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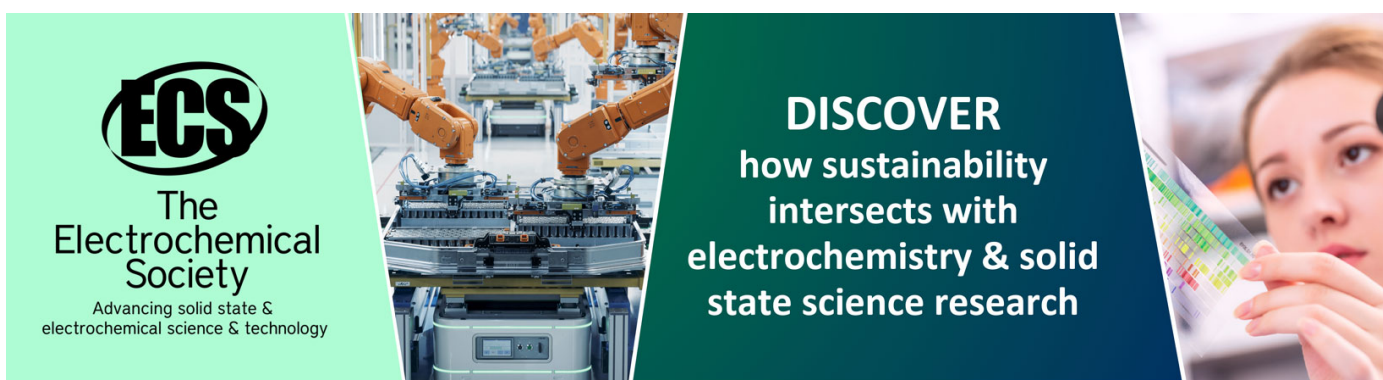
## The social construction of gender relation reality: an analysis of time management applied on sustainable bamboo forestry among families in Ngadha, East Nusa Tenggara, Indonesia

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# The social construction of gender relation reality: an analysis of time management applied on sustainable bamboo forestry among families in Ngadha, East Nusa Tenggara, Indonesia

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**Abstract.** Gender discourse in Indonesia is currently developing very rapidly. On one hand, gender activists have focused on gender mainstreaming. On the other hand, the socio-cultural reality in Indonesia persists with the old traditional construction of power relations between men and women. Feminists fight for justice and inclusiveness for women. However, their struggle must be confronted with the fact that the prevailing socio-cultural norms still tend to be male-dominant. This paper will reveal how the social reality of power relations in the realm of gender is constructed in rural areas in Indonesia. The subjects studied are families at the clan level who are managing sustainable bamboo forestry in Ngadha Regency, East Nusa Tenggara, Indonesia. The research was conducted in 2019-2021. The methods used are participatory rural appraisal (PRA), in-depth interviews, and observation as participants. Time allocation is used as the object of this study to create gender mapping. The analysis is carried out using a social construction theory. This study concluded that the clan of Nekuwalacan adopt the HBL system. This is reflected in the emergence of local initiatives to manage finances, the workforce, groups, as well as build and implement them at the clan level. The gender relations that exist in SBF practice at the clan of Nekuwula are relative. First, in terms of family lines, women obtain benefits because could hold matrilineal law. Political decisions remain in the hands of women. Second, practically speaking, women work twice as much in domestic and commercial work. Third, in some cases, deliberation is put forward for a fair division of labor. At this point, inclusiveness emerges as a reality that colors gender relations.

## 1. Introduction

Academics have widely studied the role of women in natural resource management. Scientific articles on gender continue to increase. For example, from 1992 to September 2018, 537 scientific papers were published in 171 journals, with study sites in 83 countries, related to women and gender and forestry and Indonesia undertake as one of the countries that are the locus of study for women activists [1]. Studies on gender are found in rural communities' life practices, especially on agroforestry and bamboo management [2].



Ecofeminist activists mainly support the central issue of women and the environment [3,4]. From the point of view of ecofeminism, nature is often personified as a woman [5]. In some places, even consider the earth, in general, is a mother [6]. This point of view then becomes the basis for treating nature the way women are treated. Materially, women, according to ecofeminism, should be important actors in environmental management [5,7].

Gender is not only about males or females. Furthermore, gender is a social construction that is formed and is identical to the regulation of the role of men and women [5,7]. In agroforestry management, for example, it was found that the role of men is more dominant than women's [2,8–10]. Mainly men are working in upstream sectors while women are working in the downstream areas [11–13].

In the context of bamboo management, several articles mention the influence of gender in the division of tasks between men and women, for example, in Ghana [14], India [15], and Toba [16]. Bamboo has a history that is closely related to cultural practices [17]. Bamboo is identical to men [18]. Women process bamboo into handicrafts because of culture [19].

