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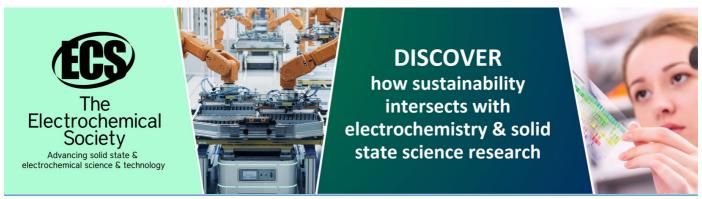
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# Gender Role in the Second-Generation Resettler Households in Koto Panjang Hydropower Area, Riau Province

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**Abstract.** This research was aimed to study: a) the gender role of the second-generation resettler households in domestic activities; b) the gender role of the second-generation resettler households in economic/public activities; c) the gender role of the second-generation resettler households in social activities. The research was conducted in Koto Masjid Village and Pongkai Istiqomah Village. These locations were intentionally selected (purposive sampling). The population in this study was all second-generation families who married after the relocation in Koto Mesjid Village and Pongkai Istiqomah Village. There were 62 households in Koto Mesjid Village and 30 households Pongkai Istiqomah Village taken as the samples of this study. The results show that: 1) The role of gender in the domestic activities of most households in Koto Masjid Village and Pongkai Istiqomah Village is categorized in the low level or in gender bias category. 2) The role of gender in economic/public activities is classified in the medium category (gender perspective). 3) The role of gender in the social activities is in the low category (gender bias).

## 1. Introduction

#### 1.1 Background

Dams have become an important part of the global economy since the 20th century. Large dams emerge as one of the most important and tangible tools for water resource management. More than 45,000 large dams around the world have played important roles in helping people and the economy such as in using water resources for food production, energy generation, flood control, and household use. In Southeast Asia, a total of 58 large dams have been built in Cambodia, Laos, Myanmar, and Vietnam, with more than 52 dams in the planning stage [1].

Dam construction in many cases has led to forced displacement and relocation of around 40-80 million people worldwide [2, 3, 4]. Globally, resettlement due to development and resettlement occurs on a large scale, displacing around 10 million people each year [5]. Forced displacement is more than a physical relocation of people; it has the potential to destroy people's lives economically, physically, culturally and socially, causing the impoverishment of present and future generations [6].

The issue of gender disparity in resettlement operations has been ignored in the literature. A small number of studies report that women often experience the detrimental consequences of forced displacement more strongly than men. For example, compensation payments are usually paid to the family patriarch; the cash value of family assets concentrates on the hands of men; women and

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children experience a higher risk of impoverishment than men [7]. In the guidelines relating to policies regarding people affected by the project, settlers are again described as homogeneous and not differentiated in the state policy. It is a fact that women suffer more than men. However, there are no detailed studies of gender analysis of forced displacement yet [8]. Women and men are not affected in the same way in large-scale resource development projects [9, 10] or large-scale land matters [11]. The difference in gender roles take into account different impacts on women and men [12].

The Koto Panjang Hydroelectric Dam located in XIII Koto Kampar District is a hydropower project with an installed power of 114 MW. The construction of the dam is aimed at meeting the source of electrical energy in the central region of Sumatra, particularly in Riau Province and West Sumatra Province. This 12,400 ha dam was built by damming the flow of the Kampar River and causing the sinking of 10 villages (eight villages in Riau Province and two villages in West Sumatra Province) so that the people were moved from the inundation locations to new settlements.

Families who get married in the new settlement are the group most disadvantaged by the transfer to the new settlement location because they do not get a ration of houses and agricultural land. New families formed in the new settlements are children (second generation) of the heads of family being relocated. This new family is known as the Family Head fraction. If in the old settlement, after marriage they could use ulayat (communal) land which consisted of wet forest (swamp) and dry forest as fields, in the new settlement there was no communal land. All land allocated for relocation residents has been distributed to all residents based on the number of existing family heads. Fractions of family heads do not get a share of agricultural land. The government does not reserve land for rations for the fractions of family heads who do not have agricultural land on their own behalf. Those with status as fractions of family heads consider that government policies are not wise and not thinking long term [13]. Koto Panjang Dam has been operating for 20 years. The impact of resettlement due to the construction of the Koto Panjang Dam is also experienced by the second generation of the relocation settlers.

## 1.2. Formulation of the problem

The pattern of settlement of the Koto Mesjid Village is different from the pattern existing in the Istiqomah Pongkai Village. The population relocated to the Koto Mesjid Village has a transmigration pattern while the resettlement pattern of the Istiqomah Pongkai Village is in the form of a free move pattern in their relatively large area of communal land.

Women experience adverse consequences from resettlement due to the construction of dams that are more severe than men do. Losses incurred by women include the practice of gender discrimination in compensation criteria. In addition, inheritance systems, local traditions and customs, decision-making power, perceptions, and marital status also tend to support men and disadvantage women.

