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# Coastal women's double burden in mangrove management in Indonesia: a socio-legal perspective

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**Summary:** Introduction. 2. Research methods. 3. Patriarchy, legal systems, and cultural barriers in mangrove conservation. 4. Gender, environment, and equity: women's role in natural resource management and conservation in Indonesia. 5.

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Navigating dual roles: coastal women's contributions to mangrove management and the fight against gender inequality. 6. Ecofeminism and power dynamics: critiquing the women-nature nexus in mangrove management. 7. Empowering women in mangrove management: a Foucaultian analysis of power, resistance, and gender equality. 8. Conclusion. 9. References.

**Abstract**: Behind the global push for gender equality are many unresolved issues, especially in the South. Women, especially coastal women managing mangroves, bear a double burden. Feminist theory introduced the term "double burden" in the late 1970s, when more housewives and white women joined the workforce, changing the labour force structure. Feminist theory is used to examine coastal women's double burden in mangrove maintenance. Qualitative socio-legal research uses interviews, participant observations, and literature reviews. The analysis used discourse analysis. The study found that men and women use mangroves differently based on their socioeconomic status. Men dominate mangrove conservation policies, neglecting women's roles. This imbalance makes coastal women, who manage natural resources and conduct housework, work more. This gender inequity also marginalises women as "second-class citizens." Gender stratification increases when nature and culture are viewed as separate, prohibiting women from participating in mangrove conservation decisions. Thus, women's empowerment is the key to gender equality and mangrove ecosystem sustainability. Empowerment enhances access, involvement, control, and benefit.

**Keywords**: Socio-legal; Double Burden; Coastal Women; Gender Equality; Women's Empowerment.

#### 1. Introduction

Gender equality stands out as a critical humanitarian pillar within the primary framework of the Sustainable Development Goals. Considering its significant connection to various other Sustainable Development Goals and the substantial influence on professional development, educational progress, and the health and economic advancement of both individuals and nations, the pursuit of gender equality emerges as a critical objective. The three pillars of sustainable development—social, environmental, and economic—are pertinent to the discourse on gender equality. Research increasingly indicates that gender inequality leads to significant economic costs, as well as contributing to social injustice and environmental degradation globally<sup>5</sup>.

Gender equality entails acknowledging that neglecting half of our society will hinder our capacity to address global challenges effectively. It is essential for global efforts to focus on advancing women's roles across diverse sectors to cultivate a greater number of experts equipped to address significant social and environmental challenges. Please do so to ensure humanity's ability to achieve a global transition<sup>6</sup>.

The objective of sustainable development concerning gender equality is to ensure the empowerment of women and girls across all facets of life while attaining gender parity. This encompasses the promotion of legislation designed to guarantee access, participation, control, and benefits for women and girls across all areas of development. Gender equality ensures that women and men have the same access to education, employment, healthcare, leadership roles, and various opportunities, thereby enhancing the overall well-being of the community as a whole. Empowering

<sup>6</sup> LIMA, R.; GUEDES, G. "Sustainable Development Goals and Gender Equality: A Social Design Approach on Gender-Based Violence", *Sustainability*, V. 16, no 2, 2024, p. 914. https://doi.org/10.3390/su16020914

<sup>&</sup>lt;sup>5</sup> STEVENS, C. *Are Women the Key to Sustainable Development?*. Online. 2010. Available at: <a href="https://archive.ids.ac.uk/bridge/global-resources/resource/A71430.html">https://archive.ids.ac.uk/bridge/global-resources/resource/A71430.html</a>

women represents a strategic and significant measure to enhance efficiency, sustainability, and equality in development<sup>7</sup>.

The strong advocacy for gender equality reveals persistent issues, particularly in Global South nations, notably the double burden that women face. At present, numerous women fulfil the role of housewives while simultaneously engaging in work. This dual commitment serves to enhance the family economy, foster self-actualisation, and reinforce the foundational structure of the family unit. Nonetheless, the burden of managing domestic affairs frequently falls exclusively on women. This results in the assumption of multiple roles, which consequently creates double burdens. The social construction of society is a significant factor contributing to the double burden experienced by women. The enduring patriarchal culture continues to elevate men above women<sup>8</sup>.

Coastal women experience a notable instance of the double burden phenomenon, particularly regarding the management of mangroves. Indonesia possesses extensive mangrove forests. Mangroves are tropical plants that flourish in coastal regions characterised by fluctuating water levels, which contribute to the salinity of the wood. Mangroves possess a significant capacity for carbon storage. Mangroves serve as a crucial tool in the battle against climate change.

Furthermore, mangroves serve as critical spawning grounds and foraging habitats for a diverse array of fish, shellfish, and other biota. Mangroves contribute significantly to water quality and support the surrounding ecosystem, including coral reef systems. The robust roots of mangroves function as a nutrient solvent, wave arrester, conductor, and suspension material, effectively mitigating abrasion and coastal erosion. Mangrove ecosystems represent a category of ecosystems that exhibit a notable susceptibility to damage. The governance of mangroves in Indonesia faces a significant issue due to the discrepancies in estimates regarding both the area and the rate of mangrove destruction reported by various stakeholders. The variations in data lead to ambiguity in the planning process of a conservation area. The most recent National Mangrove Map, released by the Ministry of Environment and Forestry on October 13, 2021, indicates that Indonesia's mangrove ecosystem spans a total area of 4,120,263 hectares. This includes 3,364,080 hectares of existing mangroves and a potential mangrove habitat area of 756,183 hectares<sup>9</sup>.

Pratisti, Saksono, and Suadi<sup>10</sup> conducted research on women in mangrove conservation in Pasar Banggi Village, Rembang Regency. They found that the development of mangrove conservation has created opportunities for women's groups to participate in various conservation activities. The role of women is significant, with research identifying nine distinct forms of participation in mangrove conservation in Kaliuntu Hamlet. These include seeking information, planting seeds, filling polybags, nursery planning, decision-making in nursery implementation, maintaining mangrove plants, caring for seedlings, transferring knowledge about mangrove conservation to children, and reminding others about logging activities.

Rostiyati<sup>11</sup> detailed findings from her research in Muara Gading Mas Village, East Lampung, indicating that women engaged in the maritime sector fulfil a dual role, as the income provided by their husbands as primary earners is insufficient to meet the family's needs. This phenomenon raises the guestion of how women

<sup>&</sup>lt;sup>7</sup> RUSLAN, A.; FIRDAUS, P. A.; HIDAYATULLAH, M. H. *Inovasi dan Strategi dalam Pengelolaan Kekayaan Sumber Daya*. Uwais Inspirasi Indonesia, Ponorogo, 2024.

<sup>&</sup>lt;sup>8</sup> ERNANINGTYAS, A.; TANLAIN, E. C. "Beban Ganda Perempuan Pekerja: Sebuah Refleksi Atas Konstruksi Budaya Patriarki", *Jurnal Hak Asasi Manusia*, V. 16, no 2, 2023, p. 1–13. ISSN 2962-5262. <a href="https://doi.org/10.58823/jham.v16i2.169">https://doi.org/10.58823/jham.v16i2.169</a>

<sup>&</sup>lt;sup>9</sup> DKP JATIM. *Ayo Kita Mengenal Mangrove*. Online. Available at: <a href="https://dkp.jatimprov.go.id/unit/dkp-malangkab//news/view/3151">https://dkp.jatimprov.go.id/unit/dkp-malangkab//news/view/3151</a>

<sup>&</sup>lt;sup>10</sup> PRATISTI, C.; SAKSONO, H.; SUADI, S. "Partisipasi Perempuan Dalam Konservasi Mangrove Di Desa Pasar Banggi Kabupaten Rembang", *Jurnal Perikanan Universitas Gadjah Mada*, V. 14, no 1, 2012, p. 32–45. <a href="https://doi.org/10.22146/jfs.9047">https://doi.org/10.22146/jfs.9047</a>

ROSTIYATI, A. "Peran Ganda Perempuan Nelayan di Desa Muara Gading Mas Lampung Timur", *Patanjala*, V. 10, nº 2, 2018, p. 187–202. <a href="https://doi.org/10.30959/patanjala.v10i2.373">https://doi.org/10.30959/patanjala.v10i2.373</a>

fishermen in Muara Gading Mas Village, East Lampung, manage their dual roles effectively, balancing both domestic and public responsibilities. Consequently, there is a need to formulate an adaptation strategy to ensure that these dual roles are executed successfully. The initiatives undertaken focus on establishing new business avenues, optimising time management, and enhancing skills through participation in diverse training programmes, alongside engaging in savings and loan enterprises.

Wenifrida<sup>12</sup> indicates that coastal women involved in the management of mangrove forest areas represent a valuable human resource that should be utilised effectively to ensure the sustainability of mangrove forests. In this scenario, coastal women are anticipated to fulfil roles that extend beyond being mere objects; they are also expected to actively participate as subjects within environmental management programmes. This will foster a sense of belonging, leading individuals to take responsibility for and effectively manage their environment.

Begum, Bruyn, Kristiansen, and Islam<sup>13</sup> indicate that while women play a role in forest conservation through their involvement, their representation in the joint management of mangrove forests is less than that of men. It is essential to implement policy interventions aimed at shaping men's perceptions of women engaged in external employment. This approach has the potential to balance gender involvement in the co-management of forests while simultaneously enhancing support for women's livelihoods by acknowledging their contributions and amplifying the significance and effects of their engagement.