Meanwhile, the bamboo gardens in Ngadha are mostly grown on clan lands. The use of bamboo is regulated with deliberation by the families who are members of the clan. Men and women are always involved in activities in the bamboo garden. Initially, bamboo was used subsistence for construction needs, such as naja, lenga, and pelupuh. When the bamboo processing industry in Maumbawa was established, several clans used their bamboo to sell it to the company [20].

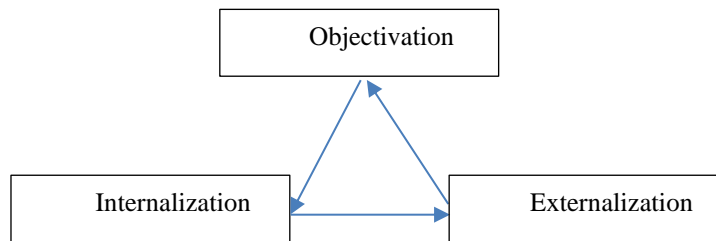
However, the practice of gender-based division of labor in daily activities deserves more attention. For example, how is the division of roles between men and women in their daily practice? How much time do women and men spend sharing roles in working and taking care of the household? The next question arises, namely, how gender relations are constructed from the division of roles and time allocations that occur.

This paper will reveal how the real social reality of power relations in the realm of gender is constructed in rural areas in Indonesia. The subjects studied are families at the community level clan managing sustainable bamboo forestry (SBF) in Ngadha Regency, East Nusa Tenggara, Indonesia.

## **2. Methodology**

This research is action research that is using a qualitative approach. Activities conducted during the research process are not only for obtaining data and information but also become part of the social engineering on the clan who are under study. The research is conducted on a house-based clan community named Sao Neguwula. The location of Sao Neguwula is in Doka, Radabata Village, Golewa District, Ngadha Regency, East Nusa Tenggara Province. The research was conducted from 2019 to 2021. The methods used are participatory rural appraisal (PRA), in-depth interviews, and observation as participants. Time allocation is used as a tool in this study for gender mapping. The analysis is carried out using a triad dialectical framework of social construction theory.

This study uses social construction theory [21] to determine the construction of gender-based power relations which are formed among clan communities. The triad dialectical of objectivation, externalization, and internalization is employed to describe the social reality that is shaped as a result of daily social interactions among families in Sao. Objectivation is a social reality that exists and considers as a common habit. Internalization, in addition, is a process of understanding objective reality by individuals in the community. Meanwhile, externalization is the actualization of values, rules, and norms resulting from the internalization of daily activities [21].



**Figure 1.** Triad dialectical in social construction theory according to Berger & Luckmann [21].

Gender-based power relations formed in clan communities will be discussed according to the framework (Figure 1). The approach used is an analysis of the Time allocation and daily activities of men and women are taken as tools to identify gender relations in this clan community. The intensity of the activity and the duration of time spent are important points to describe gender-based power relations.

### 3. Results and discussion

#### 3.1. Sao Neguwula, SBF and matrilineal law

Sao Neguwula is a clan that has already benefited from selling bamboo harvested from their Sao lands. Money that they obtain from selling bamboo is managed by their group for Sao's needs. In 2019 they used the money to repair their traditional houses. According to Nimus Jawa, leader of the clan, they spent almost IDR 300,000,000,- for house materials and more than 100,000,000,- for the traditional ceremony. “All money we used for those occasions are gathered from selling bamboo,” said Nimus.

Currently, there is a bamboo processing industry established in 2009 located between Ngada and Nagakeo districts that utilize community bamboo resources. The factory has been producing preserved bamboo strips and sticks as half-finished products to supply the larger industry in Bali and East Java. The bamboo half-finished products from Flores are processed further into bamboo lamination boards and blocks as end products. Since bamboo has been processed into construction material, the raw material requirements are four years old bamboo. Therefore this industry partnered with civil society as a non-government organization namely Environmental Bamboo Foundation (EBF) to assist in the sustainable bamboo forestry system known as the SBF system that they have been created.

EBF also provides support knowledge and technology on SBF system implementation. Although, EBF still hires laborers to ensure the SBF method is applied towards bamboo they purchase from bamboo owners. This method makes bamboo owners only generate IDR 20,000,- per-culm. Additional values will be reached if the owners are taking over the role of EBF’s labor in doing the SBF system. The price will rise about IDR 60,000,- to IDR 70,000 per culm. To pursue this, Sao Neguwula intends to take the chance by planning to take over the role of EBF in managing bamboo on their land through the SBF method.

