Time Allocation and Economic Contribution of Women in Fulfilling the Basic Needs of Poor Households

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ABSTRACT
The primary purpose of this study is to explore the time allocation and economic contribution of women in fulfilling their families' basic needs. This research used a qualitative approach and applied observations and interviews as the data collection technique. The research sample consisted of 25 people, including 23 stone-breaking women, who have a family, and 2 village heads, whose village areas contain stone-mining enterprises. The obtained data was analysed qualitatively, implying that the processes of data collection, data reduction, data display, and data verification were carried out simultaneously. The results of this study show that the respondents allocate more time to household chores than to stone-breaking work. However, through the activities as a stone breaker, homemakers do make a significant economic contribution to the family's income. Indeed, the sole reliance on the husband's income as the head of the family cannot be sufficient for fulfilling the basic needs. The husband's income only serves to maintain the survival of the family.

KEYWORDS
time allocation, economic contribution, women work, basic needs, poor households

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Introduction

Poverty is a state or condition in which a person, household, or community lacks the financial resources for a minimum living standard. Poverty is a serious issue facing both developing and underdeveloped countries, including Indonesia. In Indonesia, many people experience a lack of a supportive environment leading to a restricted access to opportunities. Indeed, this influences the capability of facilitating the affected community’s welfare. According to Naschold (2012), structural poverty traps perpetuate the poor and the vulnerable (Naschold, 2012). Generally, developing countries are still experiencing difficulties in providing access to welfare for the poor in society (Carrard et al., 2019; Peters et al., 2008). Conditions of poverty are usually assessed in monetary terms using information on household consumption expenditure and data on commodity prices (Ngo & Christiaensen, 2018). Poverty is usually based on per capita income or expenditure; however, it is also known that these constraints have weaknesses due to their ability to simplify its meaning to the poor (Karlan & Thuysbaert, 2019).

Poverty is a multidimensional phenomenon pertaining to numerous aspects, such as low economic growth. A more growth-oriented development paradigm that has been applied in developing countries has given rise to structural poverty (Bétrisey et al., 2016). Therefore, the quality or state of being poor encourages social gaps inseparable from a nation’s development. People living in poverty do not have isolated living environments unless they live in a specific social habitus that depends on others and institutions for survival. Many governments and non-governmental social institutions make attempts to reduce poverty by supporting the basic needs of people unable to earn sufficient income. According to Nooteboom (2015), private and public institutions performing the state’s role and the policymakers responsible for development need to ensure that the rate of poverty within an environment is significantly reduced (Nooteboom, 2015, pp. 280–294).

As a rule, poor people have a high fighting spirit used to defend themselves and work hard to achieve daily needs. However, in most cases, this spirit is unable to provide a decent life (Hos et al., 2019). Domestic workers in Turkey demonstrate high fighting power when commuting to the city’s outskirts, spending hours carrying out household duties in an employer’s house and returning home to attend to their family (Erman & Kara, 2018). In understaffed conditions, women play an essential role in sustaining the economic resilience of poor households. The increasing cost of living encourages homemakers to work for a living (Samargandi et al., 2019). Furthermore, poverty has encouraged many women in South Asia to become agricultural workers forced to work to meet their families’ basic needs (Rao, 2020). One example of women’s role in fulfilling the economic needs of low-income families is found in a stone-breaking company in the North Moramo district of South Konawe Regency (Makmur & Sahrun, 2017). Many families here participate in stone breaking, which involves carrying building materials for mixed cement cast.

Women, traditionally known as the weaker gender, work as stone breakers in Indonesia. Their involvement, especially of housewives, helps alleviate poverty,
thereby providing essential needs. However, the process of balancing work and household chores is one of the most significant challenges faced by these categories of women (Srivastava & Cheema, 2019). In addition to housework, these housewives also need to fulfil their activities as stone breakers (public affairs). Social norms still provide women with the obligation to carry out their household activities, and this view is accepted without questioning (Bittman et al., 2003). In addressing the increase in workload, some women demand workload distribution with their partners and other family members (Komatsu et al., 2018). The workload distribution happens because the dual role breeds the necessity to share a woman’s time between two main tasks: homemakers and stone breakers.

