

Salt in Women's Hands: Traditional Salt Production Culture from Teupin Kuyuen Locality

Khaira Nazira^{1*}, Fikarwin Zuska², Fajar Utama Ritonga³
^{1,2,3} Universitas Sumatera Utara

Corresponding Author: Khaira Nazira khairanazira44@gmail.com

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ABSTRACT

This study aims to analyze the role of female salt farmers in Gampong Teupin Kuyuen in maintaining the sustainability of traditional salt-based livelihoods, while also providing new contributions regarding the integration of local ecological knowledge within the framework of ecofeminism and sustainable livelihoods. Using qualitative methods with an ethnographic approach, the study was conducted from April-July 2024 through participant observation and in-depth interviews with women involved in all stages of production, from sourdough salt, sour salt, cooking, and marketing. The findings indicate that women play a key role as well as managers of ecological knowledge, such as techniques for determining salinity and strategies for adapting to the rainy season. PHE NSO's CSR interventions are still charitable and have not yet targeted women's strategic needs. This study confirms that the sustainability of salt production is highly dependent on women's work, local knowledge, and cultural practices passed down across generations, with implications for the importance of more transformative, gender-based empowerment programs.

INTRODUCTION

Traditional salt production in Indonesia represents a natural resource based economic heritage that has sustained coastal communities for generations (Purwiyono et al., 2022). Salt is not merely a commodity but embodies a long standing relationship between humans, the sea, solar energy, and land-based ecological processes. Over the past two decades, however, the modernization of the national salt industry has placed traditional small-scale salt producers in an increasingly vulnerable position. Limited access to production technology and capital, increased dependence on market intermediaries, and heightened exposure to climatic variability have constrained the sustainability of smallholder salt livelihoods (Rasidi et al., 2023). Prolonged rainy seasons frequently eliminate income opportunities, while surplus production during dry seasons often leads to price collapses below production costs (Yanuartati & Sari, 2024). These conditions underscore the persistent economic and ecological vulnerability of coastal communities within unequal market structures.

Teupin Kuyuen Village in Seunuddon District, North Aceh, remains one of the few coastal settlements that preserves a traditional salt production system grounded in local ecological knowledge. Distinctively, salt production in this village is predominantly carried out by women, socially recognized as salt farmers. These women engage not only in production activities within the *lancang* (salt fields) but also in post-production management, distribution, and household economic sustainability. Their central role demonstrates that coastal economic systems are deeply embedded within social relations where women function as key actors in maintaining everyday livelihoods (Fatati et al., 2023).

The dual roles assumed by women salt farmers illustrate the lived experience of multiple responsibilities, wherein productive salt-making activities coexist with domestic labor. Locally expressed as “turning on two kitchens” the *jamboe sira* (salt kitchen) and the household kitchen – this articulation highlights how economic production and social reproduction are inseparably connected. Rather than positioning women solely as economically marginalized actors, these practices reveal how salt production is embedded within women’s identities, moral commitments, and collective survival strategies. Such findings resonate with broader anthropological and feminist scholarship that recognizes women’s bodies and labor as critical links between productive and reproductive spheres (Asmarani, 2024).

Cultural symbolism further reinforces this relationship between women, tools, and the coastal environment. The brine-filtering device used in traditional salt production, locally called *inong* (meaning “woman”), reflects a culturally embedded understanding of women as mediators between nature and livelihood. From an ecofeminist perspective, this symbolism does not introduce a new theoretical framework but provides an analytical lens to interpret existing practices that connect women’s labor with ecological care and resource management (Shiva & Mies, 1993; Warren, 2000). In Teupin Kuyuen, women’s everyday interactions with seawater, tools, and land reveal a sustainable ecological praxis rather than an abstract ideological position. Despite this culturally grounded resilience, women salt farmers continue to face structural

vulnerabilities. Salt prices are largely controlled by *meugee* (local retailers), who dominate market access, while production costs increase due to rising firewood prices and climate instability.

Comparable empirical patterns have been documented among women salt producers in Madura and Brebes (Rasidi et al., 2023; Yanuartati & Sari, 2024). However, women in Teupin Kuyuen demonstrate adaptive strategies rooted in local knowledge, including brine storage for rainy seasons, the use of salt seeding to accelerate crystallization, and simple gravity-based water distribution systems. These practices reflect the strategic use of available livelihood assets as conceptualized in the Sustainable Livelihood Framework (Chambers & Conway, 1992; DFID, 1999).

