

GENDER INEQUALITY IN LOGISTICS INDUSTRY EMPLOYMENT: EMPIRICAL EVIDENCE FROM CENTRAL JAVA

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ABSTRACT

Introduction/Main Objectives: The logistics industry is a strategic sector experiencing rapid growth due to the expansion of global trade and modern supply chains. Despite its development, the industry remains dominated by a masculine work culture that may create gender inequality and hinder women's career advancement. This study aims to analyze the forms of gender inequality, the factors influencing women's challenges, and the implications of gender inequality on career development and the work environment within the logistics industry in Central Java.

Background Problems: This study addresses the question of how gender inequality manifests in the logistics industry, what factors contribute to women's challenges, and how such inequality affects their career development and work environment.

Novelty : While previous studies have examined gender inequality across various industries, limited research has specifically explored the forms, contributing factors, and organizational implications of gender inequality within Indonesia's logistics industry using an in-depth qualitative approach. This study provides empirical insights into women's experiences in the logistics sector in Central Java.

Research Methods: This research employed a qualitative descriptive approach. Data were collected through in-depth interviews, observations, and documentation involving female employees and management personnel from several logistics companies in Central Java. Data were analyzed using an interactive model consisting of data reduction, data display, and conclusion drawing.

Findings/Results: The findings indicate that gender inequality persists in the logistics industry through job segregation, limited promotion opportunities, gender stereotypes regarding women's capabilities, and low participation of women in organizational decision-making. These challenges are influenced by patriarchal cultural values, work systems requiring high mobility, and limited access to competency development and leadership opportunities.

Conclusion: Gender inequality remains a significant issue affecting women's career development, work motivation, and the quality of the work environment in the logistics industry. Creating a more inclusive organizational culture and ensuring equal career opportunities are essential to improving gender equality in the sector.

Implementation Potential: The findings provide practical implications for logistics companies and policymakers in developing gender-responsive human resource policies, strengthening leadership development programs for women, and promoting inclusive workplace practices to support sustainable organizational performance.

Keywords : gender inequality; logistics industry; career development; women workers; work environment

JEL Classification: J16; J24; M12; M54

1. INTRODUCTION

The logistics industry holds a strategic position in supporting modern economic activities through the management of goods distribution, transportation, warehousing, and interregional supply chain integration. The rapid growth of digital commerce and the increasing demand for goods distribution have positioned the logistics sector as one of the key sectors in national economic development. In this context, the logistics industry no longer functions merely as a supporting activity, but has become a major factor in enhancing a country's economic efficiency and competitiveness. However, the growth of the logistics industry has not been fully accompanied by the establishment of an inclusive and gender-equal employment system, particularly for women who still face various limitations in accessing employment opportunities within this sector (World Bank, 2020).

Gender inequality in employment remains a global issue commonly found in developing countries, including Indonesia. Women frequently encounter barriers in obtaining employment opportunities, access to promotion, labor protection, and equal professional recognition compared to men. Such conditions are also evident in the logistics industry, which has long been associated with physically demanding work, high mobility, and a masculine work culture. As a result, women are more frequently assigned to administrative positions rather than operational or strategic

decision-making roles. This situation indicates that gender-based social constructions continue to influence the division of labor within the logistics industry (International Trade Union Confederation [ITUC], 2021).

Internationally, the issue of gender equality has become an important part of the Sustainable Development Goals (SDGs) agenda, particularly Goal 5 concerning gender equality and Goal 8 concerning decent work and economic growth. The United Nations emphasizes that increasing women's participation in the workforce can generate positive impacts on economic growth, organizational innovation, and the sustainability of social development. However, various international reports indicate that women continue to experience inequalities in terms of wages, access to leadership positions, and employment opportunities across various strategic sectors, including logistics. The characteristics of logistics work, which require time flexibility and high mobility, often intensify the challenges faced by female workers (United Nations, 2022).

In Indonesia, gender inequality in employment can be observed through the lower labor force participation rate of women compared to men. In addition, women tend to work in sectors with lower income levels and limited career advancement opportunities. Cultural factors, educational disparities, domestic role divisions, and gender stereotypes remain the primary causes of women's limited participation in certain sectors. This condition indicates that national economic development has not yet fully resulted in an equal distribution of employment opportunities between men and women (Ministry of Manpower of the Republic of Indonesia, 2023).

Central Java Province represents an interesting area for study due to its rapid development in industrial, trade, and distribution sectors. The growth of industrial zones, distribution warehouses, and the expansion of electronic commerce have increased the demand for labor in the logistics sector. Nevertheless, the increased demand for labor does not necessarily reflect equal employment opportunities for women. In practice, women still face challenges such as job segregation, limited access to strategic positions, and dual burdens arising from domestic and formal work responsibilities. This condition demonstrates that gender inequality remains a relevant issue within the regional logistics employment system (Central Java Statistics Agency, 2023).

Research on gender inequality has been widely conducted in Indonesia, particularly in the fields of education, health, and employment in general. However, studies specifically discussing

women in the logistics industry remain relatively limited. Most logistics studies primarily focus on supply chain management, transportation, goods distribution, and operational efficiency. Consequently, the social dimensions of employment, particularly women's experiences and challenges in the logistics industry, have received limited attention in academic research. This limitation provides an opportunity for the present study to contribute empirically to the development of gender and logistics literature in Indonesia (Sari & Nugroho, 2022).

In addition to structural barriers, women in the logistics industry also face psychological and social challenges in the workplace. Previous studies indicate that women frequently experience gender stereotypes, limited professional recognition, restricted access to leadership positions, and difficulties in maintaining a balance between work and family life. In male-dominated work environments, women are often required to prove their professional capabilities to a greater extent than their male counterparts. Such conditions may affect women's work motivation, productivity, and career sustainability within the logistics sector (Sharma & Kaur, 2022).

