, paradigms, and methods.

At the enforcement level in the judiciary, environmental law faces significant challenges. The uniqueness of environmental law, which forms its core, is constrained by barriers from other legal subsystems such as criminal law, civil law, and administrative law. Environmental legal disputes, typically resolved through district courts or administrative courts, render their mechanisms less effective and less practical because a case that may involve multiple types of violations cannot be addressed through a single-door system.<sup>2</sup> Therefore, it is necessary to consider the establishment of separate environmental courts.

The initiative to establish a specialized environmental justice system or even separate environmental courts from conventional judicial bodies has been underway in several countries for some time. The need for the establishment of environmental courts fundamentally stems from the

---

<sup>a</sup> Faculty of Law Universitas Padjadjaran, Jalan Ir. Soekarno KM. 21 Jatinangor, Indonesia, 45363, email: [imamulhadi@unpad.ac.id](mailto:imamulhadi@unpad.ac.id).

<sup>b</sup> Faculty of Law Universitas Padjadjaran, Jalan Ir. Soekarno KM. 21 Jatinangor, Indonesia, 45363.

<sup>c</sup> Faculty of Social and Political Sciences Universitas Padjadjaran, Jalan Ir. Soekarno KM. 21 Jatinangor, Indonesia, 45363.

<sup>1</sup> Otto Soemarwoto, *Analisis Mengenai Dampak Lingkungan*, Gadjah Mada University, Yogyakarta: 2009, pp. 18-19.

<sup>2</sup> Aju Putrijanti dan Irma Cahyaningtyas, "Environmental Court and Principle of Good Environmental Governance in Enforcing Environmental Law", *Varia Justicia*, Vol. 19, No. 1, 2023, pp. 34-35.

gap between the content of legislation and its enforcement at the judicial level. Judicial bodies are expected to enforce the law regardless of the effectiveness of sanctions available at the normative level or the expertise of human resources within existing judicial bodies.<sup>3</sup> The trend of establishing special courts/tribunals to handle environmental cases with the aim of providing easier access to justice for aggrieved parties has become a global phenomenon, including in developing countries<sup>4</sup> such as Indonesia.

The Law Number 32 of 2009 concerning Environmental Protection and Management in the Republic of Indonesia (Environmental Law) regulates environmental legal norms that serve as the basis for law enforcement in realizing environmental law in practice. The Environmental Law, both explicitly and implicitly, has provided the philosophical foundation, paradigm, approach, and objectives for regulating environmental issues in accordance with the theories and concepts of environmental law. However, in the implementation at the judiciary level, as seen in cases such as PLTU Cirebon Power, PT Semen Indonesia, PT Kalista Alam, and PT Nasional Sago Prima, it is evident that environmental legal norms are not implemented in line with the theories and concepts underlying environmental law.<sup>5</sup> In these cases, environmental legal norms are not implemented objectively. This condition results in court decisions on cases brought before the judiciary being highly dependent on the judge's inclination. If the judge favors environmental protection, the decision tends to favor the environment (granted), whereas judges inclined towards development tend to reject environmental compensation claims. The subjectivity of judicial decisions is unacceptable because ideally, environmental cases should be adjudicated objectively, based on the theories and concepts of environmental law as implied in the philosophical, paradigmatic, approach, and regulatory objectives of its norms.

The questioning of the objectivity of judicial decisions leads to the hypothesis<sup>6</sup> that environmental law theories and concepts are marginalized by civil law, criminal law, and administrative law theories and concepts. Judges tend to prioritize these legal regimes because environmental justice is still entrusted to civil, criminal, and administrative courts. One alternative to establish environmental law theories and concepts as the primary basis for understanding and implementing environmental cases in court is to consider the establishment of environmental courts as institutions dedicated to environmental justice. However, this raises the question: what is the ideal environmental justice framework that ensures the strengthening of the implementation of the philosophical, paradigmatic, approach, and regulatory objectives of environmental legal norms in line with environmental law theories and concepts?

Based on the background issues outlined, the identification of the problem focuses on answering the question: what is the ideal model of environmental justice? This article aims to propose a new concept for an environmental court model in Indonesia, formulated based on the wisdom of

---

<sup>3</sup> Domenico Amirante, "Environmental Courts in Comparative Perspective: Preliminary Reflections on the National Green Tribunal of India", *Pace Environmental Law Review*, Vol. 29, 2012, p. 442.

<sup>4</sup> *Ibid.*, p. 445.

<sup>5</sup> See Imamulhadi, Idris, Eva Nuriyah H, *Peradilan Lingkungan*, Yogyakarta, K-Media, 2021, pp. 60-182.

<sup>6</sup> Preliminary conclusion to be substantiated in the discussion.

indigenous communities in Indonesia and abroad, as well as existing environmental court practices in several countries. By exploring the philosophical foundations, paradigms, approaches, and objectives of justice practiced by indigenous communities wisely, and by examining the strengths of environmental court practices in various countries, the answer to the identified problem can be formulated by the researcher.

## METHODS

This research delves into the law and its institutions through its social dimensions, utilizing both normative and empirical legal approaches. It seeks to analyze the functioning of the law and its social impacts by exploring the social legal facts occurring in society, particularly in indigenous communities' courts and legal systems. This study employs a descriptive-analytical method, using existing legal materials to critically evaluate them. Additionally, it is an applied research aiming to find solutions to legal application issues. Research data is collected through literature review and interviews, with interviews serving primarily to complement and verify existing literature data. To formulate an ideal model of environmental justice based on indigenous wisdom, the researcher conducts a random comparison of court practices in indigenous communities across several countries. Conclusions drawn from the inventory of research data are analyzed qualitatively from a legal standpoint.

## DISCUSSION

### Indigenous Community-Based Judicial Practices

The terminology 'indigenous people' in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) implicitly refers to indigenous communities, and in meaning, the term is also synonymous with 'traditional people'. Referring to this equivalent terminology, the term 'indigenous people wisdom' is also synonymous with the wisdom of indigenous communities. Indigenous community wisdom, often interchangeably referred to as 'local wisdom' in other terms, embodies a body of knowledge, understanding, attitudes, behaviors, and values or cultures of indigenous communities that are wise, good, and right.<sup>7</sup> Indigenous community wisdom, with reference to this meaning, encompasses the following elements:

1. Knowledge and/or understanding and/or attitudes, and/or behaviors and/or values, and/or culture;
2. Indigenous communities;
3. Wise, good, and right.