Different gender roles have different impacts on women and men. Studies on gender aspects in assessing the impact of dams on settlers are limited. The debate in contemporary literature about forced displacement did not contain gender. Besides, dams are one of the most long-lived infrastructure projects. The long-term impact of dams will also be experienced by second-generation settlers. Considering the issues described, the problems of this this study are formulated as follows:

- a. How is the gender role of the second generation of relocation settlers in domestic activities?
- b. How is the gender role of the second generation of relocation settlers in economic/public activities?
- c. How is the gender role of the second generation of relocation settlers in social activities?

#### 1.3. Research objectives

The main objective of this study is to examine the gender role of the second-generation relocation settlers in the Koto Panjang hydropower area, Riau Province.

The specific objectives are as follows:

- a. To study the gender role of the second generation of the relocation settlers in domestic activities.
- b. To study the gender role of the second generation of the relocation settlers in economic/public activities.
- c. To study the gender role of the second generation of the relocation settlers in social activities.

#### 1.4. The needs for the research

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The findings of this research is hoped to contribute:

- a. To increase academic knowledge of the role of gender relations in resettler domestic life;
- b. To raise awareness among the policy makers in improving guidelines for resettlement planning in the future.

## 2. Research Methodology

#### 2.1 Research location

This research was conducted in the Koto Mesjid Village and the Istiqomah Pongkai Village within the XIII Koto Kampar District, Kampar Regency, Riau Province from February 2016 to March 2017. The locations of this study were purposefully selected.

#### 2.2 Research method and data collection

The research method used was in the form of a survey. The data in this study were divided into two parts; primary and secondary data. The primary data were collected through quantitative and qualitative approaches.

## 2.3 Population and sample

The population in this study was all second-generation families who married after the relocation in the Koto Mesjid Village and Pongkai Istiqomah Village. Based on the data from the Head Office of Koto Mesjid Village and Istiqomah Pongkai Village, the number of family heads in Koto Mesjid Village is 74 households and 32 households in Pongkai Istiqomah Village. Based on the population of the second-generation families in the two studied villages, the number of sample taken was based on the Slovin formula with an error rate of five percent. The following is the Slovin formula:

$$n = \frac{N}{(1 + Ne^2)}$$

remark:

n: number of sample (families)

*N*: number of population (families)

e: error rate (5%)

From the results of the calculation with the Slovin formula, the number of samples obtained for farm households in the Koto Mesjid Village was 62 households and 30 households in the Pongkai Istiqomah Village.

#### 2.4 Data analysis

Gender analysis is used to identify gender issues in the profile aspects of the activities of family heads and their partners by using Harvard analysis techniques which are often termed as GFA (Gender Framework Analysis).

## 3. Findings and Discussions

## 3.1 Gender role in family task sharing patterns

One actual form of division of gender roles is the division of labor between men and women in farm households. An activity can be carried out by the wife, by the husband, or together.

The division of labor in the household is categorized into three: low, medium, and high categories. Low category means that husband and wife do not really cooperate in the distribution of tasks in the family. Medium category means that husband and wife start to work together in the distribution of tasks, but still dominated by one of them (wife or husband). Whereas, the high category means that husband and wife have performed well in colloboration and in the division of tasks in the family.

## 3.2 Family task sharing in domestic activity

The household responsibility sharing in domestic activities in this study consists of: (a) taking care of children: taking care of children every day, caring for children if they are sick, accompanying children to learn; (b) housework: cleaning the house, cooking, washing clothes, ironing clothes, cleaning the yard, shopping for daily needs, and shopping for household appliances.

In overall, the division of labor in domestic activity in the second generation households in Koto

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Masjid Village and Istiqomah Pongkai Village is dominated by wives (Table 1). Activities that are dominated by the wives in caring for children are taking care of children every day and accompanying children to learn. Activities carried out together by husband and wife are in caring for sick children. The activities of doing housework in some households in Koto Masjid Village and Istiqomah Pongkai Village are predominantly carried out by wives. Only the household equipment shopping activities are predominantly carried out together by husband and wife in Istiqomah Pongkai Village.

The distribution of second-generation households based on the category of division of labor in domestic activities is presented in Table 1. In overall, the division of labor in domestic activities in most households in Koto Masjid Village (87.10%) and households in Pongkai Istiqomah Village (93, 33%) was categorized low or gender bias. The households in the Koto Masjid Village categorized medium was only 9.68%, in the Pongkai Istiqomah Village was 6.67%. The division of labor in households that is classified as high (gender responsive) in the Koto Masjid Village is 3.22%, while in Pongkai Istiqomah Village there is no high category of the division of labor (gender responsive). The findings of this study are in line with the research conducted by Saleha (2003) which shows that in some communities, the pattern of division of labor applies where the domestic sector is the wife's responsibility, although there are also several cases where the husband is willing to share work with his wife to do household chores.