Irwansyah and Supriadi<sup>14</sup> indicate that in addressing the economic needs of her family, the wife fulfils multiple roles, including that of a housewife, which encompasses household responsibilities such as washing and cooking, as well as caring for her husband. A wife consistently demonstrates loyalty to her husband, regardless of the challenges or joys they face together. She supports him through various situations while he serves as a protective figure, ensuring the well-being of the family. This partnership includes the shared responsibility of educating their children, providing guidance and motivation, and engaging in maternal practices that foster spiritual development, such as teaching them to pray. Their contributions extend beyond domestic responsibilities, as they engage in various economic activities to support their husbands' income. This includes roles such as sand miners, seaweed binders, and fish sellers in the market, all aimed at fulfilling their family's financial requirements.

The assumption that women are inherently more suitable for managing domestic responsibilities, such as maintaining household cleanliness, cooking, washing, and caring for children, results in a double workload for them. Domestic work is often perceived as lacking value and being subordinate to male work due to its classification as unproductive. Women who strive to fulfil their needs must acknowledge these consequences while simultaneously bearing the responsibility for their households. This is the factor that leads to women experiencing a dual burden of responsibilities<sup>15</sup>.

Beneria<sup>16</sup> critiques the conventional examination of the "Women's Question" and identifies paid production as a potential resolution to the oppression faced by women. However, the criticism highlights that merely incorporating women into income-generating programmes without a thorough understanding of their roles

WENIFRIDA, T. "Pengelolaan Mangrove Berbasis Perempuan Dan Modal Sosial", *Journal Agriculture Sciences*, V. 7, no 1, 2019, p. 1–16.

<sup>&</sup>lt;sup>13</sup> BEGUM, F.; BRUYN, L. L. de.; KRISTIANSEN, P.; ISLAM, M. A. "Forest Co-Management in the Sundarban Mangrove Forest: Impacts of Women's Participation on Their Livelihoods and Sustainable Forest Resource Conservation", *Environmental Development*, V. 43, 2022, p. 100731. <a href="https://doi.org/10.1016/j.envdev.2022.100731">https://doi.org/10.1016/j.envdev.2022.100731</a>

<sup>&</sup>lt;sup>14</sup> IRWANSYAH, A.; SUPRIADI. "Peran Ganda Perempuan Nelayan Pada Masyarakat Pesisir", *Hegemoni: Jurnal Ilmu Sosial*, V. 1, nº 1, 2022, p. 11–17.

<sup>&</sup>lt;sup>15</sup> MASSENGA, T. W. *Peran Perempuan Dalam Pelestarian Mangrove*. Yayasan Penerbit Muhammad Zaini, Pidie, 2022.

<sup>&</sup>lt;sup>16</sup> BENERÍA, L. Women and Development: The Sexual Division of Labor in Rural Societies. Praeger, New York, 1982. ISBN 0-03-061802-9.

and responsibilities at home, such as childcare, household chores, and the collection of water and fuel, is insufficient.

The concept of double burden highlights the dual oppression faced by women who are engaged in paid employment while also fulfilling the roles of unpaid housewives and mothers within the domestic sphere. The concept originated within feminist theory during the late 1970s, a period marked by significant transformations in the paid labour force due to the increasing participation of women, including those who were married, white, and mothers. This concept suggests that the primary locus of a woman's oppression is within the private sphere and that this oppression intensifies when she engages in the public sphere of work  $^{17}$ .

Beneria<sup>18</sup> emphasises several significant themes that subsequently become pivotal in the feminist examination of development. She emphasised the significance of women's reproductive activities in influencing their employment, alongside the considerable differences in the gender-based division of labour. Furthermore, he observed that this distribution of tasks is in a state of flux, evolving in tandem with broader economic shifts. Beneria posits that women's subordination arises not solely from male dominance but is also intricately linked to essential economic and political frameworks, including class and gender dynamics. Additionally, she pointed out that women's economic activities frequently need more recognition in the labour force and national income statistics, indicating a bias in the assessment of women's contributions to the economy.

This study aims to examine the dual challenges faced by coastal women in relation to mangrove management through the lens of feminist theory. Furthermore, drawing from Foucault's<sup>19</sup> concept of power, it is evident that power extends beyond the confines of governments, legal systems, or major authorities. Power manifests in diverse forms within social relations and plays a role in all contexts. Foucault introduced the term 'micro-power' to describe the power that operates on a small scale, particularly within interpersonal relationships in daily life.

This research initiates a critique of the existing discourse surrounding women's roles in mangrove management, highlighting its failure to ensure access, participation, control, and benefits for women, ultimately resulting in a double burden for coastal women. This research concluded with an initiative to explore alternative methods for empowering coastal women within the framework of mangrove management in Indonesia, aiming to achieve substantive justice for this group.

#### 2.Research methods

This study employs qualitative research methods and socio-legal research strategies within the framework of legal research. This study encompasses all aspects of the social sciences that focus on law, legal processes, or legal systems. The multi-disciplinary nature of most socio-legal studies is a significant characteristic. Theoretical perspectives and methodologies in socio-legal studies are systematically organised according to research carried out across a range of diverse disciplines. The scientific disciplines employed are notably varied, encompassing sociology, anthropology, political science, public administration, economics, as well as psychology and development studies. In theory, there are no definitive boundaries regarding the disciplines that may be applied<sup>20</sup>.

<sup>&</sup>lt;sup>17</sup> CODE, L. *Encyclopedia of Feminist Theories*. Taylor & Francis, New York, 2002. ISBN 978-1-134-78725-8.

<sup>&</sup>lt;sup>18</sup> BENERÍA, L. Women and Development: The Sexual Division of Labor in Rural Societies. Praeger, New York, 1982. ISBN 0-03-061802-9.

<sup>&</sup>lt;sup>19</sup> FOUCAULT, M. *The History of Sexuality*. Allen Lane, London, 1979. The History of Sexuality V. 1. ISBN 978-0-7139-1094-0.

<sup>&</sup>lt;sup>20</sup> BEDNER, A. W.; IRIANTO, S.; OTTO, J. M.; WIRASTRI, T. D. *Kajian Sosio-Legal*. Online. Pustaka Larasan, Denpasar, 2012. ISBN 978-979-3790-95-4.

The interest of feminist law scholars in the study of socio-law stems from its ability to circumvent the notion of law as independent or detached from context. This approach allows for a critical examination of how the law mirrors (or neglects to mirror) and shapes women's experiences in relation to gender dynamics. Consequently, it is essential to incorporate women's subjectivity into the legal framework. The subjectivity encompasses a range of women's experiences, including sexual abuse, rape, sexual objectification, pregnancy, domestic violence, parenting, the challenge of balancing childcare with paid work, gender discrimination, political and professional exclusion and marginalisation, low wages, post-divorce poverty, vulnerability to exploitation, limited agency, gender inequality, and subordination<sup>21</sup>.

This study employs a combination of socio-legal research and feminist theory. This socio-legal research utilises primary data, which encompasses the outcomes of interviews conducted with informants, specifically non-governmental organisations that concentrate on women and mangroves. Additionally, it includes findings from interviews and observations of participants with women mangrove managers located in various regions of Indonesia, carried out between 2022 and 2024. The areas under consideration include Tompotana Village in the Tanakeke Islands District of Takalar Regency, located in South Sulawesi Province; Mantehage Island within the Wori District of North Minahasa Regency in North Sulawesi Province; and Mentawir Village, situated in the Sepaku District of North Penajam Paser Regency in East Kalimantan Province. This study incorporates both primary data and secondary data, which includes a range of relevant laws and regulations, research findings, books, journal articles, and other pertinent sources. The secondary data was acquired via literature studies.

Following the collection of data, the process proceeds to the analysis phase. The method of analysis employed is discourse analysis. Foucault<sup>22</sup> posits that power and discourse lack subjectivity. Foucault aimed to demonstrate that the individual does not wield power and the individual does not generate that discourse. Conversely, discourse as a form of power constructs the subject. In addition to Foucault's explanation, Van Dijk<sup>23</sup> elaborates that the processes of planning and comprehending discourse or other actions have indeed constructed 'mental models' that are distinctive. The mental models within a community or social group represent manifestations of collective beliefs, encompassing social dimensions such as knowledge and ideology. Dijk posits that ideology constitutes a perspective on reality that governs discourse, interaction, and social practices. This is achieved through the establishment of a foundational set of values, beliefs, and social representations, which are propagated via a process that is both reproductive and discursive.

### 3. Patriarchy, legal systems, and cultural barriers in mangrove conservation

Mangrove forests possess a significant abundance of marine resources available for direct harvesting alongside various products, including wood, firewood, and other plant materials like tea and roofing supplies. Mangroves serve a critical role in safeguarding against floods and storms, functioning as effective buffers in response to rising sea levels. In developing countries, coastal communities have a direct dependence on the products and services that originate from mangrove

<sup>&</sup>lt;sup>21</sup> HUNTER, R. "Feminist Approaches to Socio-Legal Studies", In: *Routledge Handbook of Socio-Legal Theory and Methods,* Abingdon: Routledge, 2019, p. 260–272. ISBN 0-429-95281-3.