Women’s involvement in stone-breaking activities that are included in heavy and abusive work certainly has a subjective motivation known as background. Limited access to decent work with a fair wage has forced housewives to undergo heavy and rough activities such as stone breaking (Chakraborty, 2019; Ibáñez, 2017). According to Laranjeiro et al. (2020), limited access to a decent job is mainly due to a lack of skills, which is the main driving force of women’s involvement in stone breaking. Furthermore, in most cases, women join this occupation to support their husbands’ income to meet their families’ needs.

Based on the explanation above, this study aims to analyse women’s time distribution as homemakers and stone breakers. This study also aims to determine the income contributions of stone-breaking workers to the family income.

Research Methods

This research used a qualitative approach. This research was conducted inductively based on the logic procedures derived from the particular proposition in describing information. The study started from an observation over the research objects and ended at the conclusion (new knowledge) as a common hypothesis. The research was done by studying humans’ behaviour in the context and situation in which they are located; understand human behaviour based on their point of view; deep observations and interviews based on collecting critical data.

The data collected in this study was obtained through in-depth interviews with respondents. In addition, a direct observation of social processes was conducted. Methodologically, suppose the research is considered to be a sample use. In that case, it is more precisely referred to as snowball sampling, in which data extraction is carried out from various sides until it reaches information saturation. Long before the research was conducted, there had been an inadvertent observation of stone-breaking women’s activities every time we visited the site for various affairs. Observations were made on social practices, expressions, and facts related to stone-breaking activities carried out by women and connected to their activities to take care of the family as housewives. Furthermore, in-depth interviews were conducted to determine the subjective meaning and provide a deeper understanding of the observed social practice phenomena. Before conducting an interview, the researcher first asked the informant for permission. Until the research process was complete, no informants
objected to being asked for information. Interviews were conducted at work with an atmosphere of familiarity. An informant answered each question in detail while continuing to carry out her stone-breaking activities. Both observations and in-depth interviews were conducted repeatedly to obtain accurate information.

The sample consisted of 25 informants comprising 23 research subjects (stone-breaking women) and 2 village heads who live in villages located in stone-mining areas. At the beginning of data collection, we faced difficulty in meeting informants due to the prolonged period of heavy rain. At the first interview, the mining site seemed totally deserted. The activity of breaking stones is usually suspended during the rainy season or when the stone is too wet to break. Another difficulty was connected with gathering information about the income and expenses involved with stone-breaking activities and household purposes. Generally, the informants could not provide exact figures because they had never recorded any of their income and expenses. These difficulties were overcome through data mining by applying data triangulation models and triangulation of data collection methods. We checked the correctness of information from several informants and used several ways of collecting data. Moreover, intimate relationships with informants created by occasionally tucking humour and jokes into the interview process allowed us to increase the validity of research information.

Over time, through a fairly lengthy process and intensive and repetitive interactions with informants, the required data was collected. Although the data was not be considered 100% reliable, it could be used as a foothold to select categories to find core or major categories in data analysis. The process of collecting and interpreting data was simultaneously conducted throughout the research process. The process of translating data in this study followed Huberman & Miles (1994) where data reduction activities, presentation, and verification are interconnected activities before, during and after the parallel collection of data (Bokiev & Samad, 2021).

