Challenging norms, protecting forests: The agency and negotiation strategies of women rangers in Aceh, Indonesia

Rizkika Lhena Darwin*✉, Melly Masni, Bobby Rahman***, Cut Dian Fitri****, Anna Christi Suwardi*****, Nabila Amira Septiana********

*Universitas Islam Negeri Ar-Raniry, Banda Aceh, Indonesia
Email: rizkikadarwin@ar-raniry.ac.id
**Universitas Islam Negeri Ar-Raniry, Banda Aceh, Indonesia
Email: melly.masni@ar-raniry.ac.id
***Universitas Malikussaleh, Lhokseumawe, Indonesia
Email: bobby.rahman@unimal.ac.id
****Universitas Islam Negeri Ar-Raniry, Banda Aceh, Indonesia
Email: cutdianfitri@ar-raniry.ac.id
*****Mae Fah Luang University, Chiang Rai, Thailand
Email: anna.suw@mfu.ac.th
******Universitas Islam Negeri Ar-Raniry, Banda Aceh, Indonesia
Email: 220801005@student.ar-raniry.ac.id

ABSTRACT

This research analyzes the strategic agency of Mpu Uteun, a women-led conservation group in Aceh, Indonesia, that emerged in response to severe environmental degradation within a patriarchal social context. Grounded in the theoretical framework of women's agency and empowerment, this research examines the negotiation mechanisms that these female forest guardians employ across multiple spheres—domestic, communal, economic, and state—to legitimize their roles in environmental governance as they navigate socio-cultural barriers. Conducted within a qualitative design, this research employed secondary data examined through thematic narrative analysis. The findings revealed that the agency of Mpu Uteun is rooted in a collective experience of ecological disaster, which motivates proactive conservation measures such as forest patrols, reforestation, and disaster mitigation. The group's success hinges on sophisticated negotiation strategies: they renegotiated domestic roles to accommodate public activism, navigate communal resistance through inclusive tactics and non-confrontational approaches toward illegal loggers, and, crucially, secure formal legitimacy from the state by obtaining a customary forest management permit. This research concludes that Mpu Uteun exemplifies an effective

✉ Corresponding author:
Email Address: rizkikadarwin@ar-raniry.ac.id

model of community-based conservation while fundamentally transforming the gendered landscape of natural resource governance. Thus, this research advances understanding of women's environmental agency, demonstrating how strategic negotiation dismantles patriarchal barriers and informs inclusive conservation policy.

Keywords: Women Rangers; Forest Conservation; Women's Agency; Negotiation; Gender Norms.

ABSTRAK

Studi ini menganalisis agensi strategis Mpu Uteun, sebuah kelompok konservasi yang dipimpin perempuan di Aceh, Indonesia, yang muncul sebagai respons terhadap degradasi lingkungan yang parah dalam konteks sosial patriarki. Berdasarkan kerangka teoritis agensi dan pemberdayaan perempuan, penelitian ini mengkaji mekanisme negosiasi yang digunakan oleh para perempuan penjaga hutan ini di berbagai ranah—domestik, komunal, ekonomi, dan negara—untuk melegitimasi peran mereka dalam tata kelola lingkungan saat mereka menavigasi hambatan sosial-budaya. Dilakukan dalam desain kualitatif, penelitian ini menggunakan data sekunder yang diperiksa melalui analisis naratif tematik. Temuan penelitian mengungkapkan bahwa agensi Mpu Uteun berakar pada pengalaman kolektif bencana ekologis, yang memotivasi langkah-langkah konservasi proaktif seperti patroli hutan, reboisasi, dan mitigasi bencana. Keberhasilan kelompok ini bergantung pada strategi negosiasi yang canggih: mereka menegosiasikan kembali peran domestik untuk mengakomodasi aktivisme publik, menavigasi perlawanan komunal melalui taktik inklusif dan pendekatan non-konfrontatif terhadap penebang liar, dan, yang terpenting, mengamankan legitimasi formal dari negara dengan memperoleh izin pengelolaan hutan adat. Studi ini menyimpulkan bahwa Mpu Uteun merupakan contoh model konservasi berbasis masyarakat yang efektif sekaligus secara fundamental mengubah lanskap gender dalam tata kelola sumber daya alam. Dengan demikian, penelitian ini memajukan pemahaman tentang agensi lingkungan perempuan, menunjukkan bagaimana negosiasi strategis meruntuhkan hambatan patriarki dan menginformasikan kebijakan konservasi yang inklusif.

Kata Kunci: Perempuan Penjaga Hutan; Konservasi Hutan; Agensi Perempuan; Negosiasi; Norma Gender.

1. INTRODUCTION

Indonesia possesses vast forest resources, although these areas are experiencing a significant decline. In 2020, data from the Ministry of Environment and Forestry (KLHK) indicated a national forest area of 120.5 million hectares, a reduction from the estimated 122 million hectares during the preceding New Order era (Susetyo, 2022). This ongoing decrease is largely attributed to substantial annual forest degradation, commonly referred to as deforestation, which the Food and Agriculture Organization (FAO) estimates at 1,315,000

hectares per year (Arumingtias, 2021). Furthermore, data from Global Forest Watch identifies Sumatra as one of the three Indonesian islands facing the highest rates of deforestation (Raras, 2022).

Aceh province, situated in Sumatra, faces particularly severe challenges to its forest integrity. Reports from the Aceh Forest, Nature, and Environment (HAkA) Foundation indicate a loss of 443 hectares of forest cover between June 2020 and July 2021, with an additional estimated 251,000 hectares classified as damaged. The government's efforts toward effective forest rehabilitation have been constrained, primarily by limited financial resources allocated for forest protection. High levels of forest damage, prevalent in regions such as Central Aceh, North Aceh, and Gayo Lues (Hanafiah, 2022), stem principally from encroachment, illegal logging, and the conversion of forest land. Compounding the issue, a lack of comprehensive stakeholder engagement in development planning has hindered effective solutions and worsened the situation.