Importantly, existing theoretical frameworks ecofeminism and sustainable livelihoods are already well-established in explaining gendered ecological relations and livelihood strategies (Krantz, 2001; Shiva & Mies, 1993). The limitation does not lie in the absence of theory but in the scarcity of ethnographically grounded studies that document how these frameworks are *experienced and practiced* by women in specific coastal contexts, particularly in Aceh. Most previous studies on folk salt production in Indonesia prioritize technical efficiency, market integration, or income generation, offering limited empirical insight into women's embodied knowledge, cultural symbolism, and everyday ecological practices.

Similarly, corporate and policy interventions, such as CSR programs implemented by PT Pertamina Hulu Energi NSO, have largely relied on generic empowerment models rather than empirically grounded understandings of local livelihoods and women's ecological roles (Pertamina Hulu Energi, 2024). Social mapping results indicate that these programs remain predominantly charitable in nature and insufficiently aligned with the lived realities of women salt farmers. Therefore, the research gap addressed in this study is empirical rather than theoretical. This study contributes ethnographic evidence from the field to enrich existing phenomenological and livelihood literature by documenting how women salt farmers in Teupin Kuyuen *experience, interpret, and sustain* their livelihoods through everyday work practices, ecological knowledge, and culturally meaningful tools. By foregrounding women lived experiences, this study strengthens the empirical foundation of ecofeminist and sustainable livelihood analyses without claiming the development of a new theoretical framework.

THEORETICAL REVIEW

Ecofeminism (Ekofeminisme Kontekstual)

Ecofeminism is a theoretical perspective that emphasizes the structural link between the exploitation of nature and the subordination of women within the modern political-economic system (Shiva & Mies, 1993; Warren, 2000). This perspective stems from a critique of the logic of development and capitalism, which views nature as an object of production and women as invisible, secondary labor. However, in the context of this research, ecofeminism is not positioned as a normative ideology or advocacy movement, but rather as an analytical lens for

interpreting the socio-ecological practices that exist and occur in the daily lives of coastal communities.

Thus, the focus of ecofeminism in this research lies in understanding the concrete relationships between women, nature, and labor, as experienced and interpreted by local actors in traditional salt production practices. The relevance of ecofeminism in this research is evident in the central role of women as primary actors in the management of coastal natural resources, from the use of seawater and land to wood fuel in the salt production process. The ecological knowledge possessed by female salt farmers is embodied, acquired through daily work experiences and passed down across generations through social practices and interactions. Furthermore, cultural symbols such as the *inong* a saltwater filter linguistically translated as "*woman*" represent local understandings of women as mediators between nature and sustainability. Through a contextual ecofeminist perspective, these practices are understood as forms of sustainable ecological relations, without ideologizing women's experiences but instead positioning them as sources of empirical knowledge in social and environmental analysis.

METHODOLOGY

This study uses a qualitative methodology with ethnographic methods to understand in depth the salt production practices of women salt farmers in Gampong Teupin Kuyuen. Ethnography was chosen because it allows researchers to observe people's daily lives firsthand and capture cultural patterns that emerge from their own experiences. According to Harris and Johnson (2000), ethnography is a method that involves participatory observation and in-depth interviews to understand cultural interpretation in depth. The approach applied in this ethnographic research is an empirical approach that seeks to read the way women salt farmers of Teupin Kuyun interpret work, bodies, tools, and ecological relations through their own perspective. This field research was carried out from February 20-April 20, 2024, following the daily rhythm of salt production from morning to evening.

Data collection techniques include participatory observation, in-depth interviews, and documentation. Observation was carried out by being involved in the process of *meu'u tanoh*, drying, filtering *ie sira*, and cooking *ie sira* until it became a lump of salt crystals, so that researchers could understand the technical and social dimensions of women's work. In-depth interviews were conducted flexibly to key informants such as Mrs. Mariati, Mrs. Nursiah, Mrs. Sapiah, Mrs. Sulmi, several other women salt farmers, local retailers (*meugee*), village head *Geuchik* Saifannur, and CDO PT PHE NSO. Documentation in the form of field photos, recordings, and diaries was used to reinforce the findings. The validity of the data is maintained through triangulation of sources and the application of research ethics such as informant consent, data confidentiality, and the position of the researcher as observer-participants to build answers to how the reality is felt by women salt farmers in Teupin Kuyun, Seunuddon District, North Aceh.