Results and Discussion

Time Allocation for Women as Housewives and Stone Breakers

Time allocation or time management is a consequence of a housewife’s involvement in making a living. They have to divide their time between two main roles, namely as a housewife and as a breadwinner, to ensure everything is appropriately conducted. Typically, the allotted time given to take care of the family is also adjusted to enable them to work and earn some money. These categories of women usually carry out household affairs before breaking rocks. The timing used to make a living and take care of the household for stone-breaking women dramatically determines the level of income and the quality of household management (Seymour et al., 2019). However, when both are compared, the time used to perform home activities is greater than the stone breaking process. This trend is backed by the level of education and skills of stone-breaking women, which are generally low. Therefore, the allocation of time used is still more dominant to work without wages in the household. These findings are consistent with research by D. Salehi-Isfahani and S. Taghvatalab in Iran (Salehi-Isfahani &
Taghvatalab, 2019), which show that more educated women tends to allocate more time to jobs. In India, there is also a limited access to decent jobs for poor women from less-educated households (Singh & Pattanaik, 2019).

When compared to men (husbands), the time used by women to fulfil household chores is more significant. These findings are relevant to Vu’s study in Vietnam (Vu, 2019), which stated that husbands spend 40.3–58.6 fewer minutes each day than their wives in terms of housework. In addition, dual roles spend more time working and increasing workloads for households. The division of work and the allocation of working time between husband and wife are significantly related to the local community’s culture (Pollmann-Schult, 2016).

One of the stone-breaking female informants (HRTN, 27 years old) states that she breaks stones every day while also cooking at home to ensure the availability of food for the family. However, their husbands tend to assist in cooking when their wives are sick or need to attend to activities outside the village. However, this is also infrequent because they always prepare food when a plan comes up to leave the house. Similarly, these men take care of the laundry and sometimes take their children to school in their wives’ absence. Meanwhile, in terms of house cleaning, they ultimately carried out the process except on specific occasions when their husbands volunteer to help. These findings indicate that the time allocated to carry out certain activities is associated with availability and gender (Adjei & Brand, 2018; Pailhé et al., 2019).

HRTN’s statement represents the overall division of work in a stone-breaking family. These findings support the time allocation theory, in which married women with many household chores give preference to domestic time with fewer working hours (Sakanishi, 2020). A woman as a housewife has the dominant task of completing domestic affairs. This condition necessitated a stone-breaking housewife to smartly divide the time in carrying out both affairs every day. According to Nordenmark (2013), the tendency of women to accept unbalanced workload without resistance as shown by stone-breaking women, suggests that their social context is still influenced by conservative gender ideology (Nordenmark, 2013).

There are three types of stone-breaking working women. First, those who work on stone owners in certain places, along with other workers. Second, those who work breaking someone else’s stone brought at the place of the woman’s residence. Third, women breaking the stone brought from a mining site and delivered back when the work is ready. The first and second types are categorized as mining labour, because women work in favour of other parties to earn wages and are often powerless in managing time and demanding a more decent wage, despite being regulated by the law. The research carried out in India revealed that the wages of the majority of domestic workers is still under the standard minimum amount (Gudiband & Jacob, 2020).

For stone-breaking woman, arranging their time is rather problematic because the time hours are determined by the stone owner: starting from 07:30–10:00 and continued from 14:00–17:00. Therefore, household affairs are fulfilled in the morning before 07:30, noon between 10:00–14:00, and in the afternoon from 17:00 till evening.
These workers practically do not have some time off, except at night around 21:00. Furthermore, those with young children are forced to take them to work sites because there are no adults at home to look after the children.

The second type of stone-breaking women slightly benefited from the workplace located in their yard. Therefore, they can carry out their housework and breaking the rocks concurrently. Hence, there is no time-use pattern that explicitly separates the living and household work time. However, when viewed in terms of allocating the time required to complete the work, the second stone-breaker type remains similar to the first type because both remain tied to the owner of the stone. Therefore, the difference is only related to the workplace and the opportunity to carry out concurrent housework.

However, those who belong to the third type of stone breaker are a little freer because they set the working time according to their desires and capacity. This is possible because the workplace is located close to their yard. Therefore, they have the opportunity to do household chores while breaking stones well. They can also freely set the rhythm of their work without pursuing settlement targets by other parties.