<sup>&</sup>lt;sup>22</sup> FOUCAULT, M. *The Order of Things*. Taylor & Francis, New York, 2018. Routledge Classics. ISBN 978-1-317-33667-9.

<sup>&</sup>lt;sup>23</sup> VAN DIJK, T. A. Ideology and Discourse. In: FREEDEN, M.; STEARS, M. (eds.), *The Oxford Handbook of Political Ideologies*, Oxford: Oxford University Press, 2013, p. 175–196. ISBN 978-0-19-958597-7. <a href="https://doi.org/10.1093/oxfordhb/9780199585977.013.007">https://doi.org/10.1093/oxfordhb/9780199585977.013.007</a>. Accessed on: 29 Aug. 2023.

ecosystems. The persistent and unsustainable exploitation of mangroves by humans, primarily influenced by international market demands for various resources and products, has resulted in significant overexploitation and widespread destruction of these vital forests. The decline of mangroves has resulted in significant repercussions for the lives and livelihoods of local communities. Current global conservation initiatives increasingly engage local communities in efforts aimed at reversing detrimental trends<sup>24</sup>.

Understanding the unique contributions of men and women in ecosystems and societies is essential for the success of any conservation effort. This quarantees the incorporation of varied inputs and effects, fostering specific responses that both men and women can execute. The prevalent notion of incorporating local communities into conservation initiatives has gained considerable traction; however, there exists a notable risk of neglecting the distinct interests and possible contributions of marginalized community members, including women. This risk emerges due to the fact that women frequently possess diminished social, economic, and political power. The presence of deeply rooted inequitable structures and barriers results in a reduced influence on community decision-making processes. Gender-responsive approaches in conservation efforts are increasingly gaining global traction, yielding notable outcomes in the empowerment of women and the advancement of gender equality. For women, potential outcomes of these approaches may encompass improved food and water security, enhanced leadership opportunities, better health, security, education, and skills development, along with improved livelihoods and income. The IUCN Global Gender Office emphasizes and advocates for these strategies to ensure that gender equality is central to sustainable global environmental solutions across a range of issues. In the context of mangrove conservation and restoration initiatives, IUCN, along with its partners and various organizations, is involved in projects that focus on incorporating gender considerations and responses<sup>25</sup>.

Safequarding mangroves and coral reefs play a crucial role in maintaining marine biodiversity and addressing the challenges posed by climate change. Coral reefs and mangrove forests offer significant protection against cyclones and tsunamis for coastal communities. Given their demonstrated success, it is essential to promote and broaden female-led initiatives aimed at safeguarding coastlines and marine ecosystems. Local initiatives of modest scale, spearheaded by women, have effectively revitalized mangrove ecosystems in Kenya and various East African nations, protected coastal regions, and enhanced the populations of marine species. Microfinance initiatives indicate that women often emphasize long-term business sustainability to a greater extent than men, which results in enhanced protection of marine ecosystems. A recent report by the UN Environment Programme emphasizes the significance of women's initiatives in the cleaning and protection of coastal areas, particularly in relation to mangrove regeneration in regions of India, Mexico, and the Philippines. Women contribute notably to the field of marine sciences. The gender gap in marine sciences presents a noteworthy contrast when compared to other scientific disciplines. Women constitute, on average, 38% of researchers in marine sciences, which is roughly 10% higher compared to other scientific fields. In the 2018 academic year in Mexico, it was observed that women represented 71% of the teaching staff in undergraduate programs focused on biology, earth sciences, and sustainable coastal management<sup>26</sup>.

Furthermore, women represented approximately 54% of postgraduate students in the fields of biology, marine sciences, limnology, and sustainability studies across various educational institutions. Nonetheless, additional initiatives are essential to ensure the retention of women in scientific disciplines, particularly

<sup>&</sup>lt;sup>24</sup> IUCN. *Gender Equity Is Key to Mangrove Restoration*. Online. 2017. Available at: <a href="https://iucn.org/news/forests/201707/gender-equity-key-mangrove-restoration">https://iucn.org/news/forests/201707/gender-equity-key-mangrove-restoration</a>

<sup>&</sup>lt;sup>25</sup> IUCN. *Gender Equity Is Key to Mangrove Restoration*. Online. 2017. Available at: <a href="https://iucn.org/news/forests/201707/gender-equity-key-mangrove-restoration">https://iucn.org/news/forests/201707/gender-equity-key-mangrove-restoration</a>

<sup>&</sup>lt;sup>26</sup> OECD. *Gender and the Environment: Building Evidence and Policies to Achieve the SDGs*. Online. OECD Publishing, Paris, 2021. <a href="https://doi.org/10.1787/3d32ca39-en">https://doi.org/10.1787/3d32ca39-en</a>

within the marine and environmental sectors. Achieving this requires the implementation of mentorship programs, the cultivation of more inclusive work environments for women, and the active confrontation of unconscious biases<sup>27</sup>.

A significant challenge for women's leadership in mangrove management is the presence of discriminatory legal systems. Friedman, Grant, and Hayden<sup>28</sup> identifies three essential components of the legal system: structure, substance, and legal culture. These components are essential and multifaceted elements of the social landscape. The legal system exhibits a structure that evolves, albeit at different rates of change. Certain components exhibit a slower rate of change compared to others. The legal system's structure encompasses its foundational principles, persistent elements, and the various components that delineate its overall configuration. Consistent patterns emerge within this structure over time. This includes factors like the quantity and dimensions of courts, their jurisdictions (specifically, the categories of cases they address and the rationale behind this), and the interrelations among courts. The content encompasses various aspects such as legislative organization, presidential actions, police procedures, and additional elements. It exhibits characteristics akin to a cross-section or a static representation of the legal system, encapsulating its operations.

In Indonesia, there are multiple institutions established to promote gender equality for women. The Ministry of Women's Empowerment and Child Protection, responsible for overseeing women's empowerment, has initiated the development of policy notes focused on addressing six priority issues. These notes aim to be both succinct and thorough, focusing on the reduction of gender inequality across different development sectors while enhancing gender equality and women's empowerment within national development frameworks. Indonesia established the National Commission on Violence Against Women through Presidential Decree No. 181 of 1998, which was subsequently reinforced by Presidential Decree No. 65 of 2005.

The second component of the legal system consists of its substance, which includes the rules, norms, and behaviors exhibited by individuals within the system. This also pertains to the "products" generated within the legal framework, including rulings and newly established regulations. The annual statistics on arson arrests provide insights into the underlying dynamics of the legal system. This pertains to the laws as they are applied rather than just those that are documented. This brings us to the third component of the legal system, which tends to be less overt—legal culture<sup>29</sup>.

From the constitutional viewpoint on gender justice, Article 27, paragraph 1 of the 1945 Constitution articulates that "All citizens have equal standing before the law and government and are obliged to uphold the law and government without exception." This quote suggests that the Indonesian state acknowledges the principles of justice and equality across genders<sup>30</sup>. The principle of gender equality is evident in numerous policies and laws designed to eradicate gender-based discrimination and guarantee the participation and safeguarding of equal rights for every individual, without exception. In Indonesia, the legal framework addressing women's rights is articulated in Law Articles 45-51 No. 39 and Law No. 23 of 2004, which focuses on the elimination of domestic violence. Furthermore, Indonesia has

<sup>&</sup>lt;sup>27</sup> OECD. *Gender and the Environment: Building Evidence and Policies to Achieve the SDGs*. Online. OECD Publishing, Paris, 2021. <a href="https://doi.org/10.1787/3d32ca39-en">https://doi.org/10.1787/3d32ca39-en</a>

FRIEDMAN, L. M.; HAYDEN, G. M. "What Is a Legal System?", In: *American Law: An Introduction*. Online. Oxford: Oxford University Press, 2017, p. 1–18. ISBN 978-0-19-046058-7. <a href="https://doi.org/10.1093/acprof:oso/9780190460587.003.0001">https://doi.org/10.1093/acprof:oso/9780190460587.003.0001</a>. Accessed on: 12 Jul. 2024.

<sup>&</sup>lt;sup>29</sup> FRIEDMAN, L. M.; HAYDEN, G. M. "What Is a Legal System?", In: *American Law: An Introduction*. Online. Oxford: Oxford University Press, 2017, p. 1–18. ISBN 978-0-19-046058-7. <a href="https://doi.org/10.1093/acprof:oso/9780190460587.003.0001">https://doi.org/10.1093/acprof:oso/9780190460587.003.0001</a>. Accessed on: 12 Jul. 2024.

<sup>&</sup>lt;sup>30</sup> SUHENDAR; ARINGGA, R. D. "Equality Before the Law in Law Enforcement in Indonesia", Sinergi International Journal of Law, V. 2, nº 1, 2024, p. 38–48. https://doi.org/10.61194/law.v2i1.109

ratified several international agreements related to women's rights, including the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) via Law No. 7 of 1984.