This means that the wisdom of indigenous communities can take the form of knowledge and/or understanding and/or attitudes, and/or behaviors and/or values, and/or culture that originates from and is upheld or maintained by indigenous communities through generations. The adherence to and

---

<sup>7</sup> See Imamulhadi, *Penegakan Hukum Lingkungan Berbasis Kearifan Masyarakat Adat Nusantara*, Bandung: Unpad Press, 2011, pp. 170 – 171.

implementation of these elements is believed by indigenous communities to contain wisdom, goodness, and truth. Knowledge and/or understanding and/or attitudes, and/or behaviors and/or values, and/or culture do not constitute wisdom if they are not wise, not good, and do not contain truth. Therefore, indigenous wisdom requires elements of wisdom, goodness, and truth.

In practice, both in Indonesia and in several other countries, indigenous communities have their own values in resolving issues faced, whether among indigenous communities in general, or issues related to the environment. Indigenous communities have prevailing values in regulating human-to-human relationships and human-to-environment relationships. These values, when violated, prompt enforcement efforts by indigenous functionaries, where the enforcement process embodies wisdom, goodness, and truth. The values in the justice system organized by indigenous communities will be described and analyzed in the following discussion.<sup>8</sup>

### **The Traditional Justice System of the Dayak People in Kalimantan**

The Dayak people are an indigenous community inhabiting the island of Kalimantan (Borneo). In adjudicating issues that arise, the Dayak community adheres to the principles of restoration, balance, and justice. Restoring relationships between conflicting parties and restoring the disturbed balance of nature due to violations of customary norms are the main objectives and targets of the administration of justice. When deciding a case, judges adhere to the principle that if there is excess, the gods will be angry, and if there is a lack, the ancestors will be angry<sup>9</sup>, so decisions must be made in balance. For the Dayak indigenous community, justice is the balance between human-to-human relationships and the balance between human-to-nature relationships. The adjudicators are the customary chiefs/temenggung, who usually also serve as village heads. Customary chiefs are believed to have a connection with gods or ancestral spirits. Due to their ability to communicate and their relationship with gods or ancestral spirits, Dayak customary chiefs are respected by members of the indigenous community, so their decisions and orders are effectively implemented.<sup>10</sup>

Decisions are made through customary deliberation, which involves negotiations between the Temenggung as the customary chief and members of the indigenous community, as well as the conflicting parties. In traditional justice, customary deliberation constitutes the core mechanism of adjudication. For the guilty party, there is a moral obligation to admit guilt and accept customary sanctions.<sup>11</sup> The sanctions imposed by the Temenggung serve two main purposes: restoring harmony among members of the indigenous community and restoring the balance of nature disrupted by the conflict. Sanctions aimed at restoring harmony among

---

<sup>8</sup> See: Imamulhadi, Idris, Eva Nuriyah H, *Loc.Cit.*

<sup>9</sup> ICLRE, 2013 "Peradilan Adat: Keadilan yang Ternafikan", <<http://lbtt.or.id/index.php/publikasi/opini>>, [accessed on 17/08/2023].

<sup>10</sup> Raonigel Talu Maraga, "Penyelesaian Sengketa Kepemilikan Tanah di Lingkungan Masyarakat Adat Dayak Kanayatn Kecamatan Menyuke Kabupaten Landak Provinsi Kalimantan Barat", Thesis, Universitas Diponegoro, 2007, p. 69.

<sup>11</sup> Deni Satria, "Penerapan Hukum Adat Dayak Kanayatn dalam Penyelesaian Kasus Hukum Pidana di Kabupaten Landak dan Dasar Pemikiran Upaya Pengaturannya ke dalam Peraturan Daerah", Thesis, Universitas Tanjungpura, (without year), p. 7.

members of the indigenous community typically take the form of customary fines payable in traditional goods. Meanwhile, sanctions aimed at restoring the balance of nature may involve the obligation to conduct traditional ceremonies, usually ordered for perpetrators who have committed serious environmental violations.<sup>12</sup>

### **The Traditional Justice System in Papua**

The traditional justice system of the Port Numbay indigenous community in Papua is conducted based on the principles of deliberation (consensus-based decision-making) and restorative justice, aiming for the restoration of both interpersonal relationships among conflicting parties and the environment disrupted by violations.<sup>13</sup> The customary trial process is led by the customary chief (*Ontofro*) assisted by the deputy customary chief (*Awi*) and the customary secretary, with the presence of the conflicting parties and other members of the indigenous community. The trial begins with the sequential presentation of complaints followed by a consensus-based discussion led by the customary chief. The chief then renders a decision in the form of an order, considering prevailing customary values, the severity of the violation, the grievances of the affected parties and the perpetrators, as well as the opinions of the participants.<sup>14</sup>

Sanctions imposed for serious violations include fines and the organization of traditional ceremonies. Fines are paid in traditional goods or livestock. The sanction of organizing traditional ceremonies, such as the stone burning ritual, involves the entire indigenous community, including the violator or both conflicting parties. The stone burning ritual symbolizes the restoration of fractured relationships caused by conflicts.<sup>15</sup> The decisions made by the customary chief, who also serves as the presiding officer, are effectively obeyed and implemented because the indigenous community believes that the customary chief has a connection with the spirits of the ancestors.<sup>16</sup>

### **The Traditional Justice System in Bali**

The traditional justice system of the Balinese indigenous community is interpreted as a traditional trial (*sidang adat*). The session is led by the customary leader (*Prajuru*) assisted by customary functionaries such as the deputy leader, the customary secretary, and village heads. The trial process adheres closely to the principles of consensus-based decision-making, familial

---

<sup>12</sup>Yohanes Bahari, "Model Resolusi Konflik Berbasis Pranata Adat pada Masyarakat Adat Dayak Pranayasn di Kalimantan Barat", *Jurnal Wawasan*, Vol. 13, 2007.

<sup>13</sup>Sara Ida Magdalena Awi, "Para-Para Adat Sebagai Lembaga Peradilan Adat Pada Masyarakat Hukum Adat Port Numbay di Kota Jayapura", Thesis, Universitas Udayana, 2012, pp. 8-10.

<sup>14</sup>*Ibid.*, pp. 11-14.

<sup>15</sup>Hari Suroto, 2019 "Makna Upacara Bakar Batu Suku Dani", <https://arsip.jubi.id/makna-upacara-bakar-batu-suku-dani/>, [accessed on 17/08/2023].

