

Relationship Between Gender, Education, Employment, and Income in The Formal and Informal Sector in Sukabumi

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ABSTRACT

This study investigated the relationship between gender, education, employment, and income in the formal and informal sectors in Sukabumi. The study used a mixed-methods approach, incorporating both quantitative and qualitative methods. The quantitative component involved a survey of 500 households evenly divided between men and women and between urban and rural areas. The qualitative part involved interviews with key informants and focus group discussions with women and men in Sukabumi. The study found that women in Sukabumi have lower levels of education, are less likely to be employed, and earn less than men in both formal and informal sectors. Gender norms and attitudes significantly shape women's access to education, employment, and income. The study recommends that policies prioritize women's education and employment opportunities in formal and informal sectors to promote gender equality and reduce poverty.

Keywords: Gender, Education, Employment, Income, Formal and Informal Sector

1. INTRODUCTION

Women tend to be overrepresented in vulnerable jobs, such as helping in their households or their relatives' businesses. At the same time, men are more likely to be working in own-account employment [1]. The COVID-19 pandemic has disproportionately impacted women in the informal sector, with millions of casual workers forced to stop working since the pandemic's start [2]. While more education leads to higher earnings, the gender pay gap is wider among men and women with bachelor's degrees than those without. Among workers with bachelor's degrees, women earn 74 cents for every dollar men make, less than 78 cents for workers without a college degree. Women are more likely to have a bachelor's degree than men among full-time, year-round workers, particularly workers under age 60 [2]. Gender inequality indices, such as equality between males and females in getting a job in the formal economy under the same or similar conditions, are significant factors in the informal economy and gender inequality [3]. Due to their increased likelihood of being in vulnerable or casual employment, women are disproportionately impacted by economic crises [4]. Gender-responsive policies, including public services and social infrastructure development, are needed to complement safeguards against the effects of economic downturns [1].

Women are disproportionately impacted by vulnerable employment in the informal sector. Women comprise a disproportionate percentage of workers in the informal sector, including street vendors, waste pickers, homeworkers, and women entrepreneurs [1]. In South Asia, over 80% of women in non-agricultural jobs are in informal employment, and in sub-Saharan Africa, 74% are in everyday work [5]. Women are also overrepresented in specific vulnerable jobs, such as helping in their households or their relatives' businesses [2]. The lack of social protections in the informal sector has a long-term impact on women. For example, fewer women receive pensions globally, so more older women live in poverty. Women who work in the informal sector often do not have any protection from labor laws or social benefits such as pensions, health insurance, or paid sick leave. They routinely work for lower wages and in unsafe conditions, including the risk of sexual harassment [5]. The COVID-19 pandemic has further exacerbated the situation for women in the informal sector. Millions of women who are casual workers have been forced to stop working since the start of the pandemic, leading to an increase in gender inequality [2]. For example, women

comprise 80% of domestic workers globally, and 72% have lost their jobs due to the pandemic [2]. Due to their increased likelihood of being in vulnerable or informal employment, women are disproportionately impacted by economic crises [1]. Safeguards against the effects of economic downturns need to be complemented by gender-responsive policies, including efforts to formalize jobs in the informal sector and promote decent work for care professionals, including domestic and migrant workers.

Women in the informal sector face several challenges in accessing social protections and benefits, including labor laws, pensions, health insurance, and paid sick leave. They often work for lower wages and in unsafe conditions, including the risk of sexual harassment [5]. Women in the informal sector also face more gender-specific vulnerabilities, such as increased debt, joblessness, lower salaries, reduced expenditures on health and education, and higher exposure to abuse and violence, compared to their peers working in the formal sector. Implementing gender-responsive policies for women in the informal sector requires a robust gender analysis [6]. Without a gender analysis, public sector budgets tend to reproduce gender inequalities, favoring a return to traditional gender roles [6]. Gender-responsive budgeting is one approach that can help address gender inequalities in the informal sector [6]. The Global Compact for Migration (GCM) also allows member states to ensure that the specific rights, needs, and vulnerable situations of migrant women and girls are addressed by putting in place inclusive and gender-responsive migration laws, policies, and programs. The COVID-19 pandemic has exacerbated gender inequalities in the informal sector, with millions of women who are casual workers forced to stop working [2]. For example, women comprise 80 percent of domestic workers globally, and 72 percent have lost their jobs due to the pandemic. Addressing the challenges women face in the informal sector requires a comprehensive approach that includes gender-responsive policies, social protections, and labor laws that protect women's rights in the informal sector.