Indonesian law exhibits a significant issue regarding gender inequality, particularly within the framework of Civil Law. This framework perpetuates the notion that women are inherently weak and require protection from their husbands. This perspective is reflected in various provisions of the Civil Code (*Burgerlijk Wetboek*), such as Article 105, which states that "The husband manages the wife's assets," and Articles 250-256, which indicate that "Children born in marriage can be denied by their husbands"<sup>31</sup>. This reinforces the framework of gender inequality that influences the allocation of roles, particularly in the area of natural resource management, including mangroves. The exclusion of women from meaningful participation in environmental decision-making highlights enduring social and legal prejudices. The involvement of women in the mangrove management sector, or their limited roles, frequently indicates the underlying patriarchal structure that is often legitimized by legal frameworks.

Legal culture encompasses the attitudes individuals hold regarding the law and the legal system, influenced by their beliefs, values, and expectations. This represents a specific segment of the larger cultural framework, particularly concerning the legal system. The concepts and viewpoints serve as driving forces for legal proceedings. Conversations regarding legal culture frequently take place without clear recognition. For example, the notion that devout Roman Catholics refrain from divorce based on their religious convictions, that residents of impoverished areas harbor skepticism towards law enforcement, that individuals from middle-class backgrounds are more inclined to lodge complaints compared to those reliant on welfare, or that the Supreme Court is perceived with considerable respect, all represent insights into the dynamics of legal culture and its influence on behavior. Legal culture fundamentally influences the societal mindset and the dynamics that determine the application, evasion, or exploitation of laws. The absence of legal culture leads to a stagnation of the legal system; it resembles a lifeless fish in a basket instead of a vibrant one in the ocean<sup>32</sup>.

Patriarchal cultural restrictions on women's roles frequently lead to discrimination and marginalization within the context of women and mangroves. Gender inequality in roles establishes structural barriers that hinder equal access for individuals within society. Furthermore, government policies that overlook the specific needs of women frequently intensify their victimization. The inadequacy of legal protections for women has contributed to their marginalization. Historical and cultural factors have systematically positioned women in subordinate roles due to patriarchal power dynamics, influenced both on an individual level and through state regulations<sup>33</sup>.

The law is acknowledged as a powerful tool for establishing legality. When legal norms or laws exhibit masculine, patriarchal, and gender-insensitive characteristics, they systematically position women in a disadvantaged role. The legal system inadequately addresses women's rights, resulting in harm to women and perpetuating a legally sanctioned devaluation of their status<sup>34</sup>.

<sup>&</sup>lt;sup>31</sup> NATALIS, A. "Reformasi Hukum dalam Rangka Mewujudkan Keadilan bagi Perempuan: Telaah Feminist Jurisprudence", *Crepido*, V. 2, no 1, 2020, p. 11–23

<sup>&</sup>lt;sup>32</sup> FRIEDMAN, L. M.; HAYDEN, G. M. "What Is a Legal System?", In: *American Law: An Introduction*. Online. Oxford: Oxford University Press, 2017, p. 1–18. ISBN 978-0-19-046058-7. <a href="https://doi.org/10.1093/acprof:oso/9780190460587.003.0001">https://doi.org/10.1093/acprof:oso/9780190460587.003.0001</a>. Accessed on: 12 lul 2024

<sup>&</sup>lt;sup>33</sup> ARIFAH, K. N.; NOVITASARI, D. "Telaah Feminist Legal Theory Dalam Kebijakan Pembangunan Nasional", *Jatijajar Law Review*, V. 1, nº 2, 2023, p. 179–192. <a href="https://doi.org/10.26753/jlr.v1i2.1247">https://doi.org/10.26753/jlr.v1i2.1247</a>

<sup>&</sup>lt;sup>34</sup> AZIZAH, N. "Aliran Feminis dan Teori Kesetaraan Gender dalam Hukum", *SPECTRUM:* Journal of Gender and Children Studies, V. 1, nº 1, 2021, p. 1–10. <a href="https://doi.org/10.30984/spectrum.v1i1.163">https://doi.org/10.30984/spectrum.v1i1.163</a>; WEISBERG, D. K. Feminist Legal Theory:

In societies characterized by patriarchy, the formulation and execution of laws embody masculine values, resulting in a legal framework that is inherently patriarchal and susceptible to biases against women. This phenomenon arises from the persistent enforcement of laws that uphold male dominance over women within social structures. In the legal field, traditional theories like legal positivism exhibit patriarchal tendencies by perceiving law as an objective reality firmly rooted in factuality for legal practitioners<sup>35</sup>.

### 4. Gender, environment, and equity: women's role in natural resource management and conservation in Indonesia

Indonesia ranks as the fourth most populous nation globally and holds the distinction of having the largest Muslim-majority population worldwide<sup>36</sup>. Despite having the largest Muslim population globally, Indonesia operates without the implementation of Islamic law, which precludes its classification as a Muslim state. The official motto of the country is "Bhinneka Tunggal Ika," which translates to Unity in Diversity. Indonesia is home to over 700 living languages and approximately 1,300 ethnic groups. The local population exhibits a welcoming attitude towards foreigners and others, attributable to its highly diverse society. The presence of various ethnic groups results in a significant range of local cuisines. The diverse traditional dishes across various regions in Indonesia are characterized by their rich use of spices and herbs. This significant factor motivated the Dutch to establish their colonies in the early 17th century. Indonesia not only boasts a diverse society but also holds the position of third in the world for biodiversity. Indonesia, situated along the equator, exhibits a tropical climate characterized by consistent sunshine throughout the year. It undergoes two distinct seasons: the rainy season and the dry season<sup>37</sup>.

Indonesia's Global Gender Gap score in 2023 was 68.4% or 0.684, a 0.3% or 0.003 increase from the previous year. Nevertheless, Indonesia's aggregate score remained at 0.697, which is the same as in 2022. This suggests that Indonesia has not made any progress from the previous year, having achieved 69.7% gender equality. Achievements in education, health and survival, economic participation and opportunity, and political empowerment comprise the score. Scores on the Global Gender Gap Report are assigned on a scale of 0 to 1, with 1 denoting complete gender equality and 0 indicating complete inequality<sup>38</sup>.

The level of women's access and participation in decision-making regarding natural resource management could be much higher across multiple tiers, from the household level to national and international arenas. Women face constraints in accessing and controlling education, information, training, capital, land, and technology related to Natural Resources. Disparities in the distribution of benefits from natural resource development continue to persist. The impact of environmental destruction disproportionately affects women, leading to a greater burden on this demographic. The adverse effects of Natural Resource degradation on women are more pronounced than those experienced by men.

Gender represents a social construct that arises from the fields of sociology and anthropology, serving to elucidate the socio-cultural framework that delineates

Foundations. Temple University Press, Philadelphia, 1993. Feminist Legal Theory. ISBN 978-1-56639-029-3.

<sup>&</sup>lt;sup>35</sup> NATALIS, A. "Reformasi Hukum dalam Rangka Mewujudkan Keadilan bagi Perempuan: Telaah Feminist Jurisprudence", *Crepido*, V. 2, no 1, 2020, p. 11–23.

<sup>&</sup>lt;sup>36</sup> DHINGRA, I. C. *Sustainable Development in India and South-East Asia*. Manakin Press, New Delhi, 2023. ISBN 978-1-00-089875-0.; JAMES, G. *Introduction to Indonesia*. Gilad James Mystery School, Denver, 2023.

<sup>&</sup>lt;sup>37</sup> MEIVITAWANLI, B. Effect of Foreign Direct Investment in Tourism on Economic Growth: Empirical Study in Indonesia. In: *Tourism and Foreign Direct Investment*, Abingdon: Routledge, 2022, p. 194–214.

<sup>&</sup>lt;sup>38</sup> IBCWE. *Fakta tentang Indonesia dalam Global Gender Gap Report 2023*. Online. Available at: <a href="https://ibcwe.id/id/fakta-tentang-indonesia-dalam-global-gender-gap-report-2023/">https://ibcwe.id/id/fakta-tentang-indonesia-dalam-global-gender-gap-report-2023/</a>

the roles and relationships between women and men within a society. Gender, being a socio-cultural construct, is not a universal or uniform concept; rather, it is relative to the specific socio-cultural context of each society. Gender is typically differentiated from sex, which refers to the biological classification of individuals as male or female and encompasses the societal roles assigned to men and women. Women fulfil the role of child-bearers, engaging in the processes of childbirth and other functions associated with their biological predispositions. This role cannot be substituted by individuals of the male gender, indicating that the notion of sex is both universal and inherent, unchangeable, applicable across all eras, and relevant in every location around the globe<sup>39</sup>.

This contrasts with relative genders, which may vary across different locations and can be interchanged or evolve. The labour distribution within the fishing community exhibits distinct characteristics when compared to that of the farming community. In subsistence fishing communities, there is a notable balance in the involvement of men and women in production activities, as exemplified by the Bajau people who inhabit marine environments. The Bajau fishing family exhibits an integrated approach to labour, with no distinct separation between the roles of men and women. All tasks are completed collaboratively. The couple alternates responsibilities such as sailing boats, babysitting, and preparing rice while collaboratively engaging in income-generating activities like fishing, gathering shellfish and sea cucumbers, and repairing nets and other gear.

Some fishing communities hold the belief that it is inappropriate for women to venture out to sea, and there is a prevailing notion that if women do engage in fishing, they will not achieve successful outcomes. In this society, the task of fishing in the sea is primarily undertaken by men, while women are responsible for household duties such as cooking and nurturing. Should he need to catch fish, his approach would be limited to the beach, utilising basic tools like sero or nets. Unlike subsistence fishing communities, fishing communities with a market economy orientation typically see women participating in post-production activities<sup>40</sup>.