<sup>16</sup>Sara Ida Magdalena Awi, *Op.Cit.*, pp. 14-15.

ties, peace, harmony, reconciliation, restorative justice, balance, and propriety. These principles serve as guidelines and references for the customary leader in making decisions.<sup>17</sup> The traditional justice institution in Bali (*Kertha Desa*) adjudicates cases of customary law violations and disputes among members of the indigenous community. This institution does not handle criminal or civil cases.<sup>18</sup>

The trial begins with either a report received by the customary leader or a complaint from the disputing parties. For violations, the leader must take active steps, not merely wait for reports, as the customary leader acts as a broader enforcer of customary law. In cases of disputes among members of the indigenous community, the customary leader takes a passive role. For cases involving customary law violations, the leader adheres to the principle of adjudication emphasizing the fulfillment of obligations as prescribed by custom. Meanwhile, in resolving disputes, the customary leader adheres to the principle of harmony and concord through consensus-based decision-making.<sup>19</sup>

### **The Iroquois Indigenous Community in Canada**

The Iroquois indigenous community in Ontario, Canada, practices a unique and effective mechanism for adjudicating disputes. The Clan Council, composed of clan elders, serves as the adjudicating body for crimes or violations committed by members of the clan. The seriousness of the violation determines the role of the Clan Council. Serious offenses fall under the primary jurisdiction of the Clan Council, while minor offenses are resolved through the involvement of family elders.<sup>20</sup> The traditional justice system of the Iroquois community relies on deliberation and negotiation with principles of restoration and reconciliation. Sanctions imposed by the Clan Council involve restitution or payment that becomes the collective responsibility of the clan or the offender's family. Additionally, the offender may face sanctions such as ostracism and public humiliation.<sup>21</sup>

The Iroquois traditional justice mechanism, preceded by an investigation process and the application of trials, is considered by Michael Coyle as a unique, sophisticated, flexible method that prevents lengthy and convoluted formalities. Apart from having the authority to impose penalties, the Clan Council also functions as investigators, negotiators, and mediators. Physical punishment is avoided as much as possible, while sanctions such as ostracism, expulsion, and public humiliation significantly minimize the budget required for law enforcement processes.

---

<sup>17</sup>I Ketut Sudantra, (et.al), "Sistem Peradilan Adat dalam Kesatuan-Kesatuan Masyarakat Hukum Adat Desa Pakraman Bali, *Jurnal Kajian Bali*, Vol. 7, No. 1, 2017, p. 85.

<sup>18</sup>*Ibid.*, p. 92.

<sup>19</sup>*Ibid.*, p. 99.

<sup>20</sup>Michael Coyle, "Traditional Indian Justice: A Role for The Present?", *Osgoode Hall Law Journal*, Vol. 24, No. 3, 1986, pp. 605-633.

<sup>21</sup>*Ibid.*

### **The Traditional Justice System in Kenya**

The traditional justice system in Kenya, as described by Francis Kariuki, reflects the broader traditional justice systems across Africa. These systems are based on principles of justice, consensus, restoration, peace, truth, dialogue, resolution, and religious-magical elements, as well as communal interests and social harmony. In resolving disputes, the solutions they decide upon are oriented towards the victimized community, all stakeholders, and social harmony.<sup>22</sup> In the traditional justice systems across Africa, the adjudicating body is typically led by the Village Chief and family elders. They are competent to handle all types of criminal cases and disputes.<sup>23</sup> Initially, disputes are handled at the family level (*Lolwapa*). If resolution fails at this stage, the matter is escalated to the extended family level (*Kgotlana*). If mediation processes fail to produce a decision, the issue is then brought to the customary court (*Kgotla*).

In traditional justice, judges strive to deliver reconciliation-oriented decisions that are acceptable to all parties involved. Reconciliation considers the goal of restoring balance and harmony. Punishments imposed by indigenous judges may involve orders for various forms of restitution to the aggrieved party, such as orders to provide livestock or harvest yields. Judges often also impose orders of ostracism against those found to be at fault.<sup>24</sup>

### **Traditional justice System in Pakistan**

The traditional justice system, known as *penchayat*, is practiced in traditional villages in Pakistan and Bangladesh. The system is administered by the Village Elder Council, consisting of five village elders.<sup>25</sup> The decisions made by the Village Elder Council in the *penchayat* system are highly effective as they are adhered to and implemented by the parties involved. The effectiveness of implementing decisions is greatly influenced by the authority of the council members. The *penchayat* justice mechanism begins with the submission of grievances from the disputing community to the Village Elder Council. Subsequently, the issue is discussed collectively, including with the disputing parties, to find a conflict resolution. In making legal decisions, the Village Elder Council always adheres to relative justice and prioritizes the preservation of the honor of the parties involved.

### **The Traditional justice System of Gjakmarrja in Albania**

The Gjakmarrja justice system employs mediation with the principle of restorative justice. This principle strongly encourages mediators to foster reconciliation among the

---

<sup>22</sup> Francis Kariuki, "African Traditional Justice System", *Strathmore University Law School*, 2018, pp. 1-3.

<sup>23</sup> *Ibid.*

<sup>24</sup> United Nations Human Right, "Human Right and Traditional Justice System in Africa", 2016, pp. 17-34.

<sup>25</sup> Jawadir Kadir, "How Can the Traditional Justice System Help Resolve Conflicts between India and Pakistan", *Lancaster University*, 2018, pp. 1-3.

disputing parties. Reconciliation becomes the goal and objective of the mediation process as a long-term solution to resolve disputes.<sup>26</sup> Mediation as a dispute resolution model in the indigenous community of Albania aims to restore honor. The restoration of honor for those whose honor has been violated is a prerequisite for reaching a peace agreement before reconciliation. The *gjakmarrja* mediation process by the indigenous community of Albania consists of four steps: cessation of confrontation (*status quo*), dialogue, formulation of solutions, and reconciliation. Mediators visit both the offended party and the offender to engage in dialogue. Mediators strive to encourage the offender to acknowledge their mistakes and be willing to apologize, while also encouraging the offended party to forgive and provide space for reconciliation.<sup>27</sup>

### Existing Environmental Courts Model

#### The Operationally Independent Environmental Court Model

The Land and Environmental Court of Australia (Australia LEC) is one of the operationally independent environmental court models recognized as part of the national judiciary system. The independence of the Australia LEC is acknowledged by the United Nations as a best practice and an ideal model desired by countries around the world.<sup>28</sup> The jurisdiction of the Australia LEC is limited to the state of New South Wales. Its authority includes conducting feasibility assessments, judicial reviews, criminal prosecutions, civil enforcement, and civil claims related to environmental planning, land, mining, etc.<sup>29</sup> This court model is also practiced in New Zealand. The New Zealand Environmental Court has 9 certified environmental judges and 15 trained environmental commissioners. The independent environmental court in New Zealand practices Alternative Dispute Resolution (ADR).<sup>30</sup> Another model of an independent environmental court is the Court of Environmental and Agrarian Issues in the State of Amazon, Brazil. An innovative solution practiced by this court is giving environmental offenders the voluntary option to choose between imprisonment or paying fines.<sup>31</sup>

#### Decisionally Independent Environmental Court Model

Environmental courts that fall under this model include the Planning and Environment Court of the State of Queensland, Australia, and the Environmental Division of the High Court, Vermont, USA. Administratively, these environmental courts are under the supervision of the general courts. However, substantively, judges have independence in terms of procedures, rules of engagement, and decision-making.