Development approaches often fail to adequately consider the impacts of forest degradation on key stakeholders, notably women. Due to prevailing patriarchal structures and cultural norms that perceive forests as primarily male spaces, women typically face significant limitations in accessing and controlling forest management processes (Waani, 2010). This gender disparity is further compounded by the influence of corporate interests in natural resource extraction, which often reflects masculine-coded dynamics (Rinoza, 2016). Consequently, the potential for effective and sustainable management of forests, which are vital for sustaining numerous livelihoods, is diminished when gender equity is ignored. Indeed, gender-based restrictions in forest governance serve primarily to worsen environmental degradation (Gabriel, De Vera, & Antonio, 2020).

Women have increasingly asserted their agency within forest and natural resource management spheres. Key catalysts for this heightened involvement include concerns regarding climate change, environmental degradation resulting from the marginalization of women's contributions, and the growing recognition of women as crucial actors in ensuring community food security. While female agency in natural resource management has not yet achieved widespread dominance, distinct models of women's leadership have emerged. Illustrative examples include the Chipko movement in India, where women physically protected sacred trees integral to their livelihoods; protests by women from the Kendung Mountains against sand mining that threatened groundwater quality, symbolized by acts of resistance such as cementing their feet; Wangari Maathai's pioneering of a mass tree-planting movement in Kenya; and the management of 'lopo' (traditional food storage units) by women in Mollo, East Nusa Tenggara, to enhance local food security.

Building upon these precedents of female environmental leadership, this research investigates women's involvement in forest management within Bener Meriah, Aceh, where women have assumed active roles as forest rangers. The forests in this region are integral to the Gunung Leuser National Park (TNGL), a major Indonesian natural conservation area recognized as the largest flora and fauna protection zone in Southeast Asia. Despite its ecological significance, the TNGL ecosystem faces considerable threats; in 2018, forest degradation led to an approximate reduction of 33,702 hectares of forest cover (Zikrillah et al., 2021). Such degradation has yielded severe consequences for local communities, notably

triggering destructive flash floods in Bener Meriah in 2015 and 2020, which directly affected five villages across two sub-districts.

In direct response to these environmental crises, a women's ranger group, commonly known as *Mpu Uteun*, was established in Bener Meriah in 2019. While the present reserach focuses on their agency and negotiation, prior research by Zikrillah et al. (2021) has already highlighted the role of these women in preserving TNGL forests. That research found their efforts were significantly supported by elements of social capital, including mutual trust, shared norms, and established networks. This article aims to provide a more detailed exploration of forest protection issues and gender relations within the Bener Meriah context. Utilizing a theoretical framework grounded in women's agency—conceptualized through capacity and ability as sources of empowerment—we analyze the presence and actions of these female forest rangers. This framework facilitates an understanding of the extent to which these women function as agents who reclaim narratives and negotiate space within the traditionally male-dominated domain of forest management. Their negotiations manifest across diverse spheres, including the family, the community, interactions with corporate entities (often represented by illegal loggers), and engagements with the state. Accordingly, this research examines the strategies employed by *Mpu Uteun* for safeguarding and managing forests, offering critical insights into their evolving role in forest conservation.

By focusing on the nuanced, multi-layered negotiation strategies of *Mpu Uteun*, this research makes a critical contribution to the literature on women's environmental agency. It moves beyond identifying that women act to explaining how they strategically navigate entrenched socio-cultural barriers, thereby offering a replicable framework for understanding women-led conservation in other patriarchal contexts.

2. LITERATURE REVIEW

2.1. Women's Environmental Movements

Scholarship concerning rural women's roles in forest conservation has been significantly shaped by studies of prominent movements, particularly the Chipko Movement in Uttarakhand, India (Haigh, 1988; Bhatt, 1990), alongside other Indian initiatives such as the Baiga Women's efforts and Mahila Mandal groups (Hunt & Jean, 1996; Tyagi & Das, 2020). Further international examples subjected to academic scrutiny include the Olokomeji movement in Nigeria (Gbadegesin, 1996) and women's conservation activities in Kakamega, Kenya (Ondiba & Matsui, 2021). Among these, the Chipko movement is widely recognized as a seminal example of indigenous community-led environmental protection in the Global South (Haigh, 1988). Characterized by radical, non-violent, women-led activism, exemplified by the iconic practice of hugging trees targeted by loggers, Chipko is often considered a foundational precursor to subsequent rural women's forest conservation movements globally (Tyagi & Das, 2020).

Investigations into the emergence of these movements reveal a confluence of motivating factors. They often arise from the economic hardships faced by rural communities experiencing deforestation (Haigh, 1988), direct concerns over ecological degradation (Ondiba & Matsui, 2021; Tyagi & Das, 2020; Zikrillah et al., 2021), the potential loss of plants and sacred sites tied to religious beliefs (Ondiba & Matsui, 2021), and situations where male emigration compels women to assume responsibility for safeguarding local forests for community survival

(Gbadegesin, 1996). The resultant sense of vulnerability and despair among women, as the group most directly impacted, frequently catalyzes collective protest and action. Furthermore, the success of these movements can be bolstered by enabling resources; access to education and information has been identified as a primary driver (Muthuki, 2006), while social capital—encompassing mutual trust, established norms, and robust networks—provides crucial support for sustained collective action (Zikrillah et al., 2021).

Theoretically, much of the existing research employs an ecofeminist framework to understand these phenomena, often positioning women as key agents in mitigating forest degradation (Elbaar & Meilantina, 2020; Muthuki, 2006; Locke, 1999; Jackson, 1993). Such studies frequently assert women's greater effectiveness as environmental conservationists compared to men (Gbadegesin, 1996; Cecile, 1993; Dalupe, 2020), often linking this to perceived inherent feminine qualities of nurturing and care (Locke, 1999). Alongside ecofeminism, other analytical lenses include the social movement framework, which views these actions as strategic responses to discrimination and inequality (Fitri & Akbar, 2017), and the empowerment framework, which connects the emergence of women's movements to increased access to resources like education and information (Madhu, 2001; Zikrillah et al., 2021).

Despite this body of work, a significant gap remains concerning the specific ways women negotiate their roles and position themselves within intersecting spheres of family, community, and interactions with corporate entities when acting as forest protectors. Engaging in forest conservation presents unique challenges for women, requiring them not only to adapt to environments often perceived as masculine domains but also to navigate complex societal and familial gender norms. Critically, they must often contend with corporate interests, which are frequently primary drivers of the environmental degradation necessitating conservation efforts. Exploring the nuances of these negotiations—how women reconcile personal conviction, familial expectations, community perceptions, and corporate pressures—is therefore crucial.