Historically, women have maintained a significant connection with nature that persists to the present day. The repercussions of environmental degradation disproportionately affect women significantly. In numerous particularly among indigenous populations, women are integral to the stewardship of soil, water, plants, animals, and various other natural resources. The existing gender gap in natural resource management continues to impede women's contributions to environmental protection and management. The Food and Agriculture Organisation (FAO) report on food security highlights that women in developing countries, particularly in rural regions and dependent on natural resources for their livelihoods, are integral to small-scale livestock management, conservation efforts, and the sustainable utilisation of diverse plant and animal species. They also play a role in seed selection and other aspects of agriculture that shape the future of agricultural systems, as well as food security and livelihoods<sup>41</sup>.

Bosold<sup>42</sup> emphasises that gender plays a crucial role in the context of mangrove conservation. Men and women, occupying distinct societal roles, engage with mangroves in varied ways. Their viewpoint on the significance of mangroves and the necessary measures for their protection is distinct and insightful.

 <sup>&</sup>lt;sup>39</sup> INDRIATMOKO, Y. Pembuka Cerita dari Desa ke Desa. In: *Dari Desa Ke Desa: Dinamika Gender Dan Pengelolaan Kekayaan Alam*, Bogor: CIFOR, 2007, p. 1–8. ISBN 979-24-4686-9.
 <sup>40</sup> INDRAWASIH, R. "Pembagian Kerja Secara Gender Pada Masyarakat Nelayan di Indonesia", *Jurnal Masyarakat dan Budaya*, V. 6, nº 2, 2004, p. 71–86. <a href="https://doi.org/10.14203/jmb.v6i2.205">https://doi.org/10.14203/jmb.v6i2.205</a>

<sup>&</sup>lt;sup>41</sup> SARTIKA, P. *Kesenjangan Gender Menghambat Peran Perempuan dalam Pengelolaan Sumber Daya Alam*. 2024. Available at: <a href="https://greennetwork.id/ikhtisar/kesenjangan-gender-menghambat-peran-perempuan-dalam-pengelolaan-sumber-daya-alam/">https://greennetwork.id/ikhtisar/kesenjangan-gender-menghambat-peran-perempuan-dalam-pengelolaan-sumber-daya-alam/</a>

<sup>&</sup>lt;sup>42</sup> BOSOLD, A. L. "Challenging the 'Man' in Mangroves: The Missing Role of Women in Mangrove Conservation", *Student Publications: Gettysburg College*, V. 14, 2012, p. 1–31. Available at: <a href="https://cupola.gettysburg.edu/student-scholarship/14/">https://cupola.gettysburg.edu/student-scholarship/14/</a>

Mangrove timber seldom serves as the primary income source for impoverished families reliant on forests; instead, it functions as a resource for meeting household subsistence requirements. The labour-intensive task of gathering firewood is predominantly undertaken by women, resulting in an increased physical burden and elevated opportunity costs due to the time allocated to this activity. Women typically allocate approximately 20 hours each week to the collection of wood-based fuels necessary for household cooking requirements. Social practices and responsibilities have the potential to reinforce established norms; however, they can also restrict women and children from allocating time to education or pursuing other income-generating activities. Research indicates that women and children are particularly susceptible to the impacts of indoor air pollution resulting from the use of wood for cooking and heating purposes<sup>43</sup>.

The state's initiatives to preserve mangrove areas have yet to reach their full potential, primarily due to the exclusion of women from these efforts. The current approach is predominantly male-driven, needing more involvement of women in the conservation of mangrove ecosystems. This condition does not align with the principles of gender equality. This aligns with the observations made by the Global Forest Coalition as detailed below: The presence of entrenched patriarchy leads to the manifestation of various forms of discrimination and marginalisation against women. The situation reflects an absence of formal land ownership and access rights, even though women constitute 83% of the 850 million individuals reliant on forests for their essential needs.

Women have a significant impact on forest conservation and restoration; however, their involvement in forest governance is limited, and their access and tenure rights frequently need more attention. As forests gain commercial appeal, particularly through forest carbon offset markets, there is a noticeable trend of transferring forest ownership and access from women to men. This shift effectively marginalises women, who play a crucial role in forest conservation efforts. To safeguard and preserve forests. The participation of women in the degradation of mangrove forests aligns with the initiatives of the Asian Development Bank and the Strategic Climate Fund, which partnered in 2016 to emphasise the restoration of Indonesia's forests through the Community-Focused Investment Project aimed at combating deforestation and forest degradation. This initiative is characterised by its integration of gender responsiveness throughout the project's implementation process. Both initiatives endorse Indonesia's Forestry Investment Programme, which seeks to mitigate emissions resulting from deforestation and forest degradation (REDD+), with a specific focus on mangroves.

Nguyen and Dang <sup>44</sup> indicate that a gender difference exists in mangrove-based livelihood activities. There is a higher level of participation in this activity among men compared to women. Nevertheless, the involvement of women in the capture of fish and shrimp within mangrove regions is notably significant. This can be attributed to multiple factors. Initially, fishing necessitates a robust physical state to effectively manage the machinery, haul the net, and navigate the boat, presenting considerable challenges for women to accomplish. This activity necessitates a minimum of two participants: one individual is responsible for catching fish, while the other ensures the boat remains balanced.

Consequently, the involvement of women is significant, although their contributions frequently take on a supportive nature in this context. Secondly, men assume a prominent position in aquaculture due to the inherent challenges and risks associated with this activity. Cultivation necessitates individuals with expertise and understanding to effectively manage and promptly identify issues in order to reduce potential losses. Third, the gender division of labour in these two

<sup>&</sup>lt;sup>43</sup> RASQUINHA, D. N. "Manning the Mangroves: Gender, Regional Identities, and Social History Shape Mangrove Forest Dependence and Governance", *Ecology and Society*, V. 29, no 1, 2024, p. 17. <a href="https://doi.org/10.5751/ES-14809-290117">https://doi.org/10.5751/ES-14809-290117</a>

<sup>&</sup>lt;sup>44</sup> NGUYEN, T. H. M.; DANG, T. H. "Gender Role in Mangrove Resource Management: Case Study in Trieu Phong District of Quang Tri Province, Vietnam", *Journal of Vietnamese Environment*, V. 9, no 2, 2018, p. 92–98. <a href="https://doi.org/10.13141/jve.vol9.no2.pp92-98">https://doi.org/10.13141/jve.vol9.no2.pp92-98</a>

communities indicates that women are primarily tasked with household chores, family care, and the sale of products gathered from mangroves. At the same time, men tend to take on a greater share of responsibilities associated with income generation.

Women have indeed engaged in mangrove management, and their contributions are frequently significant at the local level. Their involvement encompasses a range of activities, including the planting, maintenance, and processing of mangrove products into economically valuable items, such as processed foods or handicrafts. This role demonstrates that women possess substantial capacity, knowledge, and skills in the maintenance of mangrove ecosystems, all while contributing to community welfare. Despite their significant involvement in technical and operational areas, women frequently need equivalent influence in decision-making processes. In the context of strategic decisions or policies concerning mangrove management, there is a noticeable trend where women's perspectives are often overlooked, resulting in a scenario where the ultimate decision-making authority predominantly resides with men.

This is closely linked to the prevailing social and cultural frameworks that remain patriarchal in numerous areas, where men are viewed as the primary leaders or decision-makers within both families and communities. Women are frequently perceived merely as executors rather than decision-makers, resulting in a constrained opportunity for them to express their perspectives or requirements. Despite women's participation in discussion forums or meetings, their perspectives frequently carry a different significance than those of men. In the realm of mangrove management, this situation may lead to policies or decisions that inadequately represent the needs and experiences of women despite their status as one of the groups most impacted by environmental changes.

This inequality adversely affects women and simultaneously undermines the effectiveness of mangrove management. Research indicates that natural resource management, characterised by the full and equal involvement of both women and men, is often more sustainable. This is due to women possessing a perspective that tends to be more comprehensive as a result of their engagement in multiple facets of daily life that interact closely with the environment. The absence of women's involvement in decision-making processes can impede the development of inclusive and sustainable policies.

In contrast to Indonesia, women in Colombia have frequently participated in economic activities, acquiring significant knowledge and skills along the way. In Colombia, rural women engage in the collection of shellfish from mangrove forests as a means of livelihood; however, the processes of land conversion and deforestation pose significant risks to their income source. The Roots: Women Sowers of Change programme aims to assist rural women in Colombia by enhancing their economic empowerment and reinforcing their responsibilities as guardians of mangrove ecosystems<sup>45</sup>.