In terms of socio-cultural context, Sao Neguwula adheres to matrilineal law. Such a system has an impact on their daily activities, whether in adat activities and daily household life. According to adat law, the position of women in their family tends to be benefited. For example, in the case of inheritance right to the traditional house and the use of customary lands within the Sao family, women have their privilege on it. However, in terms of making a decision, women are still delegating their authority as a decision-maker to her brother. Even though the final decision is in a hand of women who inhabit Sao traditional house, but usually they will obey the decision made by men.

Despite this, the number of women activities in a matrilineal family in Ngadha, generally still more men activities. According to our survey towards matrilineal villages in Ngadha, there are 8 out of 11 daily activities done by women while men only did 3 out of 11. The role of women tends to be more on domestic tasks such as carrying water, cooking, looking after children, washing clothes, cleaning the

house, watching children, managing finance, and giving food for livestock. Men, on the other hand, only conduct three physical tasks such as gathering firewood, looking for animal feed and fixing the house.

**Table 1.** Distribution of role inside the household activities (%).

Activities	SBF-Matrilineal			
	M	W	M+W	N
Search for firewoods	30	16	54,4	0
Search for animal feeds	23	19	50,9	7
Feeding the livestock	18	21	54,4	7
Carrying water	9	32	36,8	22,8
Cooking	0	79	21,1	0
Look after children	0	72	21,1	7
Washing clothes	0	79	14	7
Cleaning the house	0	68	26,3	5,3
Watching children	2	51	40,4	7
Managing finance	5	63	29,8	1,8
Fixing the house	79	0	21,1	0

Source: Baseline survey 2019.

M: Men

W: Women

M+W: Men + Women

N: No response

### 3.2. Time allocation based on gender

Sao neguwula has its seasonal calendar. The result gathered from PRA shows that they have two main annual activities. First is farming activities. They grow commodities, besides the short-lived crops such as corn, tubers, and pumpkins, they also grow coffee, cloves, and cocoa. The second is socio-cultural activities. This activity is divided into traditional and religious ceremonies. The traditional party named Reba is usually held in December, January, or February. It depends on the decision made by the adat or clan leader who will vote which month the adat party will be done. Reba is a thanksgiving ceremony to start planting. While Ka Sao or repairing traditional houses is usually done in September or October. On the other hand, the religious ceremonies performed by Sao Neguwula families are Easter, New Greetings, Christmas, and New Year.

**Table 2.** Sao Neguwula’s seasonal calendar or monthly activities in a year.

Activities	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
<b>FARMING</b>												
Land preparation									x	x		
<b>Rainy season planting</b>												
Types of corn, sweet potatoes, pumpkin										x	x	
Stitching	x	x	x									x
Land clearing and maintenance	x	x	x	x	x	x						

<b>Rainy Season's Harvesting</b>							
Corn			X				
Coffee				X			
Clove					X		
Cocoa						X	
<b>Summer season planting</b>							
Corn Planting		X	X	X			
Weeding and maintenance						X	X
<b>Summer harvesting</b>							
Corn							X
<b>SOCIO-CULTURAL</b>							
Reba (traditional new year)	X						X X
Ka sa'o (repairing sa'o traditional house)						X	X
<b>RELIGIOUS ACTIVITIES</b>							
New year	X						
Easter			X				
New Greeting (Sambut baru)					X	X	
Christmas							X
<b>SBF – A SIMULATION</b>							
Coding and Survey					X	X	X
Mounding	X	X					X X X
Harvesting	Tentative – depends on needs						
Nursery	tentative – Follow the harvesting time						

Source: PRA 2020

In this PRA, a simulation of the time allocation for the application of SBF is also carried out for families in Sao Neguwula's house. As a result, they chose to conduct a survey and record the codes on bamboo which belong to Sao from July to September. Then it is continued by conducting activities of stockpiling bamboo roots and rhizomes from October to February. Meanwhile, the activities of harvesting and making bamboo seedlings are carried out tentatively. This is by the SBF principle which only allows harvesting of bamboo stalks with a year code according to the time.

**Table 3.** Activities in a week for each day.

Activities	Day						
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Go to Church, look after livestock, arisan, family gathering.	X						
Farming (dry-land).		X	X	X	X		

Preparing commodities to be sold in the weekly traditional local market.							x
Selling commodities in the local market.							x
Look for animal feed.	Tentative	tentative	tentative	tentative	tentative	tentative	tentative

Source: PRA 2020.

Daily, it is known that the activities of families in Sao Neguwula with high intensity are working in the fields and gardens. Regularly from Monday to Thursday, they spend time looking after their fields and gardens. This includes a garden overgrown with bamboo. The bamboo forest belonging to the clan is managed in cooperation among fellow members of Sao. The yield of the communal garden is given to Sao. Meanwhile, privately owned gardens are managed independently by the nuclear family. The results of it are the rights of the garden owners.