Theoretically, this study is relevant to Gender Role Theory, which explains that social constructions regarding the roles of men and women influence the division of labor within society. In addition, Glass Ceiling Theory can be used to understand the invisible barriers that limit women from obtaining strategic positions in the workplace. Within the logistics industry, a masculine work culture has the potential to reinforce inequality in career access and decision-making opportunities for female workers. Therefore, this study not only examines the empirical conditions of gender inequality but also seeks to explain how organizational culture and social structures influence women's work experiences in the logistics sector (Cotter et al., 2001).

This research possesses both academic and practical significance. From an academic perspective, the study is expected to enrich discussions on gender and employment within the logistics industry, which remain relatively limited in Indonesia. From a practical perspective, the findings are expected to serve as a consideration for local governments, logistics companies, and other stakeholders in formulating more gender-inclusive employment policies. Enhancing protection and employment opportunities for women not only contributes to workers' welfare but also improves the quality of human resources and the long-term competitiveness of the logistics industry (World Bank, 2020).

Based on the foregoing discussion, this study aims to analyze the forms of gender inequality in logistics industry employment in Central Java, identify the factors influencing women's challenges in the logistics workplace, and explore the implications of gender inequality on career development and inclusive work environments. This study is expected to provide an empirical contribution to the development of fairer and more gender-responsive employment policies within Indonesia's logistics sector. Research Questions 1) What forms of gender inequality occur in logistics industry employment in Central Java? 2) What factors influence the challenges faced by women in the logistics industry in Central Java? And 3) What are the implications of gender inequality for women's career development and work environments within the logistics industry?

2. LITERATURE REVIEW

2.1. Teori Gender Equality

Gender equality theory emphasizes that men and women should obtain equal rights, opportunities, access, and treatment in various aspects of life, including education, economics, politics, and employment. This concept emerged from criticism of social structures that for many years positioned women in subordinate roles compared to men. Gender equality does not aim to make men and women biologically identical; rather, it seeks to create social conditions that allow every individual to obtain fair opportunities regardless of gender. In the employment context, this theory highlights the importance of eliminating discrimination against women in terms of job access, career development, wage distribution, and leadership opportunities (Oakley, 1972).

Conceptually, gender equality theory originates from the distinction between the concepts of *sex* and *gender*. *Sex* refers to the biological differences between men and women that are naturally determined, whereas *gender* refers to social and cultural constructions that shape societal roles, behaviors, and expectations toward men and women. These social constructions often create inequalities in the division of labor and access to resources. In patriarchal societies, women tend to be associated with domestic work and caregiving roles, while men are positioned as dominant actors in economic activities and decision-making processes. Consequently, women frequently face limitations in accessing strategic occupations and leadership positions (Fakih, 2013).

In the development of modern scholarship, gender equality theory has been strongly influenced by liberal feminist thought, which emphasizes the importance of individual freedom and equal rights in social life. Liberal feminism argues that gender inequality occurs because of structural barriers and social policies that restrict women from obtaining opportunities equal to those of men. Therefore, reforms in regulations, education, and employment policies are considered essential for creating equality. This perspective emphasizes that women possess equal abilities and capacities in the workplace when provided with the same access and opportunities. In the context of modern industries, this approach encourages organizations to implement more inclusive work systems free from gender discrimination (Tong, 2009).

Gender equality theory is also closely related to the concept of social justice in economic development. Various studies indicate that women's participation in the economic sector can improve productivity, innovation, and organizational sustainability. Gender equality in the workplace is not merely a human rights issue but also has implications for economic growth and societal welfare. International organizations such as the World Bank and the United Nations emphasize that women's empowerment in the economic sector can enhance the quality of human resources and strengthen social resilience within communities. Thus, gender equality is regarded as an essential element of sustainable development (World Bank, 2020).

In employment practices, gender equality theory is often used to explain various forms of discrimination experienced by women in the workplace. Such discrimination may include wage disparities, limited access to promotions, job segregation, and stereotypes regarding women's abilities in certain occupations. In male-dominated sectors such as logistics and transportation, women are often perceived as less capable of performing operational work or occupying strategic positions. This condition creates inequalities in job distribution and career opportunities. Therefore, gender equality theory emphasizes the importance of organizations establishing fair work environments through anti-discrimination policies, protection for female workers, and equal career development opportunities (International Labour Organization, 2019).

In addition to structural aspects, gender equality theory also highlights the influence of organizational culture on women's work experiences. Work environments still influenced by patriarchal cultures often reinforce gender stereotypes and limit women's participation in decision-

making processes. Women frequently encounter invisible barriers known as the *glass ceiling*, a condition in which women find it difficult to achieve leadership positions despite possessing adequate competencies. These barriers generally emerge in the form of organizational bias, male dominance within management structures, and limited support for women's career development. In this context, gender equality concerns not only the number of women participating in the workforce but also the quality of their access to power and decision-making within organizations (Cotter et al., 2001).

Within the context of this study, gender equality theory is used to understand how gender inequality occurs in logistics industry employment in Central Java. The logistics industry, which is closely associated with high mobility, operational activities, and masculine work cultures, has the potential to create barriers for women in obtaining equal employment opportunities. Through the perspective of gender equality, this study seeks to identify the forms of inequality experienced by women, the factors contributing to such inequalities, and their implications for career development and workplace environments. Thus, this theory serves as an important foundation for analyzing the relationship between social structures, organizational culture, and women's experiences within the modern logistics industry.