Moreover, research focused specifically on women forest rangers in Bener Meriah is notably scarce. The limited existing work (such as Zikrillah et al., 2021) primarily utilized a social capital framework to analyze the resources influencing the rangers' existence. This research, in contrast, adopts women's agency as its central theoretical concept to elucidate the multifaceted negotiation processes undertaken by *Mpu Uteun*. By focusing on agency and negotiation, this research aims to provide novel insights into the dynamics of women-led conservation in this specific Indonesian context, thereby enriching the broader literature.

2.2. Gender Norms, Ecofeminism, and Women's Agency

Social norms, encompassing socially agreed-upon actions, regulations, and ideals within a community (Pearse & Connell, 2016), significantly influence behavior. Gender norms, specifically, constitute a set of behavioral standards, cultural beliefs, and collective practices that structure the prevailing gender order (Pearse & Connell, 2016). These norms unconsciously permeate various social arenas, delineating activities and spaces as 'masculine-coded' (e.g., engineering, mechanics) or 'feminine-coded' (e.g., healthcare, arts) (Pearse & Connell, 2016). In occupational contexts, this often translates into associating women's roles with traits like

nurturing and diligence, while men's work is linked to physical strength, authority, and technical skill.

Furthermore, gender norms impose constraints on women not typically faced by men, including specific customs, taboos, and legal or time limitations (Warren, 1997), alongside a disproportionate responsibility for child and family care (Badgett, 1999). This is exemplified by traditional expectations for women to be obedient, remain in the domestic sphere ("stay in the kitchen"), and function as "child-producing machines" (Efendi & Wahyuningsih, 2024). Such constraints often result in significant economic consequences, fostering gender inequality within households and markets. Research on agrarian societies, for instance, highlights how customary practices and inheritance laws favoring men contribute directly to gender inequality and rural women's poverty (Agarwal, 1997).

However, norms are not immutable and can be subject to negotiation or 'bargaining' (Agarwal, 1997). Agarwal (1997) demonstrates that women's bargaining position can be influenced by economic conditions and collective group strength, with control over material resources potentially driving institutional changes that reshape gender ideologies. Similarly, the systematic organization of women through collective action and campaigns represents a critical strategy for reforming restrictive gender norms and practices (Agarwal, 1997; Rosyidah, 2024). In the context of environmental struggles, the natural environment itself can become an arena where women, like the Gayo women in this research, confront and negotiate existing social norms regulating their actions.

Drawing on these dynamics, ecofeminism offers a relevant theoretical lens. As a body of knowledge applying a feminist perspective to the global environmental crisis, ecofeminism advocates replacing patriarchal values of domination and exploitation with principles of care, nurturing, and reciprocity, often associated with femininity (Mallory, 2006). Ecofeminists critically analyze power relations, particularly those maintaining the dominance of certain groups over marginalized ones, recognizing that human-environment interactions are similarly structured by these power dynamics. One of the main ideas is that exploitative development strategies frequently target both the environment and women as well (Jackson, 1993). Consequently, threats to environmental sustainability are seen as direct threats to women's lives, given their closer relationship with and reliance on natural resources, particularly in developing contexts where women bear primary responsibility for household sustainability through access to forest products like food, fuel, feed, and medicinal resources (Warren, 1997). Deforestation intensifies these burdens, potentially leading to water crises that impede domestic duties and forcing women to travel further for essential resources.

Ecofeminism posits a positive synergy between women and nature (Jackson, 1993), often associating women with altruism and caregiving, suggesting a stronger inherent commitment to environmental protection (Cecile, 1993). This perceived bond underpins proposals to mobilize women in conservation, challenging masculine models of resource exploitation by highlighting women's often more sustainable resource utilization practices, such as collecting deadwood instead of felling live trees, despite facing greater poverty (Jackson, 1993). While critiquing how patriarchal systems exploit nature and perpetuate restrictive gender norms, ecofeminism values women's traditional roles in environmental care and emphasizes the need to challenge norms that marginalize this contribution.

This connects directly to the concept of women's agency, defined as the capacity to initiate change, undertake transformative actions (Eduards, 1994), or the freedom to act towards achieving valued goals, including overcoming obstacles and confronting oppressive conditions (Sen. A, 1985). For women, exercising agency is complex, often requiring prolonged negotiation processes due to constraining social norms (Warren, 1997) and necessitating mediation within family, community, class, and religious contexts (Butalia, 1993). Nonetheless, agency theory asserts that women's subordinate positions are socially constructed and thus amenable to change. Education, particularly secondary education, has been identified as a crucial factor in enabling women's agency, often more impactful than economic opportunities alone, despite correlations between economic growth, poverty alleviation, and agency (Hanmer & Klugman, 2016).

In the context of empowerment, agency signifies women's power to determine their lives and participate actively in social, economic, and political spheres, encompassing choice, independence, and participation (Sen, 1985). This creates a virtuous cycle where empowerment fosters agency, which in turn reinforces empowerment. Key indicators of agency include decision-making power, collective action, and leadership. Analyzing agency requires considering both available resources (e.g., critical awareness, skills, assets) and the institutional structures (relationships, social norms, laws) that women must navigate. These structures operate across multiple levels and significantly shape the possibilities for exercising agency. Therefore, the framework of women's agency is highly pertinent to understanding the women rangers of Bener Meriah, who act not only as environmental protectors but also as agents of social change navigating the complex interplay between economic needs, environmental preservation, and gender justice (Kabeer, 1999).

3. METHOD

This research utilizes a qualitative research design, informed by a feminist perspective and centered on the concept of empowerment. This method aims to comprehend and demonstrate attempts at critical emancipatory action within a particular social phenomenon (McNabb, 2020), which is consistent with empowerment research traditions that concentrate on people or groups that have traditionally been marginalized from societal power structures (Small, 1995). The foundational goal of this research is to highlight the strengths and agency of marginalized groups, aiming ultimately to contribute to social change, participant liberation, and improved well-being (Small et al., 2016).