The women involved in shellfish harvesting in Colombia understand the critical importance of safeguarding mangrove forests for maintaining the health of the shellfish population. They acquire sustainable harvesting and processing techniques through knowledge transfer from women within their families and communities. The Through the Roots: Women Sowers of Change programme empowers women to act as guardians of mangrove forests, ensuring the protection of their livelihoods while simultaneously contributing to forest preservation. This initiative involved hundreds of shell women who systematically cleared and planted over 6,000 mangrove seedlings, contributing to the restoration of three hectares of forest. Every woman is allocated 1 million pesos monthly as supplementary income for the purpose of cleaning and safeguarding mangrove forests. The programme also imparts critical skills, including business planning and financial management, while highlighting the importance of mutual support. The programme will

<sup>&</sup>lt;sup>45</sup> RAHMANIA, D. *Melihat Pemberdayaan Perempuan Pedesaan di Kolombia sebagai Penjaga Mangrove*. 2024. Available at: <a href="https://greennetwork.id/kabar/melihat-pemberdayaan-perempuan-pedesaan-di-kolombia-sebagai-penjaga-mangrove/">https://greennetwork.id/kabar/melihat-pemberdayaan-perempuan-pedesaan-di-kolombia-sebagai-penjaga-mangrove/</a>

implement advanced technology to enhance the efficiency of banana processing for women<sup>46</sup>.

## 5. Navigating dual roles: coastal women's contributions to mangrove management and the fight against gender inequality

Coastal women refer to individuals residing in coastal regions, encompassing those engaged in familial activities related to fishing as well as those involved in various occupations outside of the fishing industry. The significance of coastal women's positions and roles is underscored by the sexual division of labour prevalent in coastal communities, particularly within fishing sectors. Furthermore, various issues exist regarding the integration of coastal women, such as the generally low educational conditions, the lack of objective assessment of the female labour force despite their increased family workload, and the persistent sociocultural values within the community that hinder the active participation of coastal women. Coastal women play a significant role in the social dynamics surrounding mangrove conservation activities in their daily lives. High mobility activities encompass domestic tasks associated with internal household social interactions, including cooking, childcare, and serving spouses, alongside public engagements like social gatherings and questhouse activities. Additionally, these activities extend to economic and political realms. Women can serve as a pivotal force in society by disseminating information regarding the significance of coastal resource conservation<sup>47</sup>.

The individual's social role in society is consistently interconnected. The treatment that consistently recurs is invariably present. Understanding gender involves examining the inherent traits that various societies construct for men and women. The adherence of women to roles dictated by societal constructs inhibits any potential for change in their status or circumstances. It is posited that women are confined to the domestic sphere exclusively. Women who receive labels are often expected to embody qualities such as beauty, stubbornness, loyalty, patience, nurturing tendencies, and gentleness, among others. It is often perceived that men should embody qualities such as firmness, strength, bravery, and the suppression of emotions like crying. This reflects the current dynamics within society.

Gender inequality represents a subset within a broader spectrum of intricate gender-related challenges. The issues at hand cannot be resolved through a singular policy approach, given their dynamic nature and the potential for variation across different countries over time. Moreover, different gender issues can be interconnected and have reciprocal effects, complicating the discussion when attempting to address them in isolation. Gender inequality exemplifies discrimination that arises from social constructs, notwithstanding the biological distinctions between men and women. Marginalisation positions women at the edges of economic and social spheres, whereas sexism involves biases and discrimination rooted in gender. Gender bias manifests in behaviours that preferentially support men over women, while stereotypes tend to simplify and categorise roles or traits according to gender. The concept of the double burden refers to women who participate in reproductive, productive, and community management tasks, frequently sacrificing their time in the process. Policies that do not consider the distinct roles associated with gender in specific contexts contribute to the continuation of inequality. Gender-based violence, affecting both women and men who diverge from traditional masculinity norms, represents a significant form of discrimination. Gender subordination reflects a disparity in power dynamics, which may manifest as domination, empowerment, collective action, or spiritual influence. A thorough social transformation is essential to tackle these issues,

<sup>47</sup> MASSENGA, T. W. *Peran Perempuan Dalam Pelestarian Mangrove*. Yayasan Penerbit Muhammad Zaini, Pidie, 2022.

<sup>&</sup>lt;sup>46</sup> RAHMANIA, D. *Melihat Pemberdayaan Perempuan Pedesaan di Kolombia sebagai Penjaga Mangrove*. 2024. Available at: <a href="https://greennetwork.id/kabar/melihat-pemberdayaan-perempuan-pedesaan-di-kolombia-sebagai-penjaga-mangrove/">https://greennetwork.id/kabar/melihat-pemberdayaan-perempuan-pedesaan-di-kolombia-sebagai-penjaga-mangrove/</a>

necessitating modifications in culture, social relations, politics, economics, and societal attitudes regarding gender. Throughout history, societies have transitioned from small communities to more complex national structures, highlighting the need for a reconfiguration of gender relations to achieve greater equality.

The primary issue concerning women's work is the dual burden: women struggle to effectively balance their responsibilities as workers and mothers. At the same time, society often relegates them to low-status, low-income positions on the fringes of the economy due to childbirth. Domestic work utilises a significant portion of women's labour supply, yet it confines them to positions with limited advancement opportunities. The economic challenges faced by women are reflected in their positions as unpaid contributors to family businesses, as well as in the latest statistics regarding unemployment and underemployment rates. Furthermore, for women who secure employment, economic marginalisation manifests as wages that are significantly lower in comparison to their male counterparts. Finally, the informal labour market and the disproportionate presence of women within it highlight a consistent theme of women's challenges in the economy<sup>48</sup>.

The ongoing issue related to the evolving economic roles and responsibilities of women, along with the rise in their participation in the workforce, is the dual burden they must manage. For many working women, employment represents a prolongation of the daily schedule to balance their income-generating tasks alongside domestic duties. The occurrence of double workload or double working days represents a significant challenge within the realm of women's employment issues. The issue intensifies when we analyse the long-term effects of women's dual responsibilities on their mental and physical well-being, along with the consequent decline in productivity. Numerous stereotypes regarding women's work behaviour stem from the challenges individual women face in reconciling the conflicting demands of their professional and personal lives within the constraints of their time. The issues of absenteeism, diminished earning potential, and decreased profits for employers, alongside a work history marked by frequent transitions in and out of the labour force, reflect behaviours that employers and researchers often interpret as a lack of commitment to work and employment. These patterns arise from circumstances where women struggle to manage the dual demands placed upon them.

Research on the dual role of women in mangrove management reveals a range of perceptions regarding the motivations behind women's engagement in these dual roles in their daily lives. Women engaged in mangrove management believe that their participation can enhance the family economy and alleviate the financial responsibilities of their husbands, all while maintaining their other essential roles. A number of women utilise their leisure time to engage in work, viewing it as a means of enhancing productivity within their daily routines. The dual role of women mangrove managers is intricately connected to the social dynamics within the local community. Social changes within society frequently necessitate that women assume multiple roles at the same time. This dual role primarily serves to bolster the family economy. Coastal communities exhibit three primary roles: domestic roles, public roles, and social roles. Women engaged in mangrove management frequently distribute family responsibilities among their husbands or other family members. In certain communities, the allocation of tasks continues to be shaped by gender despite a noticeable rise in women's participation in economic activities. Multiple factors impact the decision of women mangrove managers to assume dual roles, encompassing educational, economic, and cultural dimensions. The presence of this dual role prompts a range of perceptions within coastal communities concerning both traditional values and the adaptation to changing economic requirements. The involvement of women in mangrove management plays a crucial role in promoting environmental sustainability while simultaneously serving as a significant strategy for enhancing family economic resilience.

<sup>48</sup> INTERNATIONAL CENTER FOR RESEARCH ON WOMEN. *Keeping Women Out: A Structural Analysis of Women's Employment in Developing Countries*. The Office, Washington, 1980.

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The issue regarding the dual role of women as mangrove managers is fundamentally rooted not in the role itself but rather in the consequences it imposes on their families and their overall lives. Women in mangrove management frequently encounter challenges akin to those faced by women in various other communities, particularly in relation to their transitional roles, which gender-based divisions of labour often influence. Historically, women have been viewed as having a more prominent role in the domestic sphere, whereas men are seen as the primary figures in the public sphere, often serving as the main breadwinners.

The unbalanced division of labour in mangrove management can lead to an increased burden on women. Alongside their responsibilities for household chores, women who manage mangroves frequently engage in supplementary economic activities, including mangrove cultivation or management, to bolster the family economy. This situation not only consumes valuable time and resources but also reinforces a hierarchical dynamic, positioning women's contributions as "secondary" in relation to men's roles.

The inequitable distribution of roles results in an increased workload for women serving as mangrove managers. They must manage household affairs while also actively overseeing natural resources, such as mangroves, which demand considerable energy and time. The implications of this burden may lead to increased physical and mental strain on women while also obstructing the advancement of gender equality within coastal communities.

The issue of double burdens persists due to societal structures that designate domestic responsibilities, such as cooking, cleaning, and childcare, as inherently feminine roles. Consequently, even when women opt to engage in the public workforce, they continue to carry the weight of these domestic obligations. Feminism addresses the concept of women's dual roles as a means to address the injustices experienced by women. It is important to recognise that feminism is not a singular entity; however, a significant portion of it still arises from the distinction between public and domestic spheres, leading to the emergence of the concept of dual roles.