2.2. Decent Work or Decent Employment for Women

The concept of *decent work* was introduced by International Labour Organization as an approach to creating an employment system that is not only oriented toward economic productivity but also guarantees workers' welfare and dignity. This concept emphasizes that every individual has the right to obtain safe and productive employment, fair income, social protection, and freedom and equality in the workplace. Over time, *decent work* has become one of the main agendas of global development because it is considered capable of promoting inclusive and sustainable economic growth. For women, the concept of decent employment is particularly important because it is directly related to efforts to eliminate gender discrimination in the workplace, including access to employment, labor protection, and career development opportunities (International Labour Organization, 2019).

From a gender perspective, decent employment is not only measured by the availability of jobs for women but also by the quality of the work they obtain. Many women still work under vulnerable conditions, receive lower wages than men, and have limited access to social protection and job security. In addition, women are often concentrated in informal employment or occupations with low levels of job security. These conditions indicate that women's participation in the workforce has not yet been fully accompanied by justice and equality within the employment system. Therefore, the concept of *decent work* emphasizes the importance of creating a work environment that ensures equal treatment without gender-based discrimination (United Nations Women, 2020).

One important dimension of decent employment for women is equal opportunity in employment and career development. In many industrial sectors, women still face barriers to obtaining strategic positions due to gender stereotypes and masculine organizational cultures. Women are often associated with administrative or supporting roles, while leadership and decision-making positions remain predominantly occupied by men. Such inequality results in women having fewer opportunities for promotion despite possessing adequate competence and experience. In this context, decent employment must include fair opportunities for women to develop professionally without facing structural discrimination (World Bank, 2020).

In addition to career opportunities, protection of women workers' rights is also an essential part of the *decent work* concept. Women frequently face risks of harassment, discrimination, and job insecurity in the workplace. In several industrial sectors, women even experience uncertain employment status and limited access to health insurance and maternity protection. These conditions demonstrate that job quality is not determined solely by income levels but also by the existence of protection for workers' fundamental rights. Therefore, organizations and governments need to establish employment policies capable of protecting women from various forms of injustice and labor exploitation (International Labour Organization, 2022).

The concept of decent employment for women is also closely related to the balance between work and family life (*work-life balance*). In many societies, women continue to bear greater domestic responsibilities than men, including childcare and household duties. This dual burden often affects women's productivity, mental health, and career sustainability in the

workforce. Consequently, a decent work environment should provide support through flexible working arrangements, maternity leave policies, health facilities, and more family-friendly work systems. Such support is essential to enable women to fulfill professional responsibilities without losing opportunities for personal and family development (OECD, 2021).

Within the context of sustainable development, decent employment for women constitutes an important component in achieving the Sustainable Development Goals (SDGs), particularly Goal 5 concerning gender equality and Goal 8 concerning decent work and economic growth. Improving the quality of employment for women is believed to promote more inclusive economic growth and reduce social inequality. Women's participation in the economic sector also contributes to increasing household income, strengthening the quality of human resources, and supporting social development within communities. Thus, decent employment for women is not merely an employment issue but also part of a broader strategy for sustainable economic and social development (United Nations, 2022).

In the logistics industry, the concept of *decent work* for women is increasingly relevant because the sector remains dominated by masculine work cultures and operational activities that demand high mobility. Women in the logistics industry frequently face challenges such as job segregation, limited access to leadership positions, and stereotypes regarding women's work capabilities in operational activities. Therefore, the implementation of decent work principles is essential to creating a safe, inclusive, and gender-equal work environment. Logistics companies need to provide fair career opportunities, adequate labor protection, and support for women's competency development in order to establish a more equitable and sustainable employment system.

2.3. Labour Inclusion or Inclusive Workforce Participation

The concept of *labour inclusion* or inclusive workforce participation refers to efforts to create an employment system that provides equal opportunities for all individuals to participate in the workforce without experiencing discrimination based on gender, age, physical condition, social background, or other identities. From the perspective of modern development, labour inclusion is regarded as an essential element in promoting equitable and sustainable economic growth. An

inclusive employment system is not only oriented toward increasing the number of workers but also ensures that every employee has access to job opportunities, social protection, competency development, and fair participation within organizations. Therefore, labour inclusion has become an important part of the global development agenda emphasizing the significance of social and economic equality (International Labour Organization, 2021).

Within the employment context, labour inclusion is closely related to the elimination of various structural barriers that restrict certain groups from obtaining decent employment. These barriers may include gender discrimination, social stereotypes, limited access to education, and organizational policies that do not support workforce diversity. Women, persons with disabilities, minority groups, and workers from low-income backgrounds often face greater challenges in entering the formal labor market. As a result, they tend to work in the informal sector with low levels of labor protection. Under such conditions, the implementation of labour inclusion principles becomes essential in creating a fairer employment system capable of providing equal opportunities for all social groups (World Bank, 2020).

One of the main dimensions of labour inclusion is equal access to employment opportunities and career development. An inclusive workplace not only opens job opportunities for various social groups but also provides space for every individual to develop according to their competencies and professional capabilities. In practice, organizations implementing workforce inclusion principles tend to be more open to diversity, foster collaborative work cultures, and provide promotion opportunities more objectively. Such an approach can reduce inequalities in job distribution and create more productive and innovative work environments. Research indicates that organizations with higher levels of inclusiveness demonstrate greater ability to improve organizational performance and sustainability (Shore et al., 2018).