**Table 1.** Distribution of Households Based on Category of Family Task Sharing in Domestic Activities

Category of Family Task Sharing in Domestic	Koto	Pongkai
Activities	Masjid Village	Istiqomah Village
Low/gender bias $(0-33.33\%)$	87.10	93.33
Medium/gender perspective (33.34%-66.67%)	9.68	6.67
High/gender responsive (66.68% - 100%)	3.22	0.00
Average Score	13.61	13.47

#### 3.3 Family task sharing in economic activities

The activities in the economic activity predominantly carried out by the second-generation relocation settlers in the two studied villages were in the agricultural sector, i.e. the rubber plantation farming, fish cultivation and processing business, and fishing in the waters. The activities of purchasing production inputs, seeking venture capital, participating in counseling/training activities, and cultivating land are predominantly carried out by husbands in Koto Masjid Village and Pongkai Istiqomah Village. The harvesting activities are predominantly carried out together by husband and wife in both villages. Besides being involved directly, wives are also indirectly involved in farming activities. The wife's indirect involvement is usually only in providing food for the husband while working on the farm. The activities of looking for production capital and buying inputs are mostly carried out only by husbands.

The division of labor in the economic activities of most households in Koto Masjid Village (56%) and households in Pongkai Istiqomah Village (47%) are classified in the medium category. The division of labor in household economic activities is relatively high (gender responsive) with 44% in Koto Masjid Village and 30% in Pongkai Istiqomah Village. In Pongkai Istiqomah Village, 23% of households are classified as low or gender-biased, while in Koto Masjid Village there are no households classified as low in the division of labor in the public/economic activities.

In overall, based on the data in Table 2, it can be said that most of the second generation households belong to households that already have cooperation in the division of labor for economic activities in the medium category. The division of labor between husband and wife in households in Koto Masjid Village shows a relatively higher average score (21.85) than in the second generation of households in Pongkai Istiqomah Village (13.61).

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**Table 2.** Distribution of Households Based on Category of Family Task Sharing in Economic/Public Activities

Category of Family task sharing	in Koto	o Masjid	Pongkai Istiqomah
Economic/Public Activities	V	illage	Village
Low/gender bias $(0-33.33\%)$		-	23
Medium/gender perspective (33.34 – 66.67%)		56	47
High/gender responsive (66.68% – 100%)		44	30
Average score	2	21.85	13.61

## 3.4 Family task sharing in social activities

The household responsibility sharing in social activities in this study consists of Islamic/religious lecture or religious activities, mutual cooperation, village/community meetings, *arisan* (social gathering), *selamatan/syukuran* (salvation/thanksgiving), farmer groups, and PKK (*Pendidikan Kesejahteraan Keluarga*/Family Welfare Development)/ Posyandu (Maternal and Child Health Services) activities.

The research findings show that the household responsibility sharing of social work in Koto Masjid Village was done together and was dominated by his wife alone. Activities carried out jointly are religious activities/religious study activities, mutual cooperation, and salvation or thanksgiving, while the arisan and PKK/Posyandu activities are dominantly carried out by the wife. In households in Pongkai Istiqomah Village, the household responsibility sharing in social sector is not different from that carried out by households in Koto Masjid Village. Mutual cooperation and attending a salvation/thanksgiving event are carried out jointly by husband and wife. The arisan and PKK/Posyandu activities are dominantly carried out by the wife, while the activities of attending the village meetings and farmer group activities are predominantly carried out by the husband.

Table 3 shows that the cooperation of the division of labor between husband and wife for social activities in households in Koto Masjid Village shows an average score of 10.79, while in households in Pongkai Istiqomah Village is 19.37. The highest proportion of division of labor in Koto Masjid Village is in the low/gender-bias category (76%); 74% in the Istiqomah Pongkai Village. This means that there is still no cooperation between husband and wife in social activities and one party is dominant, either husband or wife alone.

**Table 3.** Distribution of Households Based on Category of Family task sharing in Social Activities

Category of Family Task Sharing in Social Activities	Koto Masjid Village	Pongkai Istiqomah Village
Low/gender bias $(0-33.33\%)$	76	77
Medium/gender perspective (33.34% - 66.67%)	16	17
High/gender responsive (66.68% - 100%)	8	7
Average score	10.79	19.37

## 4. Conclusions and Recommendations

Based on the gender analysis of the second-generation relocation settlers in Koto Masjid Village and Istiqomah Pongkai Village, the results show that:

- 1) The gender role in the domestic activities of most households in Koto Masjid Village and Istiqomah Pongkai Village is categorized low or gender-biased.
- 2) The gender role in the public activities of most households in Koto Masjid Village and Istiqomah Pongkai Village is categorized medium or gender-perspective.
- 3) The gender role in the social activities of most households in Koto Masjid Village and Istiqomah Pongkai Village is categorized low or gender-biased.

To improve gender equality and equity between men (husband) and women (wife) in the villages under investigation, policy interventions from the government can be facilitated in the form of counseling and training programs for women.

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