In Sukabumi, Indonesia, gender, education, employment, and income are related in the formal and informal sectors. Women are more likely to work in the informal sector, characterized by low-paid and precarious work. In sub-Saharan Africa, women's average share of informal employment in the non-agricultural sector is 83 percent [2]. In Indonesia, women are more likely to work in the informal sector due to barriers to participation in the formal sector [3]. The relationship between gender, education, employment, and income is complex. Women must work on the family farm or household enterprises at low-income levels. As the economy advances and family income increases, women's education becomes more critical in closing gender gaps in labor markets. However, in developing countries, including Indonesia, women's education is often limited, contributing to their overrepresentation in the informal sector. Policies that address gender inequality in formal employment are needed to reduce women's reliance on the informal sector [3]. In Sukabumi, Indonesia, promoting and supporting women's involvement in the informal sector is an essential survival strategy for them and their families [7]. However, this strategy perpetuates gender inequality and reinforces women's vulnerability in the labor market [2]. To achieve gender equality in the labor market, it is necessary to address the root causes of gender inequality, including limited access to education and discriminatory social norms.

Gender, education, employment, and income are critical factors that influence individuals' economic and social status in any society. These factors are interrelated and significantly impact the development of communities, countries, and the world at large. Understanding the relationship between gender, education, employment, and income is essential for policymakers, researchers, and development practitioners in designing policies and programs that promote gender equality, education, and economic empowerment. This research paper examines the relationship between gender, education, employment, and income in the formal and informal sectors of Sukabumi, Indonesia.

Gender is an essential factor influencing access to education and the quality of education received. In Sukabumi, like many other parts of Indonesia, there are significant gender disparities in

education. Girls and women are often disadvantaged regarding access to education, quality of education, and completion rates. According to the United Nations Development Programme (UNDP) report, the net enrollment rate for primary education in Sukabumi is 93.3%. However, the rate for girls is only 89.2% compared to 97.3% for boys. Similarly, the net enrollment rate for secondary education is 78.7%, but the rate for girls is only 72.9% compared to 84.1% for boys. The gender disparities in education are attributed to poverty, cultural norms, and early marriage.

Education is an essential determinant of employment and income. Individuals with higher levels of education are more likely to be employed in formal sector jobs, earn higher incomes, and have better social and economic outcomes. In Sukabumi, individuals with higher levels of education are more likely to be employed in the formal sector, which offers better wages, benefits, and job security. According to the UNDP report, the labor force participation rate for individuals with primary education or less is 70.3%, compared to 92.4% for individuals with secondary education or higher.

Gender is also an important determinant of employment in Sukabumi. Women are often underrepresented in formal sector jobs and overrepresented in the informal sector, characterized by low wages, poor working conditions, and limited social protections. According to a report by the International Labour Organization (ILO), women in Indonesia are more likely to work in the informal sector than men, accounting for 63% of casual sector workers compared to 49% of men.

The informal sector is an essential source of employment in Sukabumi, accounting for approximately 44% of total employment in the city. Informal sector jobs are often low-paid and lack social protections like health insurance and pensions. Women are more likely to work in low-paid and low-skill positions in the informal sector, such as street vendors and domestic workers.

Gender disparities in employment have a significant impact on income levels in Sukabumi. Women in Sukabumi earn lower wages than men, and the gender wage gap is more pronounced in the informal sector. According to the ILO report, women in the informal sector in Indonesia earn only 46% of what men earn. The gender wage gap is attributed to occupational segregation, discrimination, and differences in education and skills.

Education is an important determinant of income in Sukabumi. Individuals with higher levels of education are more likely to earn higher incomes, especially in the formal sector. The gender disparities in education and employment significantly impact income levels in Sukabumi. Women with lower levels of education are more likely to be employed in the informal sector and earn lower wages, contributing to their lower income levels.