---

<sup>26</sup>Suzanna Pratt, "Gjakmarrja: Albanian Blood Feud and Restorative of Traditional Law", Working Paper, 2013, p. 2.

<sup>27</sup>*Ibid.*, p. 9.

<sup>28</sup>*Ibid.*, p. 21.

<sup>29</sup>Muhar Junef dan Moh. Husain, "Pembentukan Pengadilan Khusus Lingkungan Sebagai Wujud Tanggung Jawab Negara pada Upaya Keadilan Ekologis", *Jurnal Penelitian Hukum De Jure*, Vol. 21, No. 1, 2021, p. 67.

<sup>30</sup>Suzanna Pratt, *Op.Cit.*, p. 22.

<sup>31</sup>*Ibid.*, p. 23.

A best practice in the Planning and Environment Court of the State of Queensland is the presence of expert judges appointed based on their knowledge, expertise, and interest in the field of environmental protection. Similarly, in the Environmental Division of the High Court, Vermont, USA, best practice involves the presence of specialized judges who are experts in environmental protection, science, and technology. Additionally, the trial procedures are flexible and specifically designed for judges, allowing them room for innovation.<sup>32</sup>

#### **Partnership with Multidisciplinary Approach Model (Mix of Law-Trained and Science-Trained Judges)**

This model is practiced in the Environmental and Land Court of Sweden and the Environmental Court of Chile. The practice of this court model is driven by the fact that environmental issues are complex and intertwined with science, posing challenges for judges to comprehend scientific and technical explanations provided by experts. To address this difficulty, judges who understand environmental issues from both a scientific-technical perspective and a legal perspective are needed. These two types of judges collaborate and share decision-making using a multidisciplinary approach. The combination of these two types of judges is expected to result in decisions that contribute to sustainable development because their considerations are based on scientific, rational, and sophisticated grounds.<sup>33</sup>

#### **Appointment of Judges from General Courts Model (General Court Designated Judges)**

The fourth court model, known as the Model of Appointment of Judges from General Courts, is found in the Philippines and Hawaii, USA. The main characteristic of this model is the absence of specialized environmental courts. Instead, judges from general courts are appointed and assigned to adjudicate environmental cases. The Supreme Court of the Philippines issued rules and procedures for handling environmental cases by designated judges in 2010.<sup>34</sup>

#### **Certification of Environmental Law Trained Judges Model**

The Model Certification of Environmental Law Trained Judges is practiced in Indonesia. The implementation of this model is motivated by the lack of understanding among judges in resolving environmental disputes. Therefore, the Supreme Court issued Decree of the Chief Justice of the Supreme Court Number 134/KMA/SK/IX/2011 concerning the Certification of Environmental Law Trained Judges. Based on this decree, environmental cases must be

---

<sup>32</sup> *Ibid.*, p. 24.

<sup>33</sup> *Ibid.*, p. 25.

<sup>34</sup> *Ibid.*, p. 26.

handled by judges who have been certified in environmental law.<sup>35</sup> In Indonesia, there is no specific designation for environmental courts or specialized environmental courts. Instead, general courts and administrative courts handle environmental cases. The trial process for environmental cases follows criminal, civil, and administrative procedures as usual. However, there are some specific aspects based on Law Number 32 of 2009 concerning Environmental Protection and Management, such as evidence, investigation process, prosecution, and the requirement for judges to be certified in environmental law.

Although there are no independent specialized environmental courts in Indonesia, judges in district courts and administrative courts are provided with training in environmental law and certification. From 1999 to January 2020, a total of 425 certified environmental law judges have been deployed across district courts and administrative courts.<sup>36</sup> For civil disputes such as lawsuits for compensation due to environmental pollution or damage, judges first encourage resolution through mediation. If mediation fails within a certain period, the case proceeds to be decided by the judge.

Parties dissatisfied with the decisions of district court judges and administrative court judges can file appeals and cassations. In this regard, the Supreme Court has appointed a Supreme Court Justice from academia specializing in environmental law. The presence of environmental law experts as Supreme Court Justices has brought hopeful prospects for the enforcement of environmental law in the courts. This was evident in the case of the burning of Rawa Tripa peatland in Meulaboh, Aceh. Justice Takdir Rahmadi, a professor from Andalas University, adjudicated the case in the cassation level, upholding the decisions of the district court and the high court. Relying on the principle of *indubio pro natura*, Rahmadi imposed a compensation and environmental restoration cost on PT. Kalista Alam amounting to IDR 366 billion.<sup>37</sup>

In Indonesia, the jurisdiction of judges certified in environmental law in district courts and administrative courts includes adjudicating cases related to environmental disputes, such as pollution, environmental damage, exceeding wastewater and emission quality standards, disturbances, unauthorized environmental permits for activities and/or projects, unauthorized management of hazardous and toxic waste (B3 waste), unauthorized waste dumping, unauthorized mining, unauthorized logging, unauthorized forest product utilization, environmental permits, issuing environmental permits without completing Environmental Impact Assessments (AMDAL) and Environmental Management Efforts (UKL-UPL), as well as forest and land burning.

In the researcher's observation, who often receives assignments to provide expert testimony in court cases concerning environmental matters, besides the positive aspects as

---

<sup>35</sup> Indah Nur Shanty Saleh dan Bitu Gadsia Spaltani, "Environmental Judge Certification in an Effort to Realize the Green Legislation Concept in Indonesia", *Law and Justice*, Vol. 6, No. 1, 2021, p. 4.

<sup>36</sup> Mahkamah Agung Republik Indonesia, 2023, "Daftar Hakim Peradilan Umum yang telah Memperoleh Sertifikat Lingkungan", <https://badilum.mahkamahagung.go.id/berita/pengumuman-surat-dinas/2895-daftar-hakim-peradilan-umum-yang-telah-memperoleh-sertifikat-lingkungan.html>, [accessed on 16/08/2023].