In general, household chores, such as cleaning or sweeping, washing clothes, caring for children's school, and cooking, are performed before 08:00. During the day, i.e., between the hours of 11:30–15:30, cooking chores are performed, while from 17:00–21:00, from late afternoon to night, cooking, caring for school children's preparation, and folding clothes is conducted. Breaking of stones is generally performed at 08:00–11:30, which is continued from 15:30–17:00. When time is allocated in this manner, these workers can rest while conducting house chores, especially during the daytime after lunch and in the evening from 17:00 hours after preparing dinner for their families.

Preliminary studies have shown that stone-breaking women have a much heavier workload compared to men (husbands). During the break, which is usually from 10:00 to 14:00, the housewives return home to prepare lunch for their family. Therefore, they have no time to take a rest. However, this is opposed to their husbands’ break time, whereby they tend to take a rest or take a nap before leaving for work again. Furthermore, in the evening, these women are usually busy preparing dinner, folding clothes, and preparing stuff for children's school, the husband also takes time to rest. These findings indicate discrimination, which gave rise to inequality in family workload distribution (Stepanikova et al., 2020). There are still structural and cultural barriers to building gender equality in workload distribution (Amâncio & Correia, 2019; Ocampo Castillo, 2019).

Changes in work roles often lead to advancement in the family role that ultimately affects marital satisfaction (Gordon & Whelan-Berry, 2005). When domestic and public roles change, marriage problems also advance. Therefore, each pair needs to devise a strategy that best suits their needs, values, and life situation. Traditionally, a husband's career is the most important. However, this is not the case due to some considerations such as a low-income husband while the wife has the opportunity to work to supplement the family income, therefore the spouse agrees to take turns taking care of the household or the wife stops working for a living (Perrone & Worthington, 2001).
It is essential to realize the role equality between husband and wife, especially for couples that work together to earn a living. There is no clear guideline on duty division in most cases, thereby giving rise to gender discrimination (Himsel & Goldberg, 2003). A stone-breaking woman’s dual role associated with imbalance is one of the forms of gender discrimination in poor households, a common practice in developing countries (Kizilova & Mosakova, 2019). Therefore, the same perception of gender justice needs to be built between husband and wife because it is an essential contributor to the satisfaction of a marriage between a working couple (Frisco & Williams, 2003). In couples, where both works to earn a living, the roles in performing household chores should be divided such that to best fit the needs and values of the family.

**Economic Contributions of Stone-Breaker Women in the Family**

Due to the rise in staple prices, the socio-economic difficulties encouraged housewives in the North Moramo district to indulge in the stone breaking process to assist their husbands in meeting their families’ needs. Women carry out this stone breaking activity under the implementation of duties as housewives, which are their obligations and responsibilities as wives according to the existing cultural norms. An example of this case occurred much earlier in the nineteenth century in America, where homemakers carried out house chores such as cooking, clearing, transporting water and childcare, which is currently a paid job market (Bradbury, 1984). However, in North Moramo, stone-breaking women continue to carry out the housework while earning a living by breaking stones.

The income earned by female stone breakers varies because it depends on the amount of time allocated to breaking stones and the volume of performed work (splintered stones). According to NLN (34 years old), a stone breaker since 1997, her income was sourced from wages by splintering stones into several to achieve IDR 250,000 or $17.73 per-truck, usually obtained within a week without rainfall. The money can then be spent on daily necessities such as rice, fish, vegetables, and sometimes for schoolchildren's needs. According to NLN, the stone-breaking activity is uncertain and dependent on the weather. For instance, during rainfall, the stone becomes hard to break, reducing the volume of work and wage.

NLN further stated that, although wages were set according to the work volume, each stone breaker’s income gained per month differed. In addition to the different working capabilities, wages were also influenced by uninterrupted supply of raw materials from mine owners, which depended heavily on users’ split requests. Sometimes, job orders are delayed due to inadequate splintering of stones.