The research methodologically employs secondary qualitative data analysis, drawing upon existing data originally collected for different purposes (Cheong et al., 2023). The data were compiled from a systematic search of publicly available documents published concerning *Mpu Uteun* and forest conservation in Bener Meriah. The corpus includes news articles from reputable national and international outlets (e.g., *Mongabay Indonesia*, *BBC Indonesia*, and *The Conversation*), official reports from supporting non-governmental organizations like the HAkA Foundation, and government press releases regarding the group's customary forest management permit. This dataset was purposefully selected to provide a multi-faceted view of *Mpu Uteun*'s activities, capturing media representations, NGO perspectives, and official state recognition.

The refined dataset was analyzed using thematic narrative analysis. The analytical process adhered to established procedures (McNabb, 2020) and involved three key stages. First, an initial open coding of all documents was conducted to identify key events, actors, and motivations. Second, these codes were consolidated into broader thematic categories corresponding to the spheres of negotiation (family, community, state, economic actors) and the study's core theoretical concepts (agency, negotiation, gender norms). Finally, these themes were synthesized to construct a coherent narrative account of *Mpu Uteun*'s strategies and evolution. This approach allowed for an interpretation of their actions not as isolated events but as a continuous process of strategic agency in practice.

The primary limitation of this research is its reliance on secondary data, which precludes direct engagement with the women of *Mpu Uteun*. The analysis is based on published accounts rather than the rangers' own voices captured through interviews or ethnographic observation. To mitigate this, a diverse range of sources was used to triangulate information and reduce potential media or organizational bias. Future research employing direct ethnographic methods would be a valuable complement to this research.

4. FINDINGS AND DISCUSSION

4.1. The Socio-Ecological Context: Forest Degradation and Gayo Patriarchy in Bener Meriah

The district of Bener Meriah in Aceh is characterized by abundant natural resources, including rich forest biodiversity. However, the preservation of this ecological wealth faces considerable challenges, primarily driven by anthropogenic pressures. Forest violations are significant; Fauna and Flora International documented 190 such instances between 2008 and 2009, and the Aceh Forest Care Coalition (KPHA) noted a sharp increase by 2015, recording 345 cases of illegal logging within the region (Hanafiah, 2019). This escalating illegal activity poses a growing threat to the Bener Meriah forest ecosystem and increases the risk of natural disasters. Projections indicate Bener Meriah is likely to face recurrent landslides, floods, and droughts over the next decade (DLHK, 2024). The severity of these risks was demonstrated by a major flash flood in 2015, which devastated a village, destroyed homes, and forced the evacuation of 462 residents (Phagta, 2015).

Critically, illegal logging activities in Bener Meriah are predominantly undertaken by men, reflecting a broader pattern of gendered dynamics in environmental destruction. Within systems where forests are viewed primarily as economic resources for exploitation, male dominance in controlling and managing these resources often reinforces existing patriarchal traditions. This is evident in Bener Meriah, where decision-making concerning land use and forest access remains largely under male control, consistently marginalizing women's roles and potential contributions to conservation efforts.

This marginalization is deeply intertwined with the patriarchal structures inherent in Gayo society. As established in previous research, the strong patriarchal and patrilineal system accords Gayo women a subordinate position within the family (Hm et al., 2018). Men are privileged as heirs to the family lineage and titles, meaning mothers lacking male offspring risk diminished status and influence. Furthermore, Gayo marriage traditions often depict women as "pledged" (*Juelen*), obligating them to adhere to the customs of their husband's family (Pratiwi et al., 2019). This subordinate status extends to customary inheritance laws, where married women typically forfeit inheritance rights upon receiving a marital dowry (*unyuk/tempah*), a

practice not applied to sons (Abubakar & Auni, 2020), contributing to observable disparities in educational attainment between Gayo men and women.

Beyond the family structure, women's roles in the broader Gayo community are constrained by strict cultural taboos (*Sumang*), which significantly limit their participation in public life. The *Sumang Pelangkahen/Peralanen* (journey) tradition, for instance, restricts the movement of married women (*jema banan*) and unmarried girls (*beru sedang*), particularly after dark. Consequently, women's activities outside the home are often confined to collective, gender-segregated tasks, such as assisting husbands in agricultural fields (Abubakar & Auni, 2020), with most spending their time engaged in domestic labor. This limited public sphere is further illustrated by studies on female Gayo religious scholars; while their emergence represents progress beyond the domestic realm, their influence remains largely confined to the female community (Rizha & Mustafa, 2020).

The intersection of forest management and ecological degradation has particularly acute consequences for women in Bener Meriah. As primary managers of domestic needs, women rely heavily on ecosystem services, especially clean water access. Water contamination resulting from deforestation poses direct health risks, impacting reproductive health and child well-being. Furthermore, the economic status of women, many of whom work in agriculture, deteriorates when land degradation reduces water availability for irrigation, leading to crop failures and increased economic hardship (Dewi & Rohma, 2023). This exacerbates the dual burden of domestic and economic responsibilities often borne by women. Ecological damage also introduces safety concerns, such as wild animals encroaching on residential areas due to habitat disturbance.

Therefore, the emergence of *Mpu Uteun*, the female forest rangers, can be understood as a direct response to the intertwined injustices of environmental degradation and restrictive patriarchal norms. By actively engaging in forest management, these women assert their presence and challenge their marginalization, participating directly in forest protection and decision-making. Their actions represent an implicit negotiation with the prevailing patriarchal culture, claiming a role in sustainably preserving the environment and its resources.

4.2. Agency in Practice: The Structure, Strategies, and Activities of Mpu Uteun

Mpu Uteun, the group of female forest rangers central to this research, emerged in Bener Meriah following a devastating flash flood that impacted the village of Damaran Baru in 2015. The initiative was spearheaded by local women from Damaran Baru, motivated by a profound sense of connection to and reliance upon the natural environment, which prompted them to volunteer for conservation efforts. From its inception, *Mpu Uteun* has demonstrated significant leadership and collective decision-making capabilities in forest management, encompassing activities ranging from strategic patrol planning to community collaboration for broader support.