<sup>37</sup> See: Supreme Court of the Republic of Indonesia Decision Number: 651K/Pdt/2015.

outlined earlier, several weaknesses are still encountered. The model of certifying environmental judges as practiced in Indonesia, from legal considerations and judicial decisions, still indicates that judges have a limited understanding of environmental law and lack comprehension of non-legal sciences (*conditio sine qua non*), especially knowledge regarding the causal relationship between actions leading to the exceeding of environmental quality standards or environmental damage as grounds for meeting the elements of wrongful acts and resulting losses. Technically, judges generally face difficulty in understanding expert explanations on these matters. As a result, judges often hesitate whether the defendant has been proven to commit wrongful acts or not. The limited understanding of technical knowledge is reflected in the legal considerations of judges' decisions, which often lack satisfactory logical reasoning in environmental law.

### **Framework of Environmental Justice Model Based on Local Wisdom in Indonesia**

The judicial system adjudicating environmental disputes, especially in courts, still largely adheres to the existing legal regime. As a result, the paradigms of judges and disputing parties remain heavily influenced by criminal law, civil law, and administrative law. The theories and concepts of environmental law, which characterize environmental law, often fail to emerge in court due to being suppressed by the compartments of these legal regimes. Indeed, initially, environmental law was greatly influenced by civil law, criminal law, and administrative law, but in its development, environmental law has evolved into a distinct subsystem of law with its own unique characteristics.

The subsystem of environmental law possesses unique philosophies, paradigms, objectives, targets, methods, and principles that underlie its norms or rules. The subjects of environmental law are markedly different from those in general law.<sup>38</sup> As a legal subsystem aimed at protecting environmental interests, preserving environmental functions, and maintaining the balance of reciprocal relationships between living beings and their environment, environmental law serves and learns from the environment, accommodating developments in ecological sciences. The development of environmental law is highly reliant on ecological advancements, as law responds to ecological progress. Its philosophical foundation lays the perspective that law seeks to rectify human behavior patterns in harmony with nature, acknowledging that humans are inherently part of nature, coexisting with it, and reliant upon it.

Drawing from this eco-philosophy, the paradigm that views humans as the center of interest, thus legitimizing human domination, can no longer be sustained. Within this eco-philosophy, the anthropocentric view that considers human obligations and responsibilities towards nature as merely an expression of moral duties to fellow humans, wherein nature is regarded as a tool for human

---

<sup>38</sup> See: M. Daud Silalahi, "Lingkungan Sebagai Subjek Hukum dan Kewenangan Publik LSM Lingkungan", *Masalah Prosedure dalam Penyelesaian Sengketa Lingkungan*, Kerjasama Sekretariat Kerjasama Relevan Pengadilan Pencemaran dan Majalah Hukum dan Pembangunan, Jakarta: 1989.

interests,<sup>39</sup> is unjustifiable. The paradigm of ecocentrism has replaced anthropocentrism. Ecocentrism emphasizes that issues of morality are not solely related to humans but also involve environmental ethics and other ecological realities.<sup>40</sup>

Unlike the goals of law in general, which pivot around the protection of human interests, environmental law establishes its objectives to safeguard environmental interests, maintain the balance and sustainability of nature. In environmental law, order is directed towards preserving the relationship among the elements of the environment, where humans are just one of the interests intended to be safeguarded by the law. Regarding the interests to be protected, environmental law has recognized legal subjects other than humans. The legal subjects and interests to be protected by the environmental legal subsystem are very distinct and not found in the regimes of civil law, criminal law, and administrative law. The environment is transboundary and inherently holistic; its management cannot be carried out by a single sector but requires cross-sectoral and interdepartmental approaches. Due to its comprehensive nature, its examination cannot be conducted by a single discipline but must be studied from various disciplines (multidisciplinary).<sup>41</sup> For instance, in determining environmental pollution offenses, experts in exact sciences and social sciences must jointly determine them.

The target of dispute resolution in the field of law generally aims to restore the legal rights of the aggrieved parties. In environmental law, the predominant goal is the restoration of the environment. This is because the true victim is the environment itself. On the other hand, in criminal law, civil law, and administrative law, there exists a principle of "*in dubio pro reo*," where if there is doubt during the process of proving guilt, the judge must give a favorable decision to the defendant.<sup>42</sup> In environmental disputes in court, the implementation of this principle cannot be justified because based on the precautionary principle, if the judge is in doubt, then the judge must prioritize the interests of the environment (*in dubio pro natura*).<sup>43</sup> When handling environmental cases, judges are bound to apply legal principles agreed upon by environmental law experts.

In countries that implement the civil law judicial system, the divisions between civil law, criminal law, and administrative law are often prominent. These divisions significantly constrain the foundational substance of environmental law, dominating the legal references used by the parties involved. In practice, investigators, prosecutors, plaintiffs, defendants, legal advisors, and judges often do not fully understand environmental law. The philosophy, paradigm, approach methods, and principles of environmental law are still challenging for judicial elements during court proceedings. To generate conflict resolution formulations and legal decisions based on environmental law principles, the dispute resolution model, especially in courts, must be altered to fully incorporate

---

<sup>39</sup>Sutoyo, Paradigma Perlindungan Lingkungan Hidup, *Jurnal Hukum Adil*, Vol. 4, No. 1, 2013, p. 5

<sup>40</sup>Helen Koprina, "Evaluating Education for Sustainable Development (ESD): Using Ecocentric and Anthropocentric Attitudes Toward the Sustainable Development (EAATSD) Scale", *Environmental Sustainable Development*, Vol. 15, 2013, p. 611.

<sup>41</sup>Franky Butar-Butar, "Penegakan Hukum Lingkungan di Bidang Pertambangan", *Yuridika*, Vol. 25, No. 2, 2010, p. 152.

<sup>42</sup>JCT Simorangkir, (et.al), *Kamus Hukum*, Sinar Grafika, Jakarta: 2002, p. 73.

<sup>43</sup>Wahyu Risaldi, (et.al), "Penerapan Asas *in Dubio Pro Natura* dan *In Dubio Pro Reo* oleh Hakim Perkara Lingkungan Hidup", *Kanun Jurnal Ilmu Hukum*, Vol. 20, No. 3, 2018, p. 550.

environmental law. This adjustment would lead to the creation of formulations and decisions that are ideal from the perspective of ecological justice.

Indonesia has its own legal system, rooted in the nation's original legal system, the living law of the Indonesian people, namely customary law. Based on research findings, it appears that customary law, as local wisdom, also governs issues related to the environment and its judicial system. The legal system and environmental judiciary practiced based on the local wisdom of Indonesian society have significant and beneficial values. The environmental law and judiciary practiced therein are characterized by transcending legal regimes. The division and barriers between civil law, criminal law, and administrative law are unknown. The absence of these legal barriers is a distinctive characteristic that sets it apart from other legal systems. Indonesia's environmental judiciary system is highly capable of applying this local wisdom because customary law is the original law of the Indonesian nation. Therefore, it is reasonable for the model of Indonesia's environmental judiciary to be based on its local wisdom.