Similar to NLN, SMRM (37 years old) stated that the obstacles they often experienced were frequent rain and unavailability of the material from their boss due to the inability to transport previous work. This point shows that breaking stones is volatile, sometimes smooth, and challenging in obtaining a job order. In the presence of a sudden rainfall, workers are unable to work. Similarly, when the splintered stone has not been transported, they cannot receive the next job from the mine order, thereby affecting their income.
The description above represents the first type of stone-breaking income, when the work is determined by the terms set by the quarry owner.

The second type of stone breakers (NL, 47 years old) revealed in an interview that the mine owner drove stones to her yard for breaking and splitting. According to NL, one truck of stone comprises about 5 cubes, with an average of splintered 50 carts completed in one week to earn wages worth IDR 5,000 or $0.35 per-cart. Therefore, based on this narrative, it is noted that when work is smoothly performed, an average income of IDR 1 million or $70.92 per month is generated. This is similar to the income gained by the first stone breaker type. The difference is that the second is more profitable because they work from the comfort of their home. However, the first-type stone breakers cannot afford such a model because their houses have no road access for truck cars.

The third type of stone breakers enables workers to break stones independently by purchasing the stone in the mining site and bringing it to a place for splintering. Mrs. MN (62 years old), a stone breaker of this type, stated that stones are sold for IDR 200,000 or $14.18 per-truck. One truck content, consisting of five cubes, can be completed within one week. After being split into 50 carts, it is sold for IDR 10,000 or $0.71 per-cart. Therefore, one truck’s sale becomes IDR 500,000 or $35.46, with a profit of IDR 300,000 or $21.27.

Mrs. MN’s narrative indicates that, in terms of income, the third type is slightly more profitable than the first and second, with an average of IDR 1.2 million or $85.10 per month. Other informants of the third type provided information similar to the average amount stated by Mrs. MN.

The description presented by some of the stone-breaking informants above is an overview of women’s income as stone breakers, without analysing the overall family wage. The activities performed by stone-breaking women in North Moramo are due to the less profitable economic condition of their families.

The work of stone-breaking women in North Moramo is very diverse. Some work as fishermen, gardeners, building labourers, paulaula (those that lift the splintered stone to a truck), as well as stone breakers. Some perform more than one type of work, such as fishermen and builders or stone breakers. Their husbands’ income tends to vary monthly, although it is generally considered low due to their inability to provide the family’s basic needs adequately. Therefore, one of the main reasons why women work as stone breakers is to help their husbands provide the basic needs of the family.

NLN (34 years old) stated that her husband as a paulaula earns a salary of IDR 60,000 or $4.25 per-truck; therefore, when three people transport the stones, the wages of each equal IDR 20,000 or $1.42. This work is not continuous and depends on the order; hence it is difficult to calculate the actual monthly income. The information about the income of NLN’s husband shows that when stones are transported in a truck three times per day, a wage of IDR 60,000 or $4.25 is obtained and when calculated monthly, a profit of IDR 1.8 million or $127.66 is earned. However, this income is still very minimal compared to the price of basic needs for one family. A stone breaker that earns IDR 250,000 or $17.73 per-truck can earn IDR 1 million or $70.92 monthly. Therefore, the cumulative family income becomes IDR 2.8 million or $198.58.
Another stone breaker named HLTN (27 years old) stated that her husband as a fisherman earns an average income of IDR 60,000 or $4.25 from each 2kg of fish sold. The amount was inadequate to meet the needs of a family with two young children. The first child was already in school (9.5 years), and the second was only a 1-year-old child. Therefore, HLTN’s husband had to indulge in breaking rocks to support the family. However, the small income prevented them from acquiring higher economic assets.