Currently comprising 40 members, with women constituting the majority (approximately 23 members), *Mpu Uteun* operates through collective decision-making processes. These processes guide key activities, including the planning and scheduling of rotational forest patrols and the crucial identification of forest areas requiring monitoring due to vulnerability to illegal activities like encroachment and wildlife poaching (Hajad, 2024). Identifying these vulnerable regions, which pose direct threats to local settlements and

community agricultural lands (Nur, 2017), directly informs patrol strategies to optimize the effectiveness of forest protection efforts (Nur, 2017). Patrol duties undertaken by *Mpu Uteun* involve arduous treks through mountainous terrain at elevations between 1,000 and 2,500 meters, often requiring overnight stays in the forest. This demanding responsibility underscores their proactive commitment to safeguarding the forest ecosystems they value.

Beyond patrol duties, *Mpu Uteun*'s activities encompass broader disaster mitigation and ecosystem restoration efforts. Reforestation is a primary focus, involving planting seedlings in degraded forest areas. This is complemented by nursery management, cultivating tree species selected for their resilience to landslides, alongside monitoring the existing fauna and flora within protected zones. The overarching aim of these activities is to enhance the ecosystem's resilience to natural disaster risks. Furthermore, *Mpu Uteun* is actively involved in developing designated forest areas for agricultural purposes, managing a 251-hectare protected forest zone under a permit issued by the Ministry of Environment and Forestry (KLHK), which allows for specific, regulated land use activities (Rahma & Mahmuddin, 2019; Hajad, 2024).

Mpu Uteun's leadership extends to community engagement and education. Recognizing that effective forest management requires resident involvement, they actively educate the local community about the detrimental impacts of deforestation and illegal logging. Concurrently, they encourage community participation in practical conservation actions such as reforestation, tree planting, and general greening initiatives. These outreach efforts serve the dual purpose of promoting environmental preservation and cultivating wider awareness of the vital role women fulfill in managing natural resources (Dewi & Rohma, 2023).

The agency demonstrated by these women in forest protection contributes to fostering complementary economic activities linked to environmental stewardship. By promoting environmental awareness, they simultaneously point out the economic benefits derived from forest preservation. This synergy is exemplified by Damaran Baru Village being recognized as a national 'Ecological Village' by the Indonesian Ministry of Tourism and Creative Economy in 2021 (ADWI, 2023). This designation reflects a community-led development model that integrates ecological principles with sustainability, emphasizing a balance between human needs and nature conservation, improving local well-being, and developing ecotourism initiatives. This recognition represents a significant step towards realizing a local economy that thrives in conjunction with, rather than at the expense of, environmental health.

4.3. Drivers of Agency: Motivations, Capacity Building, and Support Networks

Direct personal experiences serve as crucial motivating factors underpinning the forest protection initiatives undertaken by the women of Damaran Baru. The devastating flash flood that struck their village in 2015 left a profound traumatic impact, acting as a primary catalyst for action. As expressed by members, this shared trauma fuels a strong commitment to prevent recurrence: "There's no alternative; we don't want to experience the same disaster... The trauma from that event has driven the people of Damaran Baru to make a change, particularly the women who are committed to safeguarding the village..." (Asmunda, 2021). The disaster is widely attributed by the community to severe deforestation in the surrounding mountains, exacerbated by high levels of prior encroachment along the Gile River, which posed a significant threat (Hajad, 2024). Consequently, a powerful desire exists to protect the community, especially future generations, from similar environmental catastrophes.

Furthermore, concerns over essential resources, particularly clean water access, significantly influence their engagement. The Wih Gile River is the primary water source for six villages and the adjacent conservation forest area. During periods of water scarcity, women's water requirements are reportedly substantially higher than men's, highlighting the gendered dimension of resource vulnerability. This heightened awareness of environmental threats and resource precarity, catalyzed by the flood and water concerns, directly precipitated the formation of the female forest guardian group within the Village Forest Management Agency (LPHK), which later formally organized as *Mpu Uteun* (Najmuddin et al., 2022).

While initial motivation was strong, the nascent movement initially lacked specific technical expertise in forest patrol and illegal logging prevention. Over time, crucial capacity building was provided by the HAkA Foundation, equipping the women with specialized knowledge and practical skills. This training covered areas such as forest exploration techniques, flora and fauna identification and recording, monitoring protocols, standardized conservation methods, map reading, GPS usage, and identification of wildlife signs (Daii, 2024). This acquired expertise enabled them to effectively navigate the challenging terrain of the Leuser National Park Ecosystem Area and confront instances of illegal timber logging and wildlife poaching during patrols.

HAkA's role extends beyond technical training, acting as a vital external resource that empowers the female rangers and enhances their agency. By offering both capacity-building programs and financial assistance, HAkA facilitates the effectiveness of *Mpu Uteun*'s conservation strategies. This external support fosters greater confidence among the women in their roles and operational capabilities. Moreover, *Mpu Uteun* leverages HAkA's backing to conduct activism campaigns aimed at raising broader community awareness regarding the importance of conservation (Dewi & Rohma, 2023), contributing to increased community participation, including the involvement of men in the movement over time.

In addition to HAkA's support, the media has also significantly supported the framing of women rangers' agency as active participants in forest protection. This can be seen in several publications, including *The Conversation*, *Mongabay.co.id*, the *BBC*, and others. Narratives of women's heroism in environmental issues demonstrate that the media can be a strategic tool for elevating women's roles as leaders of change and shifting gender-biased social constructs in news reporting (Fitri & Maulina, 2020).

Internal group dynamics, specifically elements of social capital, are also essential resources for *Mpu Uteun*. Strong team cohesion, fostered by mutual trust among members, underpins the movement's consistency and potential for long-term sustainability (Dewi, Rohma, & Sabir, 2024). A shared dedication to environmental protection and community well-being provides powerful intrinsic motivation. This internal unity is vital for navigating challenges and resolving potential conflicts. Notably, while initiated and led predominantly by women, the movement's evolution has embraced inclusivity, with men joining the conservation efforts.

4.4. Negotiating Agency: Mpu Uteun's Strategies Across Institutional Spheres

Navigating entrenched institutional structures presents a significant challenge for *Mpu Uteun*'s operations. As established, the pervasive patriarchal culture within Gayo society relegates women to subordinate positions, a dynamic particularly pronounced in the traditionally male-dominated field of forest management. To assert their role in forest

protection, *Mpu Uteun* must therefore actively establish relationships and strategically negotiate their position across multiple intersecting spheres: the family, the wider community, economic actors (including illegal loggers), and the state apparatus.