Michel Foucault, a prominent 20th-century French philosopher and historian, made significant contributions that deepen our comprehension of social power and control. A key element in his analysis is the role of normalisation as a mechanism of power. Foucault articulated the concept of normalisation as a fundamental component of power dynamics. He posits that normalisation encompasses a collection of practices employed by power to align individuals with specific standards and norms that are favoured by society or authority. Normalisation extends beyond merely adjusting individuals to social norms; it also encompasses the process of establishing those norms themselves. Foucault's perspective reveals that the law functions beyond merely maintaining justice or addressing breaches of norms. The law serves as a crucial mechanism in the process of societal normalisation. The interplay between legislation, judicial systems, and law enforcement is crucial in defining and upholding specific societal norms.

The situation of mangrove women illustrates a dual burden, encompassing their involvement in productive activities, such as fishing, collecting mangroves, or managing marine products, and their reproductive responsibilities, which include household and family care. This phenomenon can be understood as a consequence of the normalisation process. These roles are frequently regarded as "natural" social norms for women; however, they are, in fact, social constructs upheld by various power mechanisms, such as laws, policies, and social structures.

Laws, local policies, and environmental conservation policies frequently overlook the dual role that women play in mangrove ecosystems. In other terms, they are categorised as "invisible" workers within the economic framework of coastal communities. Women are often viewed as inherently suited to manage this dual responsibility, yet they need legal protection or policies that ensure an equitable distribution of labour.

Foucault posits that law functions not merely to uphold justice but also to establish and sustain specific social norms. The law, in these instances, appears to

uphold the prevailing gender hierarchy by overlooking the contributions of women within the mangrove sector. Policies emphasising economics or conservation often prioritise male actors as the primary leaders within communities, relegating women's roles to a secondary or even overlooked status.

### 6. Ecofeminism and power dynamics: critiquing the women-nature nexus in mangrove management

Michel Foucault suggested that the notion of 'truth' is significantly influenced by the power dynamics and knowledge present within a specific context. Michel Foucault posited that the concept of truth is neither absolute nor universal. Consequently, truth represents a condition articulated through diverse manifestations of existing knowledge, indicating that what is deemed true within one society in a specific context may significantly differ from the truths recognised by another society in a different context.

The law functions as a strategic tool employed by the state or influential groups that participate in the law-making process. The objective is to shape the perceptions, behaviours, and overall welfare of individuals by asserting that specific actions are permissible while others are not, which may result in unforeseen outcomes.

Foucault<sup>49</sup> posits that humanity gradually transitions from conflict to conflict once achieving universal reciprocity, thereby generating laws as a substitute for warfare. Nevertheless, humanity persists in governing all forms of violence via legal frameworks, while one form of domination perpetuates another.

The unrecorded and unpaid labour of women across history and culture significantly contributes to the world's 'progress' and the maintenance of the status quo. Barriers to entry for women in leadership roles persist today, resulting in a disconnect between women's views and perspectives and the dominant cultures and decision-making processes prevalent in much of the world. The world system has predominantly been constructed by men, who have shaped the natural environment to align with their capitalist objectives aimed at enhancing growth and consumption. Similar to women, nature has historically been treated as a resource for technological progress and production, often without proper accountability.

Ecofeminism serves as a significant framework for examining the conflicting dynamics between nature and production, as well as the distinctions between men and women and the boundaries of public and private spheres, which define the contemporary global capitalist system. Ecofeminism represents a critical examination of ecological issues intertwined with political theory, focusing on the analysis of male dominance across different societal structures. Ecofeminism examines the intricate dynamics between women and nature, employing gender as a lens to scrutinise the connection between humanity and the natural world. Numerous ecofeminists contend that nature, akin to women, has been infantilised, sanitised, and subdued by patriarchal capitalism to create a status quo that favours men and prioritises growth. The term 'Mother Earth,' while widely recognised as embodying power, strength, and life-giving qualities, ultimately simplifies both women and nature to a singular concept of motherhood. This perspective relegates them to a purely reproductive and passive role<sup>50</sup>.

The outcome of the 21st Paris Climate Conference remains uncertain, and its potential to reinvigorate the global climate change movement will only become clear with time. This week, world leaders convened in France to engage in discussions regarding various proposed solutions to pressing issues, including strategies aimed at restricting global warming to 2 degrees Celsius. It is reasonable to anticipate that the term "Mother Earth" will be a topic of discussion among

<sup>&</sup>lt;sup>49</sup> FOUCAULT, M. "Nietzsche, Genealogy, History", In: RICHARDSON, J.; LEITER, B. (eds.), *Nietzsche*, Oxford: Oxford University Press, 2001, p. 139–164.

<sup>&</sup>lt;sup>50</sup> BARI, M. *Manipulating Mother Nature: Gendered Antagonism in Geoengineering*. Online. 2020. Available at: <a href="https://www.boell.de/en/2020/01/30/manipulating-mother-nature-gendered-antagonism-geoengineering">https://www.boell.de/en/2020/01/30/manipulating-mother-nature-gendered-antagonism-geoengineering</a>

politicians, scientists, and experts in the coming days. The notion that women and nature are fundamentally connected suggests an implicit acknowledgement of their mutual exploitation. Despite decades of harnessing the Earth's power, American children have been instructed to refer to the environment as "Mother Earth." The concept of the Earth as a parental figure due to its role in sustaining us presents a comforting analogy. Nevertheless, it is often overlooked in childhood education and continues into adulthood that gendered and sexist language poses significant risks by perpetuating gender stereotypes and hierarchies<sup>51</sup>.

There has been a recent initiative to incorporate the relationship between women and nature within the framework of mangrove management, emphasising the domestic roles that women fulfil, particularly regarding aspects of care and related matters. This reflects the marginalisation of women, illustrating how they are positioned as "the second sex" or second-class citizens, with their existence often overlooked. The distinction between nature and culture, for instance, illustrates the separation and stratification between the two sexes, with one being assigned a lower status than the other<sup>52</sup>.

In this context, the discrimination and marginalisation of women arise from societal perceptions concerning their status and role, which are influenced by differing views in comparison to men. These views are rooted in both natural perspectives and cultural values. In this context, women symbolise the essence of nature that requires control by those who are refined. The initiative to develop women's roles has resulted in a cycle of inequality within the dynamics between men and women. Consequently, one rationale presented to women as being "closer to nature" is their stronger connection to the predominant realm of public or communal engagement in social life<sup>53</sup>.

## 7. Empowering women in mangrove management: a Foucaultian analysis of power, resistance, and gender equality

Michel Foucault posited that the exercise of power inevitably gives rise to resistance. Consequently, this indicates that resistance is not solely a reaction to oppression or control; rather, it is also a fundamental component of the dynamics of power itself. Michel Foucault challenged the perspective that resistance exists independently of power. Resistance emerges from the internal dynamics inherent in power relations. Michel Foucault asserted that resistance gains authenticity and efficacy by emerging in the very spaces where power is enacted.

Consequently, resistance may manifest concurrently with power, becoming a fundamental component of the power network. Michel Foucault asserted that there is no singular or central form of resistance that serves as the origin of all rebellions. Conversely, multiple forms of resistance emerge in different contexts. Resistance manifests in various forms, including coordination, violence, compromise, and additional expressions.

For women mangrove managers to achieve such strength, empowerment is a necessary precursor. The concept of 'power,' as articulated by Michel Foucault and elaborated upon in the theoretical framework section, denotes a form of power that is empowering, dynamic, and non-oppressive. The application of the power perspective is essential for empowering women mangrove managers, as they typically engage with the intricate dynamics of power relations, legal frameworks, and spatial considerations. Women are often characterised as vulnerable individuals. It is posited that individuals can gain empowerment through sufficient access to

<sup>&</sup>lt;sup>51</sup> MILNER-BARRY, S. *The Term "Mother Nature" Reinforces the Idea That Both Women and Nature Should Be Subjugated*. 2015. Available at: <a href="https://qz.com/562833/the-term-mother-nature-reinforces-the-idea-that-both-women-and-nature-should-be-subjugated">https://qz.com/562833/the-term-mother-nature-reinforces-the-idea-that-both-women-and-nature-should-be-subjugated</a>

TITALEY, E. *Perempuan Nuaulu: Tradisionalisme dan Kultur Patriarki*. Yayasan Pustaka Obor Indonesia, Jakarta, 2012. ISBN 978-602-433-316-4.

<sup>&</sup>lt;sup>53</sup> TITALEY, E. *Perempuan Nuaulu: Tradisionalisme dan Kultur Patriarki*. Yayasan Pustaka Obor Indonesia, Jakarta, 2012. ISBN 978-602-433-316-4.

both formal and non-formal resources, subsequently enabling them to make decisions aligned with their needs.

The author posits that truth can be equated with experience, thereby elucidating the complexities inherent in prostitution. The experiences shared by women mangrove managers can be regarded as valid insights, contributing to the generation of new knowledge. This experience fundamentally aligns with the characteristics of all socially constructed knowledge. Scott<sup>54</sup> posits that the experience in this definition is derived not from external explanations but from the feelings of the WTP and the knowledge they generate themselves.