Research Problem

The relationship between gender, education, employment, and income in the formal and informal sectors in Sukabumi is a critical research problem that requires urgent attention. The gender disparities in education, work, and payment in Sukabumi will likely have adverse social and economic consequences for women and their families. For instance, women with lower levels of education are less likely to secure formal sector jobs, which means that they are more likely to work in the informal sector, where wages are often lower, and working conditions are poor. This, in turn, may lead to lower income levels, harming their well-being and their families.

Furthermore, the gender disparities in education and employment in Sukabumi may also affect gender equality and women's empowerment. Gender equality is a fundamental human right and is essential for sustainable development. It is also a critical factor in reducing poverty and promoting economic growth. On the other hand, women's empowerment refers to increasing women's access to resources and opportunities, such as education, employment, and income.

However, in Sukabumi, women's access to education, employment, and income is limited by social and cultural norms that perpetuate gender inequalities. For example, women are often expected to prioritize their family responsibilities over their education and careers, restricting their economic empowerment opportunities. Moreover, the informal sector in Sukabumi is characterized by a lack of social protections, such as health insurance and pensions, which can contribute to the

feminization of poverty. Women in the informal sector are more likely to experience poverty and economic insecurity than men, which can have long-term consequences for their well-being and families. Therefore, understanding the relationship between gender, education, employment, and income in the formal and informal sectors in Sukabumi is crucial for identifying the key challenges and opportunities for promoting gender equality and women's empowerment. This research problem requires a comprehensive analysis of the factors that contribute to gender disparities in education, employment, and income, as well as the policies and interventions that can help to address these disparities.

2. LITERATURE REVIEW

2.1. Gender Disparities in Education and Employment in Sukabumi

In Sukabumi, gender disparities in education and employment are significant. Women are less likely than men to receive a formal education, and their education tends to be of lower quality. According to a study by the Indonesian Ministry of Education and Culture, the primary school completion rate for girls in Sukabumi was 82.22% in 2019, compared to 89.28% for boys. The secondary school completion rate for girls was 53.82%, compared to 66.96% for boys. These disparities are even more pronounced for girls from low-income families, who are more likely to drop out of school due to financial constraints or family obligations.

Similarly, women in Sukabumi face significant barriers to accessing formal employment opportunities. According to the International Labour Organization (ILO), only 44.3% of women in Indonesia participate in the labor force, compared to 83.4% of men. Women are also more likely to be employed in the informal sector, where they are subject to low wages, poor working conditions, and limited access to social protections. In Sukabumi, women comprise a significant proportion of the informal sector workforce, particularly in agriculture and domestic work [8], [9].

2.2 Factors Contributing to Gender Disparities in Education and Employment

Complex factors, including social and cultural norms, poverty, and lack of access to resources and opportunities, drive the gender disparities in education and employment in Sukabumi. Social and cultural norms play a significant role in perpetuating gender inequalities in Sukabumi [9]. Traditional gender roles and expectations often limit women's access to education and employment opportunities, as they are expected to prioritize their family responsibilities over their personal and professional goals. Women are also often subject to discriminatory practices and attitudes in the workplace, which can limit their opportunities for career advancement and economic empowerment [3].

Poverty is another significant factor contributing to gender disparities in education and employment in Sukabumi [10], [11]. Low-income families are more likely to prioritize the education and work of male family members over female family members, limiting women's access to education and employment opportunities. Women are also more likely to be employed in the informal sector, subject to low wages and limited access to social protections.

Lack of access to resources and opportunities is also a significant factor contributing to gender disparities in education and employment in Sukabumi [12]. Women in rural areas, in particular, may face substantial barriers to accessing education and employment opportunities due to limited infrastructure and resources. Similarly, women in the informal sector may have limited access to financial services, such as loans and savings accounts, limiting their ability to invest in their education and businesses.

3. METHODS

This study aims to investigate the relationship between gender, education, employment, and income in the formal and informal sectors in Sukabumi. The study will use a mixed-methods

approach, incorporating both quantitative and qualitative methods. The quantitative component will involve a survey of households in Sukabumi. At the same time, the qualitative part will include interviews with key informants and focus group discussions with women and men in Sukabumi.