The familial sphere represents a primary site of negotiation. Prevailing norms dictating women's roles often confine them to domestic responsibilities, limiting engagement in public activities. Consequently, women rangers must consciously work to balance their domestic obligations with their public activism in forest conservation. This involves ongoing efforts to persuade family members that their conservation work does not detract from household duties, employing subtle negotiation and seeking familial approval and support for their involvement (Dewi, Rohma, & Sabir, 2024).

Beyond the family, the women confront societal resistance and negative stigma associated with transgressing traditional gender roles; the sentiment that "the forest is not a woman's concern" persists (Dewi, Rohma, & Sabir, 2024). *Mpu Uteun* strategically negotiates this cultural landscape partly through their chosen name. "*Mpu Uteun*," meaning "owner of the forest," is notably gender-neutral, framing forest guardianship as a collective responsibility and implicitly inviting participation from all village members (Dewi, Rohma, & Sabir, 2024). Furthermore, they actively work to include men in their environmental efforts, aiming to broaden participation and legitimacy, as noted by one member: "One of our strategies is to include and encourage male teams to join patrols, especially in the deeper parts of the forest" (Hajad, 2024).

Negotiations also extend to religious and legal norms, specifically concerning Islamic Sharia interpretations prohibiting unrelated (*non-mahram*) men and women from working together in isolation, such as on forest patrols. The rangers counter potential objections through dialogue with religious and community leaders, arguing that the potential for transgression depends on individual intention rather than location, citing that impropriety can occur even in sacred spaces (Asmunda, 2023; Dewi, Rohma, & Sabir, 2024). Their deeper aim is to garner interpretations of Sharia law that actively support women's crucial involvement in environmental protection.

Perhaps the most challenging arena involves interactions with economic actors, primarily illegal loggers and hunters operating within the forest. It requires confronting individuals, predominantly men, whose activities are driven not only by timber sales but also by land clearing for agriculture, often linked to the expanding, lucrative coffee market in the region. It frequently pits the women guardians against community members, including relatives, seeking to establish coffee plantations in protected areas (Najmuddin et al., 2022), forcing *Mpu Uteun* to challenge and negotiate widespread local economic practices. While demanding strong negotiation skills, the women leverage distinct approaches compared to previous male-dominated patrol groups, where confrontations often escalated to violence (Najmuddin et al., 2022). *Mpu Uteun* employs less confrontational, "humble" engagement strategies, which have proven effective in influencing behavior. This capacity for peaceful negotiation enhances their success and directly challenges traditional views confining women to the domestic sphere. Their persuasive approach has influenced former illegal loggers, like Bustami (Dewi, Rohma, & Sabir, 2024), to cease destructive activities and join *Mpu Uteun*'s conservation efforts, viewing it as atonement and highlighting women's capacity to foster change and contest patriarchal norms.

Finally, negotiation with the state proved crucial for securing formal legitimacy and operational authority. Supported by external partners like the HAkA Foundation, *Mpu Uteun* successfully advocated for government recognition. In June 2019, they became the first women's group in Aceh granted a customary forest management permit by the Ministry of Environment and Forestry (Decree: SK. 9343/MENLHK-PSKL/PKPS/PSL.0/11/2019), covering 251 hectares (Najmuddin et al., 2022). This formal permit, a rare achievement for women's groups in this context, conferred significant credibility and legal protection upon their activities, while simultaneously raising governmental awareness regarding women's vital role in addressing environmental issues.

Collectively, these multifaceted negotiation processes demonstrate the effective agency of the women forest guardians. Utilizing both internal capacities and external resources, they employ contextually appropriate strategies—often drawing on stereotypically 'feminine' approaches like non-confrontation—to advocate for environmental sustainability across interactions with family, society, economic actors, and the state. Having established their operational space and legitimacy, their focus includes optimizing the management of their permitted customary forest area and developing associated eco-tourism initiatives. These efforts aim to create sustainable local livelihoods compatible with environmental preservation, encouraging a community shift away from ecologically harmful practices towards collective environmental stewardship.

5. CONCLUSION

The involvement of the *Mpu Uteun* women forest guardians in Bener Meriah, Aceh, provides compelling evidence of women's capacity to enact significant agency in forest conservation, even within deeply entrenched patriarchal structures. This research demonstrates that their effectiveness stems not merely from inherent motivation but crucially from the deployment of multifaceted negotiation strategies across familial, community, economic, and state spheres. By consciously balancing domestic responsibilities, strategically framing their roles, employing non-confrontational engagement tactics, and successfully securing formal state recognition, *Mpu Uteun* has navigated restrictive gender norms and institutional barriers to achieve tangible outcomes in forest protection, ecosystem restoration, and community mobilization. Their success challenges traditional gender roles associated with natural resource management and highlights the limitations of viewing forest conservation solely through a masculine lens. Ultimately, this research underscores negotiation as a vital dimension of women's environmental agency and suggests that recognizing and supporting women's capacity for strategic action is essential for fostering both gender equity and effective, sustainable environmental governance in Indonesia and beyond.

Future research could build on this research in several ways. A longitudinal research could track the long-term sustainability of *Mpu Uteun*'s conservation efforts and their impact on local gender norms. Furthermore, comparative case studies of other women-led environmental groups in Indonesia could help identify broader patterns of strategic negotiation. Ultimately, the success of *Mpu Uteun* offers a powerful policy implication: that supporting and formally recognizing women's grassroots environmental movements is not only a matter of gender equity but is also a highly effective strategy for achieving sustainable and resilient environmental governance.

References

Abubakar, A., & Auni, L. (2020). *Perempuan Gayo setelah juelen dan angkap menjadi kuso kini bag.* Lintas Gayo. https://lintasgayo.co/2020/12/01/perempuan-gayo-setelah-juelen-dan-angkap-menjadi-kuso-kini-bag-2/

ADWI. (2023). *Desa wisata Damaran Baru Eco Village.* Jadesta Kemenparekraf. https://jadesta.kemenparekraf.go.id

Agarwal, B. (1997). Bargaining and gender relations: Within and beyond the household. *Feminist Economics, 3*(1), 1–51.