Fishers are generally associated with poverty because the majority rely solely on simple equipment due to their lack of capital (Béné, 2003). Furthermore, they also experience poor catches due to the sea’s erratic activity, which is dependent on the weather. In practice, fishing activities can only be carried out for 17–20 days monthly. The remaining days are associated with the time when the tide and wind are strong, thereby preventing them from carrying out sea-related activities. Similarly, during the occurrence of a new moon, the amount of fish captured is usually lower than usual. Therefore, these conditions make the income from fishing lower than that from breaking stones, thereby providing fishermen with a dual means of livelihood. In addition to working as a fisherman, they can also work as gardeners, paulaula, or building workers. This work diversification is a poor household strategy used to overcome the unprofitable economy for survival (Gautam & Andersen, 2016).

One of the stone-breaking women, named WND (66 years old), whose husband is a gardener, stated that the average income from the proceeds of banana, coconut, and vegetable sales is IDR 50,000 or $3.55 per day. Gardening in this context is a traditional process using simple equipment and processing systems that rely solely on energy.

The description of husbands’ income above, both as fishermen, garden farmers, construction workers, and paulaula is a picture of wages based on rupiah earned and not based on economic concepts that consider various aspects to calculate profits. For example, this assessment does not consider such production facilities and infrastructure aspects, as boats, nets, trawlers (fishermen), hoe, crowbar, the cost of fencing, seeds (gardens), martyrs, gloves, and hats (paulaula and stone breaker). Furthermore, physically hard work implies the presence of energy resources covered by food, beverages, and cigarettes. Therefore, when all these aspects are taken into account, the income becomes much lower.

The data related to the family income of stone-breaking women is still minimal, since many of them keep no record of monthly revenues. Those with accurate records of income and monthly expenses are likely to hide them. However, the collected data can serve as an indicator for determining the relative socio-economic position of stone-breaking women in their families.

A diversity of information on the contribution of husbands and wives into the family income shows that women play a very significant role in supporting their families’ needs. As a case in point, in NLN’s family, 36% of the income was used to meet the basic requirements. These findings agree with the research carried out by (Stier & Mandel, 2009), which stated that working women increase the contribution relative to household income. When women rely solely on their husbands’ income
as the head of the family, there is a significant probability that some basic family needs cannot be fulfilled. This is because this income only serves to maintain the survival of the family.

Significant economic contributions to fulfil the family's basic needs are the main factors that lead housewives into working as stone breakers, despite the difficulties associated with the job. The money gathered in small quantities through this activity is used to sustain the family's basic needs. This undermines the common assumption that women are gentle creatures who are capable of carrying out less strenuous jobs. Poverty has changed the viewpoint on stone-breaking work based on gender.

**Conclusion**

The time allocated by women to breaking stones to make a living and take care of their family is more significant than their husbands’ due to their multiple roles in working and taking care of the family. Due to the assistance rendered by housewives, the incomes of stone-breaking families have increased. This fact shows that the economic contribution of stone-breaking women (wives) in the family is very significant in meeting their basic needs. Therefore, women need to assist their husbands in order to have enough savings. Although this does not improve living standards, however, the economic contribution is the main reason why women remain stone breakers. Therefore, it is necessary to build the same perception of gender justice between husband and wife, especially regarding time and workload distribution.

Stone-breaking women are categorized as economically disadvantaged social groups struggling to ensure the survival of the family. Poverty has changed the way women think regarding the division of work by gender. The phenomenon of stone-breaking women is due to the poor's work culture; therefore, it becomes intergenerational in the long run. Stone-breaking women's phenomena happens because there has been no specific government policy to raise this social group's standard of living until recently. Therefore, there is a need for a stone-breaking women empowerment programme that would cover the social, educational, economic, and political dimensions.

**References**

Adjei, N. K., & Brand, T. (2018). Investigating the associations between productive housework activities, sleep hours and self-reported health among elderly men and women in western industrialised countries. *BMC Public Health, 18*(1), 1–10. [https://doi.org/10.1186/s12889-017-4979-z](https://doi.org/10.1186/s12889-017-4979-z)