In addition to employment opportunities, labour inclusion also emphasizes the importance of employee participation in decision-making processes and organizational life. Workers who feel accepted and valued within the workplace tend to exhibit higher levels of motivation, loyalty, and productivity. Conversely, discriminatory work environments may result in social marginalization, job dissatisfaction, and low employee engagement within organizations. Therefore, companies need to establish workplace cultures that value diversity and provide open communication spaces

for all employees. In this context, labour inclusion is not merely related to the presence of workers from diverse social groups but also concerns the quality of their involvement in organizational activities (Roberson, 2019).

From a gender perspective, the concept of labour inclusion has a strong connection with efforts to create equality for women in the workforce. Women still frequently face barriers such as job segregation, wage disparities, limited access to leadership positions, and stereotypes regarding work capabilities. In sectors dominated by men, women often encounter difficulties in obtaining equal opportunities for career advancement. Therefore, implementing gender-based labour inclusion is essential to ensure that women have equal access to employment, training, promotion opportunities, and labor protection. A gender-inclusive workplace can also enhance women's sense of security and self-confidence in performing their professional roles (United Nations Women, 2021).

The concept of labour inclusion is also closely linked to the Sustainable Development Goals (SDGs), particularly Goal 8 concerning *decent work and economic growth* and Goal 10 regarding the reduction of inequalities. Increasing inclusive workforce participation is believed to broaden economic participation and reduce social disparities within the labor market. International organizations emphasize that sustainable economic development must be supported by employment systems capable of involving all groups in society fairly. Thus, labour inclusion is not merely an employment issue but also part of a broader strategy for social and economic development (United Nations, 2022).

Within the logistics industry, the implementation of labour inclusion has become increasingly important because the sector remains dominated by masculine work cultures and operational activities requiring high mobility. Women in the logistics industry frequently face challenges such as limited access to strategic positions, stereotypes regarding work capabilities, and work environments that are not yet fully gender-responsive. Therefore, implementing workforce inclusion principles can serve as a strategy for creating fairer, safer, and more productive workplaces. Logistics companies need to provide equal employment opportunities, support competency development, and protect workers from discrimination so that all employees

can participate optimally within organizations. In this regard, labour inclusion becomes an essential foundation for building a sustainable and inclusive logistics employment system.

2.4. Workplace Discrimination

Workplace discrimination refers to conditions in which individuals receive unfair treatment in the work environment due to differences in identity, such as gender, age, race, religion, physical condition, or other social backgrounds. In modern employment studies, discrimination is regarded as one of the primary obstacles to creating fair, inclusive, and productive workplaces. Discriminatory practices may appear in various forms, ranging from recruitment processes, job allocation, wage systems, and promotion opportunities to social interactions within the workplace. Such conditions not only affect workers' welfare but also influence overall organizational effectiveness by creating dissatisfaction and inequality in employment relations (International Labour Organization, 2019).

From a gender perspective, workplace discrimination is often experienced by women due to social constructions that continue to position men as the dominant group in the workforce. Women frequently face stereotypes suggesting that they are less competent to occupy strategic positions or jobs requiring high mobility. As a result, women are more often assigned to administrative and supporting roles rather than leadership or core operational positions. This inequality indicates that gender discrimination is not only related to employment access but also concerns the distribution of power and opportunities within organizations. In many cases, women must work harder to gain professional recognition equal to that of men (Oakley, 2000).

One of the most common forms of discrimination in the workplace is the wage gap between men and women. Although women may possess relatively similar levels of education and work experience as men, they still receive lower compensation in many industrial sectors. This condition is influenced by various factors, including job segregation, organizational bias, and the low representation of women in managerial positions. In addition to affecting women's economic welfare, wage disparities also demonstrate that employment systems have not fully implemented the principles of justice and equality. Therefore, eliminating wage discrimination has become an

important aspect of creating more inclusive and gender-equitable workplaces (World Economic Forum, 2023).

Beyond economic discrimination, women also frequently encounter barriers to career advancement known as the *glass ceiling*. This concept refers to invisible barriers that prevent women from attaining leadership positions despite possessing adequate competence and experience. Such barriers generally arise in the form of masculine organizational cultures, male dominance within management structures, and biases regarding women's leadership capabilities. Consequently, women have fewer promotion opportunities than their male colleagues. The *glass ceiling* phenomenon indicates that workplace discrimination is not always direct but may also emerge through organizational systems and cultures that fail to support gender equality (Cotter et al., 2001).

Workplace discrimination may also occur in the form of verbal, psychological, or social harassment against female workers. Unsafe and non-gender-responsive work environments often cause women to experience psychological pressure, discomfort, and even decreased work motivation. In several male-dominated industrial sectors, women are vulnerable to social marginalization and treatment that undermines their professional capabilities. Such conditions may affect women's mental health, productivity, and career sustainability within organizations. Therefore, companies need to establish labor protection policies capable of preventing various forms of discrimination and harassment in the workplace (International Labour Organization, 2022).

From an organizational perspective, workplace discrimination not only harms workers but may also reduce overall company performance. Discriminatory work environments tend to create internal conflicts, low employee loyalty, and high employee turnover rates. Conversely, organizations that implement principles of equality and diversity are generally more capable of enhancing innovation, collaboration, and work productivity. Research demonstrates that workforce diversity managed inclusively can strengthen organizational competitiveness by encouraging more diverse perspectives and ideas in decision-making processes (Roberson, 2019).

Within the logistics industry, the issue of *workplace discrimination* has become increasingly relevant because the sector continues to be dominated by masculine work cultures

and operational activities requiring high mobility. Women in the logistics industry frequently encounter challenges such as job segregation, limited access to leadership positions, stereotypes regarding work capabilities, and insufficient support for work-life balance. Therefore, implementing anti-discrimination policies and strengthening inclusive workplace cultures are essential to creating fairer and more gender-responsive work environments. By reducing discriminatory practices, logistics companies can not only improve the welfare of female workers but also strengthen human resource quality and organizational sustainability overall.