RESULTS

Overview of Teupin Kuyuen salt production activities

Teupin Kuyun is one of the coastal villages located in Seunudon District, North Aceh. Gampong Teupin Kuyuen is also called Lhokseunuddon which means it includes a part of the village that is directly off the coast of Batayan.

The word *Gampong* is an Acehnese language that means "village". The word *Teupin* itself in the local community is interpreted as "land", while *Kuyun* in Acehnese society generally refers to the fruit of "lime". Teupin Kuyun Gampong has 3 (three) hamlets, namely: Lancang Hamlet, Puuk Hamlet, and Jaya Hamlet. With an area of 576 ha, it is divided into residential areas (180 ha), coastal areas (6 ha), pond areas (385 ha), and salt industrial areas (15 ha). In general, the coastal part of North Aceh district has a tropical monsoon climate (Am) with two distinct seasons, namely the dry season and the rainy season. The minimum air temperature in the region ranges from 19°–23°C and the maximum temperature ranges from 29°–34°C. Ecologically, these two seasons greatly affect coastal economic activity (Tunnida & Nurdin, 2025). As a coastal area, the people of Gampong Teupin Kuyun rely on their income from the potential of natural resources, namely marine products. In Teupin Kuyun itself, there are several institutions or groups that are economic centers and community development, namely Gampong-Owned Enterprises (BUMG), CV Putra Bahari Milk Fish Bali, and women groups of salt farmers.

Salt production activities, which are dominated by women, are the attraction and *branding* of Teupin Kuyun Gampong in the eyes of the people of North Aceh. Based on the observation results, there are around 50 active salt farmers in three hamlets (Puuk, Jaya, and Lancang), and the majority are middle-aged women. They are known as *inong peuget sira* who are not only responsible for the entire production process, but also become the manager of the household economy. This makes salt production activities a dual work arena according to the findings of Wijaningsih et al. (2023) that women salt farmers in Indonesia undergo dual work in the public and domestic spheres.

The process of making salt in Teupin Kuyuen still maintains traditional techniques that have been passed down through generations. Starting from *the activity of meu'ue tanoh* (ploughing the soil) in *lancang*, continued with the drying process until the soil becomes *anoe masen* (salty soil), then the salty soil is put into *inong* for filtration with *ie lueng* (canal water) to produce *ie sira* (salt water). After that, *ie sira* is cooked in *beulangong* (belanga) on a wood stove for 6–7 hours until it becomes salt crystals. Women carry out all of these stages with skills gained from the experience they have gained from their parents that have been passed down from generations, rather than from formal training. The uniqueness of this locality lies not only in the involvement of women, but also in the socio-economic system formed around it. Salt production activities gave rise to various new social roles, namely the presence of *meugee* (retailers), *poe tanoh* (sassy land owners), and interconnected fuel providers in small economic chains. However, in the midst of that network, women's position remains at the core, they manage time, manage results, and maintain business continuity amid weather challenges and traditional market chains with small reach.

Turning on the Salt Stove and Home Kitchen

In daily life, Teupin Kuyuen salt farmers turn on two kitchens at once, namely a salt kitchen and a home kitchen. Starting at 8.00 a.m. in the morning, they have arrived to work at the *jamboe sira* (salt kitchen), processing the *ie sira* that has been accommodated the previous day to be cooked in *beulangong* (belanga). Because it takes a long time to become salt crystal grains, which is about 6-7 hours, the women farmers decided that at 11.00 WIB they returned home to cook, wash, and take care of the children. After that, in the afternoon they will return to the *presumptuous* to make sure the salt has crystallized perfectly.

This routine describes the form of dual work that coastal women undergo: productive in public spaces and reproductive in the domestic realm (Fadiah and Safaruddin, 2022).



Figure 1. Mariati's Mother Is Packing Salt for Sale



Figure 2. Mariati's mother who returned home to continue cooking

Mrs. Mariati (52) said that when she finished turning on the fire stove and packing salt, she immediately went home to continue cooking, washing, and doing other household chores. This statement shows women's awareness of the economic linkage between work in the *presumptuous* and family life. Salt production is a symbol of survival, where they depend on hope and a sense of responsibility as mothers and workers. In the context of *praxian ecofeminism*, two

kitchens lit together depict the harmony between the female body and the coastal ecosystem.