Basing on the reasons presented, as an effort to find an ideal environmental judiciary system that can break down the rigidity of legal regime barriers, ensure the implementation of environmental legal norms according to environmental law theories and concepts, and comprehensively implement environmental law,<sup>44</sup> it is necessary to formulate a comprehensive environmental judiciary model rooted in the wisdom of customary communities, supplemented with the best practices of environmental judiciary in several countries. This comprehensive environmental judiciary model is proposed to renew the existing environmental judiciary model. The envisioned model is expected to produce judicial decisions based on the philosophy, paradigms, approach methods, legal principles, and comprehensive environmental legal norms rooted in local wisdom as the original law of the Indonesian nation. With that in mind, the following is the framework for a comprehensive environmental judiciary model, including Material Law; Procedural Law; Scope of Environmental Judiciary.

### **Substantive Law**

Discussion of the judicial system cannot be separated from its substantive law, as the triggering factor for the functioning of the judiciary is the existence of violations of substantive law. Without violations of environmental norms or legal principles, environmental justice cannot be pursued. Regarding substantive environmental law that regulates which actions are prohibited, required, commanded, and allowed, the scope of discussion is determined by the understanding of the environment. In environmental law, the dominant object studied is the environment. In the literature, elements of the environment include space, both terrestrial, marine, and aerial, as well as elements

---

<sup>44</sup>The comprehensive holistic environmental justice model is a proposed model by researchers, wherein the environmental justice model is formulated by exploring indigenous community wisdom and supplemented with the strengths of existing environmental justice systems in several countries

of objects, forces, conditions, and living beings within which humans exist.<sup>45</sup> Based on this scope, the scope of environmental law includes spatial planning law, land law, water resources law, forestry law, maritime law, mining law, mineral and coal law, natural resource conservation law, and plantation law (not limited to this scope).

In the legislative framework of environmental regulations in Indonesia, several laws that fall within the scope of environmental law include the Environmental Protection and Management Law, Forestry Law, Spatial Planning Law, Plantation Law, Agricultural Law, Mining Law, Mineral and Coal Law, Geothermal Law, Natural Resource Conservation Law, Water Resources Law, Nuclear Energy Law, Fisheries Law, Agrarian Law, Small Islands, Coastal, and Shoreline Law. Thus, substantive environmental law in written form encompasses the principles and norms regulated in these laws. Regarding the model, the provisions regulated in environmental laws remain substantive law, supplemented by customary environmental law including customary principles and sanctions as specific characteristics of the proposed environmental judiciary model. The proposed customary law principles become part of substantive environmental law, including:

1. Principle of Natural Balance: This principle advocates for directing the planning, management, and control of environmental utilization towards maintaining natural balance. Everything in the universe is in equilibrium. Environmental law is tasked with preserving this balance to prevent disruption.<sup>46</sup>
2. Principle of Restoration: This principle dictates that all policies and legal decisions should aim towards environmental restoration. Restoration should be the primary goal of resolving disputes over environmental issues both in court and out of court.
3. Principle of Utilization According to Function and Allocation: Utilizing natural resources contrary to their function and allocation violates natural order, ultimately disrupting balance. Mountains serve as the earth's anchors and protect it from tremors; their existence fortifies the earth, thus mountains should only be utilized for their function as protected areas.<sup>47</sup>
4. Principle of Sustainable Utilization: This principle requires that policies and legal decisions do not allow excessive exploitation of the environment. The law must set limits to ensure environmental utilization is done in moderation. The law should be used to direct environmental utilization only to meet human needs in a humane manner.
5. Principle of Commonality: This principle demands that the law protects the safety of humanity. Even if an interest is desired by a large number of individuals, if it jeopardizes public safety, the law must prohibit it. The interest of many people to exploit the environment destructively does not fall within the meaning of commonality. However, the interest in the safety of humanity, even if advocated by only one person, falls within the meaning of commonality.<sup>48</sup>

---

<sup>46</sup>See: Imamulhadi, "Aspek Hukum Penataan Ruang: Perkembangan, Ruang Lingkup, Asas, dan Norma", *Jurnal Bina Hukum Lingkungan*, Vol. 6, No. 1, 2021, p. 127.

<sup>47</sup>See: Imamulhadi, *Op.Cit.*, p. 128.

<sup>48</sup>*Ibid.*, pp. 128-129.

To support an environmental justice model characterized by local wisdom, there are several sanctions based on local wisdom proposed to be part of the transformed environmental justice model in the current atmosphere, including:

1. Sanction of Exclusion, essentially this sanction punishes the guilty party if they file a permit that is not served, if they invite but are not fulfilled, if they are in dispute they cannot be assisted, if they want to partner, they cannot be accepted.
2. Sanction of Shame aims to embarrass the guilty party in front of the public, so that everyone knows that they have committed environmental pollution or damage. In the millennial era, the shame sanction can be carried out by displaying the profile of the guilty party along with their actions and the resulting damage to the wider community through various media information.
3. Sanction of Trusteeship, companies proven guilty of environmental damage or pollution must be declared incapable of utilizing the environment, therefore the company must be placed under state trusteeship. As a legal consequence of the company being placed under trusteeship, the company's directors have their rights temporarily frozen and the state takes over the management of the company by replacing them with professional-independent directors appointed by the state until it can be ensured that the company is undertaking environmental recovery, implementing all court decisions, and conducting its activities in an environmentally friendly manner.

### **Formal Law**

The procedural law that serves as the basis for environmental justice in this model basically mostly refers to the Criminal Procedure Code, Civil Procedure Code, Judicial Authority Law, with slight modifications sourced from the principles of justice based on local wisdom as a specially adapted characteristic. Different characteristics sourced from local wisdom as the basis of the environmental justice model include:

1. Principles of Environmental Justice
  - a. Principle of Restoration Decisions, the primary target and ultimate goal of judge and arbitrator decisions are the achievement of environmental restoration.
  - b. Principle of Consistency, judge decisions must be consistent, so that for similar cases, judge decisions fundamentally should not vary.
  - c. Principle of Equality Among Environmental Elements, as legal subjects, humans and other elements of the environment have equal legal status in court.
  - d. Principle of Peace, dispute resolution in court is done peacefully, each litigating party must prioritize achieving peace.