2.5. Human Capital in Logistics

The concept of *human capital* refers to the collection of knowledge, skills, experience, competencies, and individual capacities that contribute to organizational productivity and economic development. In modern economic theory, humans are viewed not merely as laborers but as strategic assets possessing economic value through their intellectual abilities and skills. This perspective developed through the ideas of Gary Becker, who emphasized that investment in education, training, and work experience can improve both individual and organizational productivity. Within the logistics industry, the quality of human capital has become a critical factor because the sector requires coordination capabilities, distribution management, technological utilization, and effective decision-making in modern supply chains (Becker, 1993).

The increasing complexity of the global logistics industry has intensified the demand for high-quality human resources. Modern logistics activities no longer focus solely on transportation and warehousing processes but also encompass information technology integration, supply chain management, data analysis, and customer relationship management. These conditions require logistics personnel to possess multidisciplinary skills and the ability to adapt to technological changes. Therefore, the development of human capital has become one of the key factors in improving operational efficiency and the competitiveness of the logistics industry. Organizations with competent human resources are generally better equipped to face market dynamics and changes in global distribution systems (Christopher, 2016).

In the logistics industry, human capital is not limited to technical capabilities but also includes managerial and social skills. Logistics workers are expected to possess communication

abilities, team coordination skills, problem-solving capabilities, and the capacity to make quick and accurate decisions. Goods distribution activities and supply chain management involve multiple stakeholders, making the quality of interaction and collaboration among workers an important factor in maintaining operational effectiveness. Furthermore, the development of logistics digitalization has increased the demand for technological competencies, such as mastery of warehouse management systems (WMS), enterprise resource planning (ERP), and digital-based logistics data analysis. Consequently, the development of human capital in logistics must be carried out continuously through education and job training relevant to the needs of modern industries (Bowersox et al., 2013).

Strengthening human capital in the logistics sector is also closely related to organizational productivity and sustainability. Research indicates that companies investing in human resource development tend to achieve higher levels of operational efficiency compared to organizations that pay less attention to workforce quality. Employee competencies influence an organization's ability to manage goods distribution, reduce operational errors, improve customer service, and respond more rapidly to market changes. In the context of global competition, the quality of human resources has become one of the determining factors of competitive advantage for logistics companies. Therefore, human capital development is regarded as a long-term investment capable of enhancing business sustainability and industrial competitiveness (Hitt et al., 2001).

From an employment perspective, the concept of human capital is also related to equal opportunities in workforce competency development. All workers, including women, should have equal access to education, training, promotion opportunities, and career advancement. However, in practice, women still frequently face structural barriers in developing their professional capacities, particularly in male-dominated sectors such as logistics and transportation. Gender stereotypes often result in women being perceived as less suitable for operational work or strategic positions within supply chains. Such conditions may hinder the optimization of women's human capital potential within the logistics industry. Therefore, organizations need to establish more inclusive and gender-responsive human resource development policies so that all workers can develop optimally (World Bank, 2020).

In addition to education and training factors, the work environment also influences the development of human capital within the logistics industry. Work environments that support learning, collaboration, and innovation encourage employees to enhance their competencies and productivity. Conversely, discriminatory and non-inclusive work environments may hinder workforce capacity development, particularly for groups vulnerable to marginalization. Therefore, logistics companies need to build organizational cultures that support diversity, workforce empowerment, and continuous competency development. Such an approach not only improves the quality of human resources but also strengthens organizational capabilities in responding to the increasingly dynamic changes within the global logistics industry (Robbins & Judge, 2019).

Within the context of this study, the concept of human capital is used to understand the importance of the quality of women's human resources in the logistics industry in Central Java. Women possess professional competencies and capabilities that can significantly contribute to the development of the logistics sector. However, gender inequality and workplace discrimination remain barriers to optimizing women's capacities within this sector. By applying the human capital perspective, this study seeks to analyze how competency development, training access, and women's career opportunities in the logistics industry are influenced by organizational structures and workplace culture. Therefore, strengthening women's human capital has become an essential part of creating a more inclusive, productive, and sustainable logistics system.

3. METHOD

This study employed a qualitative approach aimed at gaining an in-depth understanding of the phenomenon of gender inequality in logistics industry employment in Central Java. The qualitative approach was selected because the study focused on exploring the experiences, perceptions, and social dynamics encountered by women within the logistics work environment. Qualitative methods enable researchers to obtain a more comprehensive understanding of social realities, employment relations, and forms of discrimination and challenges that cannot be adequately explained through quantitative measures. In addition, this approach is relevant for identifying the social, cultural, and organizational factors influencing women's participation in the logistics industry. Qualitative research also positions the researcher as the primary instrument in

the process of data collection and interpretation, thereby enabling the production of contextual analyses of the phenomena under investigation (Creswell & Creswell, 2018).

The research design applied in this study was an empirical study using a descriptive qualitative approach. The research was conducted in several companies and logistics industry activities in the Central Java region involving female workers in administration, warehousing, distribution, and logistics operations. The selection of research locations was carried out purposively by considering the existence of developing logistics activities and women's involvement within company work systems. Research informants were selected using a purposive sampling technique, namely by choosing individuals considered to possess experience and understanding related to gender inequality issues in the logistics industry. The informants consisted of female workers, company managers, human resource staff, and parties involved in logistics workforce management. This technique was employed to obtain relevant and in-depth data regarding women's work experiences and employment dynamics within the logistics sector (Sugiyono, 2022).