Women are the bridge between nature and social life—cultivating the elements of water, soil, and fire to create life. This relationship is in line with the thinking of Shiva and Mies (1993) who view the female body as an ecological medium that connects nature and social life. Their work is not only a burden, but also an expression of productive ecological relations. This is a concrete form of *sustainable livelihood* at the household level: women maintain economic sustainability as well as social sustainability through integrated daily work.

Inong Tools, Bodies, and Production Practices

In every *lapreng* in Teupin Kuyuen, there is an important tool called *panteu* or *inong*. Literally, *inong* means "woman" in the Acehnese language, but in the context of salt production, it is a filtration device used to collect salty soil and filter water into *ie sira*. This naming is not a coincidence, it is seen as a symbolic manifestation of the close relationship between women's bodies, nature, and production work that is layered with cultural significance (Rahmawati, 2021; Zulfadli & Syamsuddin, 2022).

Inong here becomes a living metaphor for the concept of ecofeminism. As Vandana Shiva (1989) and Maria Mies (1993) explain, the female body and the earth body are both a source of productive life but are often marginalized by the modern economic system. In Teupin Kuyuen, women are not only *inong* users, but representations of the tools themselves. They are the perpetrators who work every day to carry the heat of the sun, collect water from canals, be exposed to smoke when cooking salt, and even go to the packaging process. The existence of this physical work pressure makes their bodies a medium of ecological knowledge.

This shows that coastal women are the main actors in maintaining local knowledge of food production (Handayani & Sitorus, 2021; Nurjanah et al., 2023). For the local community, *inong* is not only a local technology, but also a symbol of respect for women as the creators of life. The name "inong" confirms that women's work is at the core of the traditional salt production system, not just an additional role. When women pour *ie lueng* into *inong*, they are renewing the natural cycle of turning the ocean element into a family economic source (Sari & Yuliana, 2020).



Figure 3. Mother Sapiah who is collecting *ie sira* under *Panteu*

Thus, *inong* can be understood as *gendered technology*. It represents social and cultural values about the role of women in maintaining a balance between economics and ecology. In the perspective of ecofeminism, *inong* becomes a symbol of resistance to industrialization and economic patriarchy, which tends to separate production from nature and women from the public space, removing women from the public space (Shiva, 1989; Mies, 1993).

Local Ecological Knowledge in Salt Production

Based on the results of observations made during the fieldwork, Mrs. Mariati (52) who is a key informant used her local method and knowledge to measure the salinity of *ie sira* (brine), which is done by taking eggs and spraying them into *ie sira* that has been accommodated in the *droem*. And if it is proven that the eggs are floating, then it can be known that *ie sira* It is quite salty and has iodine levels. However, because it was felt that buying eggs was enough to require additional spawning, Mariati's mother (52) chose to replace them with wooden twigs. This technique is in line with the findings that Indonesian coastal communities have a tradition of empirically checking salt levels without modern tools (Pattipeilohy & Leiwakabessy, 2020; Oktaviani & Fadli, 2021). This kind of knowledge is part of *tacit ecological knowledge* that is inherited across generations (Setiawan & Lestari, 2022).



Figure 4. The Use of Salt Seeds as Alternatives When You Can't Grow *Meu'u Tanoh*

In the face of weather challenges that affect salt production. Women salt farmers can cook salt with the technique of adding salt seeds as an alternative, which aims to increase the iodine content in salt because it is not possible to plow the soil. The technique with the use of salt seeds also does not require women salt farmers to have *meu'u tanoh* (plough the soil) in lapreught to produce *ie sira*, because with the technique of adding seeds, water can be used with ordinary water. The technique of using this seedling, apart from being an adaptation strategy to face the weather, this step also succeeded in becoming an alternative for women salt farmers who do not have presumptuous land and improving the quality of salt. However, not all salt farmers who are able to adopt it are still not many because not all women salt farmers can afford to buy the salt seeds. This phenomenon was also found in the study of the technology adaptation of salt farmers in East Java (Pratiwi et al., 2023). (Stuart O'Neill et al., 2025)

The elevation system of water pipes that connects the canal to the inong or from the inong to the salt kitchen is a tangible manifestation of the use of local knowledge that grows and develops in the daily life of the Teupin Kuyuen people. This system was built independently by the husbands of women salt farmers, with the aim of easing the physical burden of their wives in the process of extracting water. Previously, women had to draw water from the canal manually using a bucket, then carry it to the lapres and panteu back and forth. This process is not only time-consuming, but also draining, especially in the midst of the hot sun which is part of the salt production routine. With the existence of a pipe system made using local materials such as PVC pipes and wooden or bamboo support poles on which drums are given, water can now be flowed more efficiently. The women only need to pour water into the end of the drum connected to the canal, *inong*, and salt kitchen, the water will flow towards it without the need to transport it manually. This mechanism relies on the principle of gravity with elevation calculations carried out empirically based on direct experience and observation by husbands of local salt farmers (Fauzan & Hakim, 2021).