Livestock is an important thing needed for traditional ceremonies for Ngadha people. The most valuable livestock are buffalo and pigs. These two types of livestock are in very high demand. Almost every customary ritual must include buffaloes and pigs. Meanwhile, small livestock such as goats and chickens do not have a significant need for traditional celebrations. Therefore, activities to find and feed livestock are carried out almost every day. Usually in the morning and evening involving both men and women. Saturday is a market day for the Golewa people. Sao Neguwula, which is located close to the Mataloko market, takes advantage of market days to sell their commodities. They are preparing the commodities to be sold to the market on Friday. While Sundays are allocated to worship at church and gather with family members.

**Table 4.** Daily Activity for each hour both men and women

Time	Women’s Activities	Time	Men’s Activities
05.00 – 05.30	Preparing breakfast	05.30 - 07.00	Get up and breakfast
05.30 – 06.00	breakfast	07.00 – 08.00	Look after livestock, slice <i>moke</i> , preparing a packed meal.
06.00 – 06.30	Preparing children for going to school.	08.00 – 11.00	Work in the garden
06.30 – 07.30	Cleaning the house	11.00 – 13.30	Lunch break
07.30 – 08.00	Feeding livestock	13.30 – 16.00	Working in the garden
08.00 – 11.00	Working in the garden	16.00 – 18.00	Look after livestock, extract/slice <i>moke</i> , prepare for dinner.
11.00 – 12.00	Preparing lunch	18.00 – 20.00	Take a bath and dinner
12.00 – 13.00	Lunch	20.00 – 22.00	Leisure, <i>nalo</i> , playing cell phone
13.00 – 14.00	Daybreak	22.00 – 05.30	Sleeping
14.00 – 15.30	Working in the garden		
15.30 – 16.00	Feeding livestock		
16.00 – 17.30	Preparing dinner		
17.30 – 19.00	Dinner		
19.00 – 21.00	Leisure and praying Rosario		
21.00 – 05.00	Sleeping		

Source: PRA 2020.

Gender-based time allocation only appears when PRA is included in the discussion of activities that are usually carried out every day in hours. The results obtained are not much different from the previous survey on matrilineal law households in the Golewa sub-district in table 1. The role of women is twice

as much as the role of men. It is both in terms of work and duration of time allocated. Women do more domestic activities such as preparing breakfast, lunch, and dinner, preparing children's school supplies and cleaning the house. While men do not do this.

On the other hand, productive activities such as working in the garden that is carried out by men are also carried out by women. Meanwhile, in terms of the duration of time, women wake up earlier and start activities directly. Women do not nalo (chatting with people while drinking moke – traditional alcoholic drinking) while men can do it for hours on end. At this point, power relations at the family level between men and women begin to emerge.

### 3.3. *The construction of gender relation*

Power relations between men and women in Sao Neguwula could be perceived in how they distribute tasks and jobs for daily needs. The share of domestic and commercial work carried out by women is greater than men. Meanwhile, men are not burdened by domestic work. This is also occurred in Vietnam [22], India [23] and Africa [11,24]. Traditional law makes the applied job distribution situation seem unfair to women [25].

However, Ngadha culturalist, Yohanes Mopa when interviewed said that Ngadha custom respects women. This can be seen from the procession of making traditional Ngadhu symbols (male symbols) and Bagha (female symbols). This procession always prioritizes the establishment of Bagha first and then followed by Ngadhu. In addition, women always are prioritized to live in traditional houses and cultivate communal land belonging to the clan. "Those two things are examples of how Ngadha culture respects women," Mopa explained.

Such construction of social reality has been existing for a long time. Furthermore, it could be considered an objectivated truth by the Ngadha people. Women work twice as much as men from a feminist point of view, it could be interpreted as the oppression of men against women. However, from a cultural point of view, it is a form of responsibility for women who act as mothers to take care of their families, especially their children. Although they are also involved in making a living together with their husbands.

The power relations that emerge from the time allocation, the application of matrilineal law, and the triad dialectics of social construction that occur in the Sao Neguwula community show that women are respected by custom. However, in practice, women still work more than men. So, it can be said that gender-based power relations in Sao Neguwula are still won by men.

## 4. Conclusion

Although in the simulation context, families in Sao Neguwula can adopt the SBF system. This is reflected in the emergence of local initiatives to manage the financial system, workforce, groups. It also shows that the gender relation that is constructed is still relatively men domination. This could be seen by using two points of view. In the modern context, time allocation, matrilineal law, and triad dialectic of social construction theory perceived that women are less powerful than men. Nevertheless, the indigenous lenses said the opposite. According to this, women are valuable among adat people. Therefore, they put forward to be assigned more compare to men.

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