Data collection was conducted through in-depth interviews, observation, and documentation. In-depth interviews were utilized to explore informants' experiences related to employment access, division of labor, career opportunities, workplace discrimination, and work environments within the logistics industry. The interview process was conducted in a semi-structured manner to provide researchers with guiding questions while still allowing informants to explain their experiences and perspectives more broadly. In addition to interviews, observations were carried out to understand workplace conditions, interactions among employees, and organizational culture within logistics activities. Documentation was used as supporting data through the collection of company documents, employment reports, organizational policies, and statistical data relevant to the study. The combination of these three techniques was implemented to enhance the depth and validity of the research data (Miles, Huberman, & Saldaña, 2014).

Data analysis in this study was conducted interactively through several stages, namely data reduction, data presentation, and conclusion drawing. The data reduction stage involved selecting, categorizing, and simplifying data obtained from interviews, observations, and documentation based on the research themes. Subsequently, the data were presented in descriptive

narrative form to facilitate interpretation and the identification of patterns of relationships among phenomena. The final stage involved drawing conclusions by interpreting the meaning of the data in depth to address the research focus concerning gender inequality in the logistics industry. To ensure data validity, this study employed source triangulation and method triangulation techniques by comparing the results of interviews, observations, and documentation. This approach was undertaken to ensure that the research findings possessed stronger credibility and validity in explaining the social phenomena under investigation (Moleong, 2018).

4. RESULTS AND DISCUSSION

4.1. Gender Inequality Occur in Logistics Industry Employment in Central Java

The findings of this study indicate that gender inequality in logistics industry employment in Central Java continues to occur in various forms, including the division of labor, career opportunities, and decision-making processes within organizations. Women are generally assigned to administrative positions, customer service, and document management, while operational roles such as goods delivery, transportation management, and distribution supervision remain dominated by male workers. This condition reflects the existence of gender-based job segregation influenced by stereotypes that logistics work requires physical strength and high mobility, making it more suitable for men. As a result, women have more limited opportunities to participate in the core activities of the logistics industry. These findings indicate that social constructions regarding gender roles continue to influence the division of labor within the modern logistics sector (Oakley, 1972).

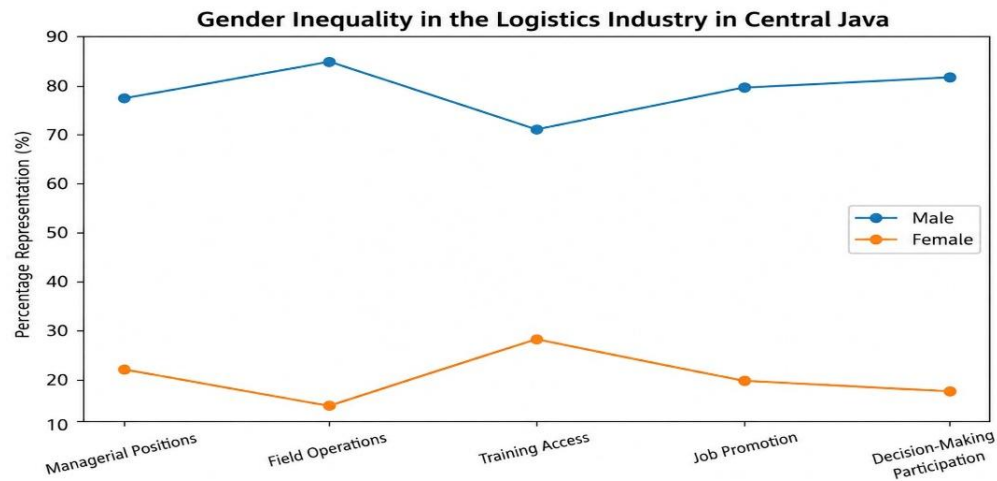
In addition to job segregation, the study also found inequality in access to career development opportunities for female workers. Most female informants stated that opportunities for promotion to supervisory or managerial positions were relatively lower compared to male workers. Despite possessing adequate educational backgrounds and work experience, women are often perceived as less capable of handling operational work pressures and leadership responsibilities in the logistics sector. This situation reflects the existence of structural barriers known as the *glass ceiling*, namely invisible barriers that hinder women from achieving strategic positions within organizations. In practice, male dominance within management structures causes

company decision-making processes to pay less attention to the perspectives and needs of female workers (Cotter et al., 2001).

This study also found that women in the logistics industry face challenges related to dual burdens arising from professional work and domestic responsibilities. Several informants explained that long working hours, shift work systems, and mobility demands within logistics activities often make it difficult for women to maintain a balance between work and family life. These conditions result in some female workers experiencing limitations in participating in training programs, competency development, and promotion opportunities. These findings demonstrate that gender inequality in the logistics industry is influenced not only by organizational factors but also by social constructions that continue to position women as primarily responsible for domestic duties compared to men (United Nations Women, 2020).

In addition to structural and social factors, this study revealed experiences of workplace discrimination encountered by female workers. These forms of discrimination include stereotypes regarding women's work capabilities, lack of trust in assigning operational tasks, and limited representation of women in decision-making positions. In several cases, women felt that they had to prove their competence to a greater extent than male workers in order to obtain equal professional recognition. This situation affects women's work motivation and self-confidence in developing careers within the logistics sector. Therefore, the findings confirm that gender inequality in the logistics industry in Central Java remains a significant challenge requiring more inclusive and gender-responsive employment policies to create fair and equal work environments. As illustrated in the following graph

**Figure 1. Gender Representation in the Logistics Industry in Central Java
by Employment Aspect**



4.2. Factors Influence the Challenges Faced by Women in the Logistics Industry in Central Java

The findings of this study indicate that the challenges faced by women in the logistics industry in Central Java are influenced by a combination of social, cultural, organizational, and job-related factors inherent to the logistics sector itself. One of the primary factors is the persistence of strong gender stereotypes within the workplace. Logistics work is often perceived as a field requiring physical strength, high mobility, and the ability to work under operational pressure, making it more closely associated with male workers. Such perceptions result in women being more frequently assigned to administrative roles rather than operational or decision-making positions. Consequently, women's participation in core logistics activities becomes more limited. These findings demonstrate that social constructions regarding gender-based role division continue to influence employment systems within the regional logistics sector (Oakley, 1972).