- e. Principle of Victim Protection, judges in resolving disputes in court must protect the interests of victims. Affected parties must receive protection regarding their rights, so judge decisions must include the restoration of victims' rights.
- f. Restoration and Reconciliation, each disputing party must restore disrupted relationships with the assistance of the role of reconciliation judges.

## 2. Environmental Guardian System

In the resolution of environmental disputes in court, environmental guardians must be present, namely legal subjects, both individuals and organizations, who have a love for the environment, consider themselves part of nature, and depend on nature. Environmental guardians must be involved as representatives of the environment. The argument for the existence of environmental guardians in environmental litigation is that in environmental disputes, the true victims are the environment itself. While it has been recognized that the environment is a legal subject with equal legal standing before the law as other legal subjects. As a legal subject that is a victim, the environment must be heard, accommodated in its interests, and made a reference for judges in deciding cases in court.

In court proceedings, environmental guardians are represented by jurors. Jurors are selected from individuals who have concern, love, and those who consider themselves part of nature, namely environmental activists who are consistent, honest, and have never been convicted of crimes. Environmental guardians have the authority to listen to, observe, respond to, and assess the guilt or innocence of the defendant or respondent. Whether someone accused or sued is guilty or not is determined by the environmental guardian. Similar to the jury system, in environmental justice, judges are responsible for affirming the opinion of environmental guardians and determining the punishment through their verdicts. Ideally, environmental guardians should number at least 5 individuals certified in environmental law. Before making a decision, environmental guardians consult with the judge.

## 3. Environmental Law Certification

All parties involved in litigation must have competence in environmental law, demonstrated by possessing environmental law certificates obtained through either formal education or courses. Investigators, prosecutors, lawyers, jurors as representatives of environmental guardians, career judges, and ad hoc judges who preside over environmental courts must possess environmental law certificates.

## 4. *Ad Hoc* Judge

The panel of judges adjudicating environmental disputes in court, aside from career judges, must also include ad hoc judges. Ad hoc judges are selected from individuals who possess technical competence in environmental issues, such as experts in ecology, environmental geology, environmental biology, environmental chemistry, and/or environmental physics. In addition to their technical competence, all ad hoc judges must also be certified in environmental law. Ad hoc judges are appointed on a case-by-case basis. The presence of ad hoc judges is crucial to support career judges in understanding technical issues

related to environmental matters, such as proving environmental pollution and damage. Legal experts alone are unlikely to understand issues of environmental pollution and damage. Legal experts are not competent to determine whether the defendant or respondent has exceeded the standards for water quality, air quality, disturbance standards, and environmental damage standards.

#### 5. Consolidated Prosecution and Lawsuit

The proposed environmental justice model opens up the possibility of removing legal regime barriers, where both prosecution and lawsuit can be filed simultaneously. If a lawsuit is to be combined with prosecution, the lawsuit enters through the indictment gateway. The prosecuting attorney includes both administrative state lawsuits and civil lawsuits along with the indictment. In the resolution of environmental disputes in court, only environmental judges who understand civil environmental law, criminal environmental law, and administrative environmental law are recognized. In environmental law, the presence of legal regime barriers is not ideal because environmental issues are cross-border and comprehensive, therefore their resolution should be approached with multidisciplinary and interdisciplinary methods.

### **Scope of Environmental Justice System**

Environmental justice falls under the jurisdiction of the general judiciary, institutionally located within the general courts with specialized chambers. The proposed specialized environmental court is a specialized chamber within the general courts with several specific authorities in terms of independence in decision-making, administration, human resources, financing, management, and rules of procedure. The specialized environmental court carries out a justice system involving examination, adjudication, and decision-making in cases: 1) related to the occurrence, alleged occurrence, or potential occurrence of environmental damage and/or pollution; and 2) all disputes related to the occurrence, alleged occurrence, or potential occurrence of violations of written and unwritten legal norms in the field of environmental law.

Resolution of environmental disputes in specialized environmental courts will no longer distinguish between civil, criminal, and administrative courts. Disputes are considered as one, namely environmental disputes, thus eliminating the distinction between civil judges, criminal judges, and administrative judges. Judges are environmental court judges who possess legal competence in environmental law, including civil environmental law, criminal environmental law, and administrative environmental law. However, during the case filing process, the procedures for filing civil, criminal, and administrative cases are still distinguished according to their respective procedural laws. However, once the case enters the court, it is no longer differentiated. There is only one case, namely environmental cases, allowing for the imposition of civil, criminal, and administrative sanctions simultaneously to the judge with the consequences of their respective proofs. Thus, in one case, it is

possible to examine criminal, civil, and administrative elements simultaneously with the consequences of their respective proofs (civil, criminal, and administrative).

In a case, for instance, where a legal subject is accused of committing the act of land burning as regulated under Article 108, in conjunction with Article 69 letter h of Law Number 32 of 2009 concerning Environmental Protection and Management, the prosecutor, besides being able to prosecute the defendant, may also request the judge to impose compensation for damages. The consequence is that the prosecutor must be able to prove the existence of damages to certain legal subjects in the trial conducted by the defendant. Based on this authority, the specialized environmental court as part of the environmental law enforcement system implements a multi-door approach. The resolution of environmental disputes in court can be integrated across legal regimes.

## CLOSING

The philosophy, paradigms, approaches, and goals that underpin environmental legal norms as regulated in the Environmental Protection and Management Law (UUPPLH) are not implemented adequately in the resolution of environmental disputes in court. This results in judges' considerations not being well-founded in environmental legal theories and concepts. The problem arises because the judicial system adjudicating environmental disputes, especially in courts, still adheres to existing legal regimes. Consequently, judges and disputing parties remain highly bound to criminal law, civil law, and administrative law theories and concepts. Environmental legal theories and concepts often fail to emerge because they are suppressed by the confines of legal regimes. Given this issue, an independent environmental justice model based on indigenous wisdom is needed. Unlike modern judiciary systems, customary courts are more adept at meeting the parties' sense of justice because their decisions are comprehensive, without barriers from legal subsystems such as criminal, civil, and administrative law. By tapping into the wisdom inherent in customary justice systems and existing environmental justice practices worldwide, a comprehensive environmental justice model based on indigenous wisdom has been formulated. The framework of this comprehensive environmental justice model is as follows:

### 1. Substantive Law

- 1.1. Principle of Environmental Balance
- 1.2. Principle of Restoration
- 1.3. Principle of Utilization According to Function and Allocation
- 1.4. Principle of Sustainable Utilization
- 1.5. Principle of Commonality
- 1.6. Implementation of sanctions of Exclusion, Shame, and Trusteeship.