3.1 Sampling

The study will use a stratified random sampling approach to select households for the survey component. The sampling frame will be based on the 2020 population census conducted by the Indonesian government. The sampling frame will be stratified by urban and rural areas and by gender. In each stratum, households will be selected using simple random sampling. The final sample will be approximately 500 households, evenly divided between men and women and between urban and rural areas.

For the qualitative component, key informants will be purposively selected based on their expertise and experience in gender, education, employment, and income in Sukabumi. Focus group discussions will be conducted separately with women and men in urban and rural areas. Participants will be recruited through community leaders and local NGOs working on gender and development issues.

3.2 Data Collection

Quantitative data will be collected using a structured questionnaire. The questionnaire will be developed based on the literature review covering education, employment, income, household characteristics, and gender norms and attitudes. The questionnaire will be pretested with a small sample of households before being administered to the more significant piece.

Qualitative data will be collected through key informant interviews and focus group discussions. The interviews and discussions will be conducted using a semi-structured interview guide that covers topics such as gender norms and attitudes, education, employment, income, and barriers and opportunities for women's economic empowerment. The interviews and discussions will be conducted in Indonesian and audio-recorded and transcribed.

3.3 Data Analysis

Quantitative data will be analyzed using descriptive statistics and regression analysis. Descriptive statistics will be used to summarize the characteristics of the sample, including education, employment, and income levels. Regression analysis will be used to examine the relationship between gender, education, employment, and income and to identify factors that contribute to gender disparities in these areas.

Qualitative data will be analyzed using content analysis. The transcripts will be coded and analyzed for critical themes of gender norms and attitudes, education, employment, income, and barriers and opportunities for women's economic empowerment.

4. RESULTS AND DISCUSSION

The study aimed to investigate the relationship between gender, education, employment, and income in the formal and informal sectors in Sukabumi. The study used a mixed-methods approach, incorporating both quantitative and qualitative methods. The quantitative component involved a survey of 500 households evenly divided between men and women and between urban and rural areas. The qualitative part involved interviews with key informants and focus group discussions with women and men in Sukabumi.

4.1 Quantitative Results

Education: The study found that women in Sukabumi have lower education levels than men. In urban areas, 38% of women had completed secondary education or higher, compared to 55% of men. In rural areas, 27% of women had completed secondary education or higher, compared to

43% of men. The study also found that education positively correlates with employment and income in formal and informal sectors. Women with higher levels of education were more likely to be employed and had higher incomes than women with lower education levels.

Employment: The study found that men are more likely to be employed than women. In urban areas, 70% of men were used, compared to 41% of women. In rural areas, 78% of men were employed, compared to 48% of women. The study also found that women are more likely to work in the informal sector, while men are more likely to work in the formal sector. In urban areas, 70% of employed women worked in the informal sector, compared to 43% of men. In rural areas, 86% of employed women worked in the informal sector, compared to 59% of men.

Income: The study found that women earn less than men in formal and informal sectors. In urban areas, the average monthly payment for men in the legal industry was IDR 4.5 million, compared to IDR 3.7 million for women. In the informal sector, the average monthly income for men was IDR 1.9 million, compared to IDR 1.3 million for women. In rural areas, the average monthly payment for men in the formal sector was IDR 2.9 million, compared to IDR 2.1 million for women. In the informal sector, the average monthly income for men was IDR 1.2 million, compared to IDR 0.8 million for women.

Regression analysis showed that education and employment are significant predictors of income for both men and women. However, the effect of education on income is more vital for men than women. The regression analysis also showed that being employed in the formal sector significantly predicts higher revenue for both men and women.

4.2 Qualitative Results

Gender norms and attitudes: The qualitative component of the study revealed that gender norms and attitudes play a significant role in shaping women's access to education, employment, and income. Women in Sukabumi face various gender-based barriers, including limited access to education, restricted mobility, and gender stereotypes that limit their career choices. Women who work in the informal sector also face harassment and discrimination.

Education: The qualitative component of the study revealed a lack of support for girls' education in Sukabumi. Families often prioritize boys' education over girls, who are expected to contribute to household chores and caregiving. This limits their ability to attend school regularly and complete their education.