In addition to cultural factors, the organizational structure of companies also influences the challenges faced by women in the logistics industry. The study found that most managerial and operational supervisory positions remain dominated by men, causing decision-making processes to pay less attention to the needs of female workers. This condition affects women's limited access

to job promotions, leadership training, and career development opportunities. Several female informants stated that opportunities to obtain strategic positions are often influenced by assumptions that men are more flexible in dealing with the demands of logistics work. This situation indicates the existence of structural barriers in the form of a *glass ceiling* that restrict women from advancing to higher career levels despite possessing adequate competencies (Cotter et al., 2001).

The characteristics of logistics work also represent an important factor influencing women's challenges within this sector. Shift work systems, long working hours, dynamic distribution activities, and demands for high mobility often make it difficult for women to maintain a balance between work and family life. Most informants stated that domestic responsibilities are still largely assigned to women, causing them to experience dual pressures arising from professional work and household obligations. These conditions affect women's ability to participate in training programs, overtime work, and promotion opportunities that require greater time flexibility. These findings indicate that the challenges faced by women in the logistics industry originate not only from organizational environments but are also influenced by patriarchal social and cultural structures within society (United Nations Women, 2020).

In addition to internal organizational factors, limited access to competency development also constitutes a barrier for women in the logistics industry. The study revealed that technical training and operational skill development are more frequently provided to male workers because they are considered more suitable for field activities. As a result, women have fewer opportunities to enhance their professional capacities in logistics operations and supply chain technology. In fact, the development of human capital has become an important factor in improving workforce competitiveness in the modern logistics era. Therefore, the findings emphasize the need for more inclusive organizational policies through equal access to training, gender-responsive labor protection, and the strengthening of workplace cultures that support women's participation in all logistics industry activities.

4.3. The Implications of Gender Inequality for Women's Career Development and Work Environment in the Logistics Industry

The findings of this study indicate that gender inequality in the logistics industry has significant implications for women's career development. One of the main impacts identified is women's limited access to strategic positions and organizational decision-making processes. Most female workers remain concentrated in administrative and supporting roles, while core operational and managerial positions are predominantly occupied by men. This condition results in women having fewer opportunities to gain leadership experience and develop strategic competencies. In the long term, this situation contributes to slower career advancement for women and the low representation of women within management structures in the logistics industry. These findings demonstrate that gender inequality not only affects job distribution but also creates unequal access to career mobility and professional development opportunities (Cotter et al., 2001).

In addition to influencing career development, gender inequality also affects women's psychological conditions and work motivation within organizational environments. The study found that some female workers felt they had to work harder to obtain professional recognition equal to that of male workers. Stereotypes regarding women's abilities in logistics operational work caused several informants to experience low self-confidence and social pressure in the workplace. Such conditions may affect work motivation, job satisfaction, and the sustainability of women's careers within the logistics sector. Work environments still dominated by masculine cultures also make women feel that they receive insufficient organizational support in developing their professional capacities. These findings indicate that gender-based discrimination affects not only structural aspects but also women's subjective experiences in the workplace (Oakley, 2000).

Another implication identified in this study relates to the quality of the work environment and social relationships within organizations. Gender inequality contributes to the formation of less inclusive patterns of workplace interaction, particularly in communication processes, task distribution, and decision-making activities. Several informants explained that women are often not fully involved in certain operational activities because they are perceived as less suitable for the characteristics of logistics work. This condition reinforces the marginalization of women within organizations and hinders the creation of collaborative work environments. Previous studies

have demonstrated that workforce diversity and inclusiveness can enhance creativity, innovation, and organizational effectiveness. Therefore, gender inequality has the potential to reduce the quality of work relationships and overall company productivity (Roberson, 2019).

Within the context of human resource development, gender inequality also affects the optimization of women's human capital in the logistics industry. Limited access to technical training, promotion opportunities, and competency development results in the underutilization of female workers' potential. In fact, women possess professional capabilities that can contribute to improving service quality and organizational efficiency. Therefore, the findings emphasize the importance of implementing more inclusive and gender-responsive employment policies within the logistics industry. Companies need to create work environments that support equal opportunities, labor protection, and women's career development in order to establish fairer, more productive, and sustainable work systems. As illustrated in the following matrix

Table 1. Matrix of Gender-Related Aspects, Findings, and Implications in Human Resource Development in the Logistics Industry

Aspect	Main Findings	Implications
Division of Labor	Women dominate administrative positions	Women's operational participation is limited
Job Promotion	Access to promotion is lower compared to men	Women's career growth is slower
Work Environment	Workplace culture is still masculine	Psychological pressure and stereotypes emerge
Competency Training	Technical training is provided more often to men	Women's human capital development is hindered
Work-Life Balance	Women face a double workload	Career development opportunities decrease

5. RESEARCH NOVELTY

This study offers a significant element of *research novelty* through its focus on gender inequality within the logistics industry at the regional level, particularly in Central Java, a topic that has received relatively limited attention in previous studies in Indonesia. Most prior studies on gender and employment have primarily concentrated on the manufacturing, education, health, or general employment sectors, while research specifically examining women's experiences in the

logistics industry remains limited. In fact, the logistics industry is a strategic sector experiencing rapid growth alongside the expansion of digital trade and the integration of modern supply chains. Therefore, this study provides a new contribution by presenting an empirical analysis of the dynamics of women's employment within the logistics sector, which has traditionally been dominated by masculine work cultures.