Figure 5. Sulmi's mother pours le Sira into the Elevation Pipe to be drained to the Salt Kitchen

Mrs. Sulmi (36), one of the women salt farmers, admitted that with the simple elevation pipe system made by her husband, she felt that her job became easier because she did not need to transport water back and forth and her work in lapreque became easier. This initiative reflects gender collaboration in traditional salt production systems, where the role of husbands is not only as a technical force, but also as a key supporter in sustaining women's work sustainability. As found in the study of Yanuartati and Sari (2024), women in dry farming communities in Lombok have also been shown to have control over domestic strategies and water technology, although access to resources is often mediated by men's roles in households. A similar point was put forward by Prihantini et al. (2024), who emphasized that family involvement in the adoption of local technology has been proven to improve the technical efficiency of small-scale salt farmers in the coastal area of Madura.

Meanwhile, Saputra et al. (2024) in their research on coastal women in Jember emphasized that women's local knowledge does not only include the

technical aspects of production, but also concerns ecological understanding of changes in water, weather, and other natural cycles. This shows that although the elevation system was built by men, it is an extension of the knowledge and needs practiced by the women salt farmers themselves. Thus, the water pipe elevation system developed in Teupin Kuyuen is not only a technical innovation, but also a form of social and ecological adaptation rooted in domestic relations, empirical experience, and local wisdom of coastal communities. This system is a testament to how collaborative work between husband and wife in the salt farming community can produce contextual, inexpensive, and sustainable solutions to the challenges of working in coastal ecological spaces.

DISCUSSION

Salt in Women's Hands: Traditional Salt Production Culture from Teupin Kuyuen Locality

This discussion outlines how coastal women of Teupin Kuyuen are central actors in maintaining the sustainability of traditional salt production through work practices, local ecological knowledge, and socio-cultural relations that develop within salt communities. The findings of the study show that women's involvement not only shows an economic role, but also forms a system of knowledge, culture, and adaptive strategies that enable the sustainability of salt production in the midst of ecological challenges and technological limitations.

Salt production activities in Teupin Kuyuen show the most obvious manifestation of the dual work of coastal women. They bring to life two productive spaces as a *salt stove* and a *home kitchen* that are interconnected in the livelihood system. The daily routine of women who go back and forth between *jamboe sira* and home shows that salt production is not a separate job from domestic life, but an integral part of the family's livelihood system.

The full involvement of women in all stages of production: *meu'u tanoh*, filtration *ie sira*, cooking, and marketing, shows that these economic activities are carried out by combining physical labor, time management, and social reproductive responsibilities. This is in line with the findings (Fadiah and Safaruddin, 2022) that coastal women combine productive and domestic work in a livelihood system that affects each other. Thus, salt production in Teupin Kuyuen cannot be separated from the contribution of women as a support for the family economy as well as a guardian of household social sustainability.

The existence of *the salty* soil filtration device presents a strong symbol in the culture of salt production. The naming of these tools as "women" shows how women's bodies and local technologies are represented in nature-based production systems. Women who work in the sun's heat, transport water, cultivate the soil, and cook salt not only carry out economic functions but also represent an intimate ecological relationship between women and the environment. This concept is in line with the idea of ecofeminism of Shiva and Mies, who view women as ecological agents who maintain the sustainability of life resources. In the context of Teupin Kuyuen, *inong* is a symbol of gendered technology, because its users, cultural meaning, and ecological functions are closely related to women's experiences and bodies. The process of transformation of *ie lueng* into *ie sira*, and

finally salt crystal, illustrates the role of women as mediators between nature and the family economy.