Asmunda, A. (2021, Maret 12). *Mpu Uteun*, kisah perempuan-perempuan penjaga hutan di Damaran Baru Aceh. *Merdeka.com.* https://www.merdeka.com/peristiwa/mpu-uteun-kisah-perempuan-perempuan-penjaga-hutan-di-damaran-baru-aceh.html

Badgett, M. V. (1999). Assigning care: Gender norms and economic outcomes. *International Labour Review, 138*(3), 311–326. https://doi.org/10.1111/j.1564-913X.1999.tb00390.x

Bhatt, C. P. (1990). The Chipko Andolan: Forest conservation based on people's power. *Environment and Urbanization, 2*(1), 7–18. https://doi.org/10.1177/095624789000200103

Butalia, U. (1993). Community, state and gender: On women's agency during Partition. *Economic and Political Weekly, 28*(17), 12–24. https://www.jstor.org/stable/4399641

Cheong, H. I., Lyons, A., Houghton, R., & Majumdar, A. (2023). Secondary qualitative research methodology using online data within the context of social sciences. *International Journal of Qualitative Methods, 22,* 1–19. https://doi.org/10.1177/16094069231180160

Daii. (2024). Perangi pembalakan liar, perempuan di Aceh buat kelompok *Mpu Uteun* penjaga hutan. *Daii TV2.* https://daaiplus.com/perangi-pembalakan-liar-perempuan-di-aceh-buat-kelompok-mpu-uteun-penjaga-hutan/

Dalupe, B. (2020). Dari hutan ke politik: Studi terhadap ekofeminisme Aleta Baun di Mollo-NTT. *Jurnal Polinter: Kajian Politik dan Hubungan Internasional, 5*(2), 31–51. https://doi.org/10.52447/polinter.v5i2.4056

Dewi, K. U., & Rohma, M. N. (2023). *Mpu Uteun*: Kelompok perempuan pelindung hutan Aceh yang melawan patriarki. *The Conversation.* https://theconversation.com/mpu-uteun-kelompok-perempuan-pelindung-hutan-aceh-yang-melawan-patriarki-203681

Dewi, K. U., Rohma, M. N., & Sabir, H. U. (2024). Challenging masculinity: Analyzing the aspects of ecofeminism in Aceh's female forest rangers. *Jurnal Ilmiah Hubungan Internasional, 1*(1), 47–65. https://doi.org/10.26593/jihi.v1i1.7815.47-65

DLHK. (2024). Perambahan hutan lindung di Bener Meriah ancam ekosistem dan masyarakat sekitar. *DLHK Aceh.* https://dlhk.acehprov.go.id/berita/kategori/berita-uptd/perambahan-hutan-lindung-di-bener-meriah-ancam-ekosistem-dan-masyarakat-sekitar

Eduards, M. L. (1994). Women's agency and collective action. *Women's Studies International Forum, 17*(2–3), 181–186. https://doi.org/10.1016/0277-5395(94)90024-8

Efendi, D. A. P., & Wahyuningsih, S. (2024). Understanding gender injustice in early marriage: Challenges faced by women. *Gender Equality: International Journal of Child and Gender Studies, 10*(1), 91–103. https://doi.org/10.22373/equality.v10i1.22510

Elbaar, E. F., & Meilantina, M. (2020). The role of women in mitigation of forest and land fires based on local wisdom. *Systematic Reviews in Pharmacy, 11*(6), 930–938. https://doi.org/10.31838/srp.2020.6.131

Fitri, A. I., & Akbar, I. (2017). Gerakan sosial perempuan ekofeminisme di Pegunungan Kendeng Provinsi Jawa Tengah melawan pembangunan tambang semen. *CosmoGov, 3*(1), 83–95. https://doi.org/10.24198/cosmogov.v3i1.12634

Fitri, A., & Maulina, P. (2020). Narasi heroisme perempuan dalam isu lingkungan (Analisis framing berita Farwiza Farhan di media daring lokal dan nasional). *Gender Equality: International Journal of Child and Gender Studies, 6*(1), 51–60. https://doi.org/10.22373/equality.v6i1.6198

Gabriel, A. G., De Vera, M., & B. Antonio, M. A. (2020). Roles of indigenous women in forest conservation: A comparative analysis of two indigenous communities in the Philippines. *Cogent social sciences*, *6*(1), 1720564. https://doi.org/10.1080/23311886.2020.1720564

Gbadegesin, A. (1996). Management of forest resources by women: A case study from the Olokemeji Forest Reserve area, southwestern Nigeria. *Environmental Conservation, 23*(2), 115–119. https://doi.org/10.1017/s0376892900038492

Hajad, V., & Ikhsan, I. (2024). Ecofeminism as a movement: Choosing between economics and nature protection. *Theoretical and Practical Research in Economic Fields*, *15*(1), 91-100. https://doi.org/10.14505/tpref.v15.1(29).09

Haigh, M. J. (1988). Understanding 'Chipko': The Himalayan people's movement for forest conservation. *International Journal of Environmental Studies, 32*(1), 13–26. https://doi.org/10.1080/00207238808710418

Hanafiah, J. (2019). Hutan Aceh rusak, dua lokasi ini terus dirambah. *Mongabay.* https://www.mongabay.co.id/2019/08/14/hutan-aceh-rusak-dua-lokasi-ini-terus-dirambah/

Hanafiah, J. (2022). 251 ribu hektar hutan Aceh rusak, upaya pemulihan? *Mongabay.* https://www.mongabay.co.id/2022/03/26/251-ribu-hektar-hutan-aceh-rusak-upaya-pemulihan/

Hanmer, L., & Klugman, J. (2016). Exploring women's agency and empowerment in developing countries: Where do we stand? *Feminist Economics, 22*(1), 237–263. https://doi.org/10.1080/13545701.2015.1091087

Hunt, D, & Jean, K. (1996). *Gender and forest commons of the Western Indian Himalayas: A case study of differences* (Occasional Paper No. 6). Winnipeg, MB: Natural Resources Institute, University of Manitoba. https://hdl.handle.net/10535/479

Jackson, C. (1993). Doing what comes naturally? Women and environment in development. *World Development, 21*(12), 1947–1963. https://doi.org/10.1016/0305-750X(93)90068-K

Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change, 30*(2), 435–464. https://doi.org/10.1111/1467-7660.00125

Locke, C. (1999). Constructing a gender policy for joint forest management in India. *Development and Change, 30*(2), 265–285. https://doi.org/10.1111/1467-7660.00117

Lusia, A. (2021). Deforestasi di Indonesia mencapai rekor terendah, namun para ahli khawatir akan terjadi peningkatan. *Mongabay.* https://www.mongabay.co.id/2021/03/07/angka-deforestasi-indonesia-turun/

Mahmuddin, M. (2019). Partisipasi masyarakat dalam mitigasi bencana banjir (Studi kasus Sungai Wih Gile di Kampung Damaran Baru Kecamatan Timang Gajah Kabupaten Bener Meriah). *Jurnal Ilmiah Mahasiswa Fakultas Ilmu Sosial & Ilmu Politik*, *4*(4).

Mahyudin, M., & Nurbaiti, N. (2018). Pola asuh anak perempuan gayo dalam perspektif gender. *Hikmah: Journal of Islamic Studies*, *14*(1), 40-71. http://dx.doi.org/10.47466/hikmah.v14i1.102

Mallory, C. (2006). Ecofeminism and forest defense in Cascadia: Gender, theory and radical activism. *Capitalism Nature Socialism, 17*(1), 32–49. https://doi.org/10.1080/10455750500505408

McNabb, D. E. (2020). *Research methods for political science: Quantitative, qualitative and mixed method approaches.* London: Routledge.

Muthuki, J. (2006). Challenging patriarchal structures: Wangari Maathai and the Green Belt Movement in Kenya. *Agenda: Empowering Women for Gender Equity, 69,* 83–91.

Nur, M. (2017, Juni 23). Aceh bertaburan masalah lingkungan hidup. *WALHI.* https://www.walhi.or.id/aceh-bertaburan-masalah-lingkungan-hidup

Najmuddin, N., Satriawan, H., Misnar, M., Akmal, Y., & Nuraida, N. (2022). Pelatihan rancangan pembelajaran konservasi lingkungan berbasis local wisdom melalui lesson study pada LPHK di Kabupaten Bener Meriah. *Lumbung Inovasi: Jurnal Pengabdian Kepada Masyarakat, 7*(4), 756–764. https://doi.org/10.36312/linov.v7i4.1025

Ondiba, H. A., & Matsui, K. (2021). Drivers of environmental conservation activities among rural women around the Kakamega forest, Kenya. *Environment, Development and Sustainability, 23*(7), 10666–10678. https://doi.org/10.1007/s10668-020-01077-2

Pearse, R., & Connell, R. (2016a). Gender norms and the economy: Insights from social research. *Feminist Economics, 22*(1), 30–53. https://doi.org/10.1080/13545701.2015.1078485

Phagta. (2015, September 8). Bener Meriah Aceh dilanda banjir bandang, 462 penduduk mengungsi. *Liputan 6.* https://www.liputan6.com/news/read/2316985/bener-meriah-aceh-dilanda-banjir-bandang-462-penduduk-mengungsi

Pratiwi, N. L., Fitrianti, Y., Nuraini, S., Rachmawati, T., Laksono, A. D., Mufida, N. F. A., et al. (2019). Concealed pregnant women or *kemel* of Gayo ethnic in Blang Pegayon District, Gayo Lues District, Aceh (Ibu hamil "kemel" pada etnis Gayo di Kecamatan Blang Pegayon Kabupaten Gayo Lues, Aceh). *Buletin Penelitian Sistem Kesehatan, 22*(2), 81–90. https://doi.org/10.22435/hsr.v22i2.1693

Raras, B. (2022, April 18). Sumatra dan Kalimantan menjadi lahan deforestasi terbesar di Indonesia. *GoodStats.* https://goodstats.id/article/sumatra-dan-kalimantan-menjadi-lahan-deforestasi-terbesar-di-indonesia-76soh

Rinoza, R. (2016). Perempuan dan lingkungan: Memahami bumi sebagai kerahiman: Suatu upaya untuk kembali pulang ke rahim ibu pertiwi. *Academia Education,* 1–10. https://www.academia.edu/

Rizha, F., & Mustafa, A. (2020). Perempuan dan dakwah di dataran tinggi Gayo. *Jurnal Peurawi: Media Kajian Komunikasi Islam*, *3*(1), 37-56. http://dx.doi.org/10.22373/jp.v3i1.6519

Rosyidah, A. N., & Rafi'ivanka, N. (2024). Peran partai politik dalam membentuk kebijakan publik di Indonesia. *Dinamika Hukum & Masyarakat*, *7*(2), 1-12.

Sarin, M. (2001). Empowerment and disempowerment of forest women in Uttarakhand, India. *Gender, Technology and Development*, *5*(3), 341-364. https://doi.org/10.1080/09718524.2001.11910011

Sen, A. (1985). Well-being, agency and freedom: The Dewey lectures 1984. *The Journal of Philosophy, 82*(4), 169–221. http://www.jstor.org/stable/2026184

Small, S. A. (1995). Action-oriented research: Models and methods. *Journal of Marriage and the Family, 57*(4), 941. https://doi.org/10.2307/353414

Susetyo. (2022, November 20). How big is Indonesia's forest area? *Forest Digest.* https://www.forestdigest.com/detail/1905/luas-hutan-indonesia

Tyagi, N., & Das, S. (2020). Standing up for forest: A case study on Baiga women's mobilization in community governed forests in Central India. *Ecological Economics, 178,* 106812. https://doi.org/10.1016/j.ecolecon.2020.106812

Waani, N. E. (2010). Peranan perempuan dalam pelestarian hutan lindung Gunung Tumpa: Suatu analisis jender. *Jurnal Logos Spectrum, 5*(3), 150–160

Warren, K. J. (1997). *Ecofeminism: Women, Culture, and Nature*. Bloomington: Indiana University Press

Zikrillah, M., Afriana, F., Putri, R., & Yunus, S. (2021). Modal sosial perempuan dalam menjaga kelestarian hutan. *Negotium: Jurnal Ilmu Administrasi Bisnis*, *4*(1), 142-154