The novelty of this research is also reflected in its analytical approach, which integrates the perspectives of *gender equality*, *decent work*, *labour inclusion*, *workplace discrimination*, and *human capital* in explaining the challenges faced by women in the logistics industry. Previous studies generally discussed gender inequality only in terms of labor force participation or employment opportunity gaps. In contrast, this study not only identifies the forms of gender inequality but also analyzes their implications for career development, workplace quality, and the optimization of women's human resources within modern logistics systems. The integration of these theoretical perspectives provides a more comprehensive approach to understanding the relationship between social structures, organizational culture, and the employment dynamics experienced by women in the logistics sector.

Furthermore, this study provides an empirical contribution through the exploration of the direct experiences of female workers in the logistics industry in Central Java using a qualitative approach. This approach enables the research to examine social realities, structural barriers, and women's subjective experiences in greater depth compared to quantitative approaches commonly used in previous employment studies. Thus, the study not only produces findings regarding the forms of gender inequality but also offers contextual understanding of the social, cultural, and organizational factors influencing women's participation in the regional logistics industry.

From a practical perspective, the novelty of this research lies in its effort to provide more gender-inclusive employment policy recommendations for the logistics sector. This study emphasizes the importance of strengthening women's career opportunities, labor protection, competency development, and the creation of more gender-responsive work environments within the logistics industry. Accordingly, the findings are expected to serve not only as an academic contribution but also as a strategic reference for governments, logistics companies, and other

stakeholders in supporting the development of a fairer, more inclusive, and sustainable employment system in Indonesia.

6. CONCLUSION

This study demonstrates that gender inequality in logistics industry employment in Central Java continues to exist in various forms, including the division of labor, career opportunities, and organizational work environments. Women tend to be placed in administrative and supporting roles, while operational and decision-making positions remain dominated by men. This condition indicates that gender stereotypes and masculine work cultures continue to influence employment structures within the logistics industry. As a result, women experience limitations in obtaining equal access to competency development, promotion opportunities, and involvement in strategic company activities.

The findings also reveal that the challenges faced by women in the logistics industry are influenced by social, cultural, and organizational factors. Social constructions that continue to position women in domestic roles cause female workers to experience dual burdens arising from family responsibilities and professional work. In addition, logistics work systems requiring high mobility, long working hours, and time flexibility also become obstacles for women in developing their careers. On the other hand, limited access to technical training and leadership development prevents the human capital potential of women in the logistics industry from being fully optimized.

This study further found that gender inequality affects the quality of work environments and women's career development. Less inclusive workplace environments cause women to experience stereotypes regarding their professional capabilities, limited involvement in decision-making, and restricted promotion opportunities. Such conditions not only affect women's motivation and career sustainability but also have the potential to reduce overall organizational productivity and effectiveness. In fact, more inclusive participation of women in the logistics industry can contribute to improving innovation, human resource quality, and organizational sustainability.

Based on these findings, this study emphasizes the importance of implementing more gender-responsive employment policies within the logistics industry. Companies need to create

inclusive work environments by providing equal career opportunities, fair access to training, protection against workplace discrimination, and support for work-life balance. In addition, the government and related stakeholders need to strengthen regulations and empowerment programs for female workers in order to establish a logistics employment system that is fairer, more sustainable, and supportive of the principles of *gender equality* and *decent work* in Indonesia.

7. RECOMMENDATIONS

Based on the findings regarding gender inequality in logistics industry employment in Central Java, several recommendations can be proposed for companies, government institutions, and related stakeholders in order to create a more inclusive and gender-responsive employment system.

1. Logistics companies need to strengthen gender equality policies in recruitment processes, job promotions, and workforce career development. Employment opportunities and professional development should be provided based on competence and performance without being influenced by gender stereotypes. Companies also need to increase women's representation in strategic and decision-making positions in order to create more inclusive work environments capable of accommodating women's perspectives within organizations.
2. Companies should provide equal training and competency development programs for female workers, particularly in logistics operations, supply chain technology, and leadership. Strengthening women's human capital is important for improving professional capacity and expanding women's participation in the core activities of the logistics industry. In addition, *gender awareness* training for all employees and company management should be implemented to reduce stereotypes and discrimination within the workplace.
3. Logistics companies are encouraged to create more women-friendly work environments through flexible work policies, protection against harassment and workplace discrimination, and support for *work-life balance*. The provision of supporting facilities such as maternity leave, lactation rooms, and more adaptive work systems can help improve the comfort and productivity of female workers within the logistics industry.

4. Local governments and labor institutions need to strengthen regulations and supervision regarding the implementation of the principles of *gender equality* and *decent work* within the logistics sector. Governments can also promote women's empowerment programs through logistics skills training, professional certification, and supply chain-based entrepreneurship development. Such policy support is important for expanding women's participation in the logistics sector, which has long been dominated by men.
5. For future researchers, this study may be further developed using quantitative or *mixed methods* approaches to obtain a broader understanding of the relationship between gender inequality, work productivity, and organizational performance within the logistics industry. Further studies may also be conducted in different regions or logistics sectors to gain a more comprehensive understanding of the dynamics of women's employment in Indonesia. Thus, the development of research on gender and logistics is expected to provide both academic and practical contributions in supporting the development of a more inclusive and sustainable employment system.

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