This principle is indeed governed by laws and regulations, notably in the Presidential Regulation of the Republic of Indonesia Number 73 of 2012, which addresses the National Strategy for Mangrove Ecosystem Management. The National Strategy for Mangrove Ecosystem Management represents a systematic approach through policies and programmes aimed at achieving sustainable management of mangrove ecosystems while fostering a prosperous community that utilises available resources, all within the framework of national development planning. Article 2 of the regulation specifies that the National Strategy for Mangrove Ecosystem Management is to be executed in a coordinated manner, serving as a foundational guideline for the Government, Regional Governments, business actors, and the community. Nonetheless, the coordination outlined in this regulation is limited to interactions among institutions and needs to address the coordination and integration that involves the community. This regulation appears to highlight the importance of integration and equality in the management of mangroves.

The Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number 10 of 2022, which addresses the Preparation of the General Plan for Forest and Watershed Land Rehabilitation and the Annual Plan for Forest and Land Rehabilitation, lacks a principle of participation in the management of mangroves. The fundamental approach to mangrove rehabilitation has not facilitated community involvement, nor has it addressed community empowerment, particularly in coastal regions. There exists a compelling opportunity, such as the utilisation of mangrove fruits or leaves, which can be transformed into economically valuable products by the community. This situation presents an irony, as the focus of mangrove conservation, particularly in protected forest areas, remains predominantly on the protection of animals alone.

In production forests, the rehabilitation of mangroves is aimed at enhancing the productivity of both timber and non-timber forest products while still adhering to the principles of forest sustainability. This effort has yet to facilitate community participation, development, or utilisation of mangroves. Conversely, mangroves can be compelling when effectively communicated to the community or government, facilitating education about their advantages and enhancing public engagement. The government is in the process of drafting a regulation focused on the protection and management of mangrove ecosystems; however, this draft needs a strong emphasis on integration. This is also one of the six criticisms submitted by the Indonesian Forum for the Environment (WALHI); namely, this draft government regulation has not accommodated community involvement in mangrove ecosystem management. The draft government regulation needs to acknowledge the local governance established by the community. The governance of mangrove ecosystems in this draft government regulation exhibits a pronounced state-centred approach.

Furthermore, it lacks a definitive stance on safeguarding mangrove ecosystems against various government policies that favour extractive industries. Additionally, this draft regulation appears to be significantly delayed in relation to its foundational law, Law Number 32 of 2009, concerning Environmental Protection and Management. Following the passage of the law in 2009, it took 14 years for a derivative regulation to emerge that addresses the protection and management of

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<sup>&</sup>lt;sup>54</sup> SCOTT, J. W. "The Evidence of Experience", *Critical Inquiry*, V. 17, no 4, 1991, p. 773–797.

mangrove ecosystems. This proposed government regulation needs to be revised regarding the enforcement of sanctions against those responsible for mangrove destruction. Furthermore, it needs to integrate mangroves within the framework of disaster mitigation that involves local communities. Local communities, comprising both men and women, possess valuable knowledge and practical experience due to their daily interactions with the mangrove ecosystem. The methodology employed must integrate academic and technocratic elements while also incorporating local knowledge.

The management of mangroves in Indonesia is fundamentally based on policies that predominantly focus on government involvement, lack community engagement and fail to prioritise gender equality. Numerous laws and regulations mandate that all national policies adhere to the principle of gender mainstreaming, as outlined in Presidential Instruction Number 9 of 2000 regarding Gender Mainstreaming. Gender mainstreaming serves as a strategic approach aimed at incorporating gender considerations throughout the various stages of planning, drafting, implementing, monitoring, and evaluating national development policies and programmes<sup>55</sup>.

The preceding analysis indicates that national policies concerning mangrove management lack a foundation in the principle of gender mainstreaming. Various documents concerning women's rights assert that the state is obligated to uphold these rights and incorporate the principle of gender equality into policies, particularly in the realm of environmental management. The Presidential Instruction on Gender Mainstreaming underscores the necessity for every institution to integrate gender considerations throughout the processes of planning, drafting, implementing, monitoring, and evaluating national development policies and programmes. To promote gender mainstreaming effectively, it is essential to take specific actions that facilitate women's active involvement in management roles, particularly by positioning them as administrators within mangrove management organisations. This represents the initial phase for women's engagement in all aspects of mangrove management and conservation, encompassing the planning, implementation, and evaluation stages. At every stage, it is essential to acknowledge and incorporate women's perspectives, as they represent a significant and impactful factor in the management of mangroves.

Gender equality or justice refers to a state where the roles and social dynamics of women and men are equal, harmonious, and balanced. The realisation of this condition hinges on equitable treatment between women and men. The concept of gender equality encompasses access, which refers to the equal opportunities available to both women and men. Both women and men engage equally in the decision-making process. Control over development resources is equally shared between women and men. Benefits and development should provide equal advantages for both women and men<sup>56</sup>.

The role of women in mangrove ecosystems influences multiple dimensions of life, particularly regarding access, participation, control, and perceived benefits. Empowerment facilitates access for women to information, training, and resources that were once challenging to obtain. Training on mangrove processing, including the creation of food products, herbal medicines, and handicrafts from mangrove raw materials, offers women the chance to acquire new skills. Furthermore, the availability of business capital and technology that facilitates the utilisation of mangroves enables women to enhance productivity and generate employment opportunities within the community. This indicates that women transcend traditional roles, emerging as innovators in the sustainable management of natural resources.

<sup>56</sup> LEACH, M. *Gender Equality and Sustainable Development*. Routledge, London, 2016. ISBN 1-138-92131-9.

PURWANTI, A.; WIJANINGSIH, C.; MAHFUD, M. A.; NATALIS, A. "Sustainable Development Goals for Empowering Women Fishers Through Mangrove Use", *Review of Economics and Finance*, V. 20, 2023, p. 907–916. https://doi.org/10.55365/1923.x2022.20.103. Accessed on: 21 Nov. 2023.

In the context of participation, the empowerment of women facilitates their active engagement in the mangrove management process. The engagement of women in the planning of conservation programmes, the execution of reforestation efforts, and the oversight of activities aimed at preserving mangrove regions is essential. Women participate in mangrove management through various community groups, including forest farmer groups and village cooperatives. This involvement transforms them from passive participants into active decision-makers. In mangrove rehabilitation projects, the contributions of women, particularly through their local knowledge, play a crucial role in determining the project's success.

The control dimension emphasises the capacity of women to influence and dictate the trajectory of mangrove resource utilisation. Empowering women enables them to take on strategic roles within community groups responsible for managing mangroves, including positions such as chairperson or administrator of cooperatives. Their authority encompasses the management of financial and natural resources pertinent to mangrove activities. Some communities have designated mangrove land for women to engage in productive activities, including crab cultivation and mangrove-based ecotourism. This control enables women to assume a more significant role in the decision-making processes that impact the well-being of their communities.

The advantages of women's empowerment in mangrove management encompass a wide range of social, economic, and environmental dimensions. Women have the potential to enhance family income by transforming mangrove products into high-value items, including mangrove fruit syrup, crackers, and herbal tea. The rise in income serves to address the requirements of families while simultaneously reinforcing the role of women as key contributors to the local economy. Women engaged in mangrove management receive increased acknowledgement for their contributions, thereby fostering a gender balance within the community. In the context of environmental considerations, the effectiveness of women's empowerment initiatives frequently plays a role in enhancing ecological awareness within the community. Preserved mangrove areas serve a critical function in safeguarding coastal regions from abrasion, mitigating the effects of disasters like tsunamis, and sequestering carbon, which plays a significant role in addressing climate change.

#### 8. Conclusion

In the realm of mangrove conservation in Indonesia, the role of gender emerges as a critical element that warrants thorough examination. The examination reveals that men and women possess distinct viewpoints and behaviours regarding mangrove utilisation, indicative of their societal roles. Existing mangrove conservation policies are predominantly influenced by male perspectives, leading to a frequent oversight of women's contributions and roles. This inequality imposes a dual responsibility on coastal women, as they are tasked with both domestic duties and the management of natural resources.

The disparities in mangrove management highlight the marginalisation of women, frequently regarded as "second-class citizens." The contrasting perspectives of nature and culture highlight the issue of gender stratification, resulting in the marginalisation of women in the decision-making processes concerning mangrove conservation. Addressing this challenge requires a focus on women's empowerment as a crucial factor in achieving gender equality and fostering the sustainability of mangrove ecosystems.

The empowerment of women in mangrove ecosystems significantly influences four primary dimensions: access, participation, control, and benefit. Access for women necessitates the availability of opportunities to acquire information, training, and resources, including technology and business capital. Training in the utilisation of mangrove products, including food production, herbal medicines, and handicrafts, presents an opportunity for women to acquire new skills and enhance their income potential.

Women must engage actively in the planning, implementation, and oversight of mangrove conservation programmes. This engagement acknowledges the significance of women not only as traditional participants but also as innovators and decision-makers. In the context of control, women who are empowered possess the authority to dictate the utilisation of mangrove resources, particularly in community-driven productive endeavours like ecotourism or crab farming. This enhances the strategic role of women within resource management groups.

Women's empowerment yields advantages across economic, social, and environmental dimensions. Women have the potential to enhance family income by transforming mangrove products into items with higher market value. The participation of women in mangrove management highlights their contributions, which in turn fosters the advancement of gender equality within coastal communities. From an environmental perspective, the empowerment of women has demonstrated a positive correlation with enhanced conservation outcomes, safeguarding coastal regions, and facilitating climate change mitigation efforts via the preservation of mangrove ecosystems.

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