This study found that women salt farmers master ecological knowledge that was passed down from generation to generation without formal training. Empirical techniques such as measuring salinity using eggs or twigs and the use of *salt seeds* as a strategy to deal with bad weather show that women are the main holders of *tacit ecological knowledge*. This knowledge allows for production adaptation during the rainy season or when the *meu'u tanoh* process is not possible. This strategy is in line with research (Pattipeilohy & Leiwakabess, 2020) and (Setiawan & Lestari, 2022) which emphasizes that coastal communities have ecological knowledge systems that are the foundation of environmental adaptation.

Women also understand the water cycle, the ideal time to cook salt, as well as the signs of weather changes that affect salt levels. This knowledge is not only technical but also of cultural value, because it is part of the identity of coastal women as the support of the family economy. Although women are the main actors, research finds that there is a significant form of gender collaboration in salt production through the construction of elevation pipeline systems. This system was created by husbands to reduce the physical workload of wives who previously had to draw water manually. This innovation is not a modern technology, but a local adaptation that utilizes simple materials. The success of this system shows that local technology grows out of women's needs and their ecological experiences, even though they are technically assembled by men.

These findings support research (Prihantini et al, 2024) and (Yanuartati & Sari, 2024) on domestic collaboration in the technological adaptation of salt farmers. With the existence of elevation pipes, women can work more efficiently without reducing production intensity. It shows that social and ecological adaptation is the result of an interaction between women's needs, local knowledge, and family support. The community's dependence on women's work gave birth to new social structures such as *meugee* (retailers), *poe tanoh* (landowners), and firewood providers. Despite the various actors involved, women remain at the center of economic activity. This system shows that salt production is not only an economic activity, but also a cultural arena that reflects social relations, division of labor, and gender-based solidarity. Women not only produce salt, but also produce social values in the form of togetherness, collective work, and family sustainability. Thus, salt culture in Teupin Kuyuen is a cultural women's culture that places women as guardians of the relationship between nature, economy, and social life.

CONCLUSIONS AND RECOMMENDATIONS

Women's comprehensive mastery of the salt production process—from interpreting weather patterns, managing salinity levels, determining crystallization quality, to introducing simple innovations such as salt seeds and elevation pipe systems reflects the presence of tacit ecological knowledge transmitted across generations. Similar patterns of inherited, experience-based knowledge have been documented among women salt producers in other Indonesian coastal regions, such as Madura and Brebes (Rasidi et al., 2023;

Yanuartati & Sari, 2024). However, this study provides deeper ethnographic evidence on how such knowledge is embodied in daily practices rather than formal technical manuals, supporting anthropological arguments on local ecological knowledge as lived expertise (Krantz, 2001). Furthermore, this research highlights the importance of cultural symbolism, particularly the use of *inong* as the name for the brine-filtering tool, which represents the close relationship between women's bodies, work tools, and coastal ecosystems.

This finding aligns with ecofeminist literature that emphasizes women's roles as mediators between nature and livelihood systems, not merely as victims of environmental degradation (Shiva & Mies, 1993; Warren, 2000). In this context, ecofeminism serves not as a new theoretical contribution but as a relevant analytical lens to interpret existing cultural practices observed in the field. In terms of practical implications, the results of this study suggest three strategic directions. First, empowerment programs should focus on strengthening women's capacities by documenting and recognizing local ecological knowledge as part of cultural heritage, as recommended by livelihood-based development frameworks (DFID, 1999). Second, the introduction of simple, context appropriate technologies such as improved filtration systems, energy-efficient furnaces, or affordable salt seeds can enhance productivity without displacing traditional practices, echoing findings from previous studies on sustainable small-scale salt production (Purwiyono et al., 2022).

Third, expanding market access through village-owned enterprises (*BUMG*) or local marketing networks is essential to improve bargaining power and reduce dependency on middlemen, a challenge consistently highlighted in studies of traditional salt economies (Yanuartati & Sari, 2024). Overall, by situating empirical findings within established literature on sustainable livelihoods, gendered labor, and ecofeminism, this study contributes robust field-based evidence to ongoing academic and policy discussions. The conclusions drawn provide a solid foundation for the development of CSR programs and village-level policies that are more gender-responsive, culturally grounded, and oriented toward long-term ecological and economic sustainability in coastal communities.

FURTHER STUDY

Future research may explore the economic sustainability of traditional salt production, gender roles in resource management, and the impact of modernization and climate change on local salt-making practices. Comparative studies with other coastal communities could also provide broader insights into the preservation of traditional knowledge and women's livelihoods.

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