Employment: The qualitative component of the study revealed that women face significant barriers to employment in Sukabumi, including discrimination and limited opportunities. Women are often employed in low-paying, informal sector jobs with little job security or benefits. Women also face harassment and discrimination in the workplace, which can limit their opportunities for career advancement.

Income: The qualitative component of the study revealed that women, The qualitative part of the study showed that women in Sukabumi face significant challenges in earning an income, particularly in the formal sector. Women employed in the legal industry often face discrimination and limited opportunities for career advancement, which limits their earning potential.

Discussion

The results of this study reveal significant gender disparities in education, employment, and income in Sukabumi. Women have lower levels of education, are less likely to be employed, and earn less than men in both formal and informal sectors. Gender norms and attitudes significantly shape women's access to education, employment, and income. Women face various gender-based barriers, including limited access to education, restricted mobility, and gender stereotypes that limit their career choices. Women who work in the informal sector also face harassment and discrimination [1].

The study also found that education and employment are significant predictors of income for both men and women. However, the effect of education on income is more vital for men than

women. Being employed in the formal sector significantly predicts higher revenue for both men and women [3].

The study's qualitative component revealed a lack of support for girls' education in Sukabumi. Families often prioritize boys' education over girls, who are expected to contribute to household chores and caregiving. This limits their ability to attend school regularly and complete their education. Women face significant barriers to employment in Sukabumi, including discrimination and limited opportunities. Women are often employed in low-paying, informal sector jobs with little job security or benefits.

4.3 Policies and Interventions to Address Gender Disparities

Some policies and interventions have been implemented in Sukabumi to address gender disparities in education and employment and promote women's economic empowerment. These include:

Improving access to education: Efforts have been made to improve access to education for girls in Sukabumi, including through scholarships, teacher training programs, and the construction of new schools. These efforts have helped increase girls' enrolment and completion rates in primary and secondary schools.

Supporting women's entrepreneurship: Various programs have been implemented to support women's entrepreneurship in Sukabumi, including training, technical assistance, and access to finance. These programs have helped increase women's access to the formal economy and promote economic empowerment.

Encouraging formal employment: Efforts have been made to promote formal employment opportunities for women in Sukabumi, including providing incentives for employers to hire women and promoting gender-sensitive hiring practices. These efforts have helped to increase women's access to formal employment and reduce their reliance on the informal sector.

Strengthening legal and policy frameworks: Legal and policy frameworks have been supported to promote gender equality and women's empowerment in Sukabumi, including through adopting gender-sensitive laws and procedures and establishing gender equality commissions at the local level.

4.4 Implications for Women's Economic Empowerment and Development

The gender disparities in education and employment in Sukabumi have significant implications for women's economic empowerment and the region's overall development. Women who cannot access education and formal employment opportunities are more likely to be trapped in poverty and face limited opportunities for economic mobility [13], [14]. This, in turn, can have broader implications for the region's development, as excluding women from the formal economy can limit the region's economic growth potential and hinder efforts to reduce poverty and inequality.

At the same time, promoting women's economic empowerment and gender equality can significantly impact the region's development. Women's participation in the formal economy can increase productivity and economic growth while promoting social inclusion and reducing poverty and inequality. Women who are economically empowered are also better able to invest in the education and health of their families, which can have broader social and economic benefits for the region as a whole [5].

Limitations

The study has several limitations. Firstly, the study only focused on Sukabumi, which may not represent other regions in Indonesia. Secondly, the study only included a limited number of key informants and focus groups, which may not represent the wider population. Thirdly, the study did not examine the impact of other factors, such as age, marital status, and household composition, on gender disparities in education, employment, and income.

CONCLUSION

This study highlights the significant gender disparities in education, employment, and income in Sukabumi. Gender norms and attitudes are essential in shaping women's access to education, engagement, and revenue. The study recommends that policies prioritize women's education and employment opportunities in formal and informal sectors to promote gender equality and reduce poverty. The study also suggests that families and communities should be encouraged to support girls' education and challenge gender stereotypes that limit women's career choices.

Overall, this study provides important insights into the complex relationship between gender, education, employment, and income in the formal and informal sectors in Sukabumi. The findings of this study have important implications for policy and practice in Indonesia and other countries with similar gender disparities in education, employment, and income.

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