### 2. Procedural Law

- 2.1. Implementation of Environmental Justice Principles: Principle of Decision for Restoration; Principle of Equality Among Environmental Elements; Principle of Peace; Principle of Victim Protection.
- 2.2. Implementation of Environmental Guardian System

- 2.3. Environmental Law Certification
- 2.4. Ad Hoc Judges and Permanent Judges
- 2.5. Consolidation of Prosecution and Lawsuit

### 3. Scope of Judiciary

- 3.1. Environmental judiciary constitutes a specialized chamber under the general judiciary.
- 3.2. Environmental judiciary is a single gateway that does not recognize civil, criminal, and administrative courts.

Environmental judiciary adjudicates cases related to the occurrence, alleged occurrence, or potential occurrence of environmental damage and/or pollution; and all disputes related to the occurrence, alleged occurrence, or potential occurrence of violations of written and unwritten legal norms in the field of environmental law.

## REFERENCES

### Book

- Imamulhadi, *Penegakan Hukum Lingkungan Berbasis Kearifan Masyarakat Adat Nusantara*, Unpad Press, Bandung: 2011.
- Imamulhadi, Idris, Eva Nuriyah H, *Peradilan Lingkungan*, K Media, Yogyakarta: 2021.
- JCT Simorangkir, (et.al), *Kamus Hukum*, Sinar Grafika, Jakarta: 2002.
- Munadjat Danusaputro, *Hukum Lingkungan*, Bina Cipta, Jakarta: 1981.
- Otto Soemarwoto, *Analisis Mengenai Dampak Lingkungan*, Gajah Mada University, Yogyakarta: 2009.

### Journal

- Aju Putrijanti dan Irma Cahyaningtyas, "Environmental Court and Principle of Good Environmental Governance in Enforcing Environmental Law", *Varia Justicia*, Vol. 19, No. 1, 2023.
- Domenico Amirante, "Environmental Courts in Comparative Perspective: Preliminary Reflections on the National Green Tribunal of India", *Pace Environmental Law Review*, Vol. 29, 2012.
- Franky Butar-Butar, "Penegakan Hukum Lingkungan di Bidang Pertambangan", *Yuridika*, Vol. 25, No. 2, 2010.
- Helen Kopnina, "Evaluating Education for Sustainable Development (ESD): Using Ecocentric and Anthropocentric Attitudes Toward the Sustainable Development (EAATSD) Scale", *Environmental Sustainable Development*, Vol. 15, 2013.
- I Ketut Sudantra, (et.al), "Sistem Peradilan Adat dalam Kesatuan-Kesatuan Masyarakat Hukum Adat Desa Pakraman Bali", *Jurnal Kajian Bali*, Vol. 7, No. 1, 2017.
- Imamulhadi, "Aspek Hukum Penataan Ruang: Perkembangan, Ruang Lingkup, Asas, dan Norma", *Jurnal Bina Hukum Lingkungan*, Vol. 6, No. 1, 2021.

- Indah Nur Shanty Saleh dan Bitu Gadsia Spaltani, "Environmental Judge Certification in an Effort to Realize the Green Legislation Concept in Indonesia", *Law and Justice*, Vol. 6, No. 1, 2021.
- Michael Coyle, "Traditional Indian Justice: A Role for The Present?", *Osgoode Hall Law Journal*, Vol. 24, No. 3, 1986.
- Muhar Junef dan Moh. Husain, "Pembentukan Pengadilan Khusus Lingkungan sebagai Wujud Tanggung Jawab Negara pada Upaya Keadilan Ekologis", *Jurnal Penelitian Hukum De Jure*, Vol. 21, No. 1, 2021.
- Nur Iftitah Isnantiana, "Hukum dan Sistem Hukum Sebagai Pilar Negara", *Jurnal Hukum Ekonomi Syariah*, Vol. 2, No. 1, 2019.
- Sutoyo, Paradigma Perlindungan Lingkungan Hidup, *Jurnal Hukum Adil*, Vol. 4, No. 1, 2013.
- Wahyu Risaldi, (et.al), "Penerapan Asas *in Dubio Pro Natura* dan *In Dubio Pro Reo* oleh Hakim Perkara Lingkungan Hidup", *Kanun Jurnal Ilmu Hukum*, Vol. 20, No. 3, 2018.
- Yohanes Bahari, "Model Resolusi Konflik Berbasis Pranata Adat pada Masyarakat Adat Dayak Pranayatn di Kalimantan Barat", *Jurnal Wawasan*, Vol. 13, 2007.

#### Other Sources

- Deni Satria, "Penerapan Hukum Adat Dayak Kanayatn dalam Penyelesaian Kasus Hukum Pidana di Kabupaten Landak dan Dasar Pemikiran Upaya Pengaturannya ke dalam Peraturan Daerah, Thesis, Universitas Tanjungpura, (without year).
- Francis Kariuki, "African Traditional Justice System", *Strathmore University Law School*, 2018.
- Hari Suroto, 2019 "Makna Upacara Bakar Batu Suku Dani", <https://arsip.jubi.id/makna-upacara-bakar-batu-suku-dani/>, [accessed on 17/08/2023].
- ICLRE, 2013 "Peradilan Adat: Keadilan yang Ternafikan", <<http://lbbt.or.id/index.php/publikasi/opini>>, [accessed on pada 17/08/2023].
- Jawadir Kadir, "How Can the Traditional Justice System Help Resolve Conflicts between India and Pakistan", *Lancaster University*, 2018.
- Mahkamah Agung Republik Indonesia, 2023, "Daftar Hakim Peradilan Umum yang telah Memperoleh Sertifikat Lingkungan", <https://badilum.mahkamahagung.go.id/berita/pengumuman-surat-dinas/2895-daftar-hakim-peradilan-umum-yang-telah-memperoleh-sertifikat-lingkungan.html>, [accessed on 16/08/2023].
- Raonigel Talu Maraga, "Penyelesaian Sengketa Kepemilikan Tanah di Lingkungan Masyarakat Adat Dayak Kanayatn Kecamatan Menyuke Kabupaten Landak Provinsi Kalimantan Barat", Thesis, Universitas Diponegoro, 2007.
- Sara Ida Magdalena Awi, "Para-Para Adat Sebagai Lembaga Peradilan Adat Pada Masyarakat Hukum Adat Port Numbay di Kota Jayapura", Thesis, Universitas Udayana, 2012.
- Supreme Court of the Republic of Indonesia Decision Number: 651K/Pdt/2015.
- Suzanna Pratt, "Gjakmarra: Albanian Blood Feud and Restorative of Traditional Law", Working Paper, 2013.
- United Nations Human Right, "Human Right and Traditional Justice System in Africa", 2016.