Navigating Post-Covid Economic Recovery: Women's Role in Indonesian Development

Muhammad Nasor¹, Anas Malik², Ani Nurul Imtiana³

¹Universitas Islam Negeri Raden Intan Lampung
Lampung, Indonesia
e-mail: nasor@radenintan.ac.id

²Universitas Islam Negeri Raden Intan Lampung
Lampung, Indonesia
e-mail: anasmalik@radenintan.ac.id

³Institut Agama Islam Negeri Metro Lampung
Lampung, Indonesia
e-mail: aninurulimtiana@metrouniv.ac.id

Abstract—The aftermath of Covid-19 has deeply affected economic landscapes worldwide, and the role of women within this paradigm is crucial for understanding human development. This study delves into the impact on women's advancement by examining their treatment in education, health, and economic sectors as indicators of development achievements. The UNDP has developed measures like IPG and IDG, assessing gender development components across various dimensions. Conducted as qualitative research, this study draws data from primary sources—observations, interviews, and documentation—from three Indonesian provinces: West Sumatra, Lampung, and East Java. Results indicate a mixed scenario post-Covid-19. Despite the pandemic's impact, West Sumatra saw continuous growth in Gender Empowerment Index and Gender Development Index (GDI) from 2020 to 2022. However, the IDG remained below the national level, while the IPG surpassed national standards. Lampung Province witnessed an increase in IPG from 2020 to 2022. Conversely, East Java experienced a decline in IDG in 2021, followed by a subsequent increase in 2022. IPG in East Java displayed relative growth during the pandemic. Across these provinces, the Gender Empowerment Index lagged behind national growth, while IPG for West Sumatra and East Java exceeded it, with Lampung province falling below. These findings underscore the intricate dynamics shaping post-Covid-19 gender roles in economic recovery in Indonesia's various regions.

Keywords- Post-Covid Economic Recovery; Indonesian Women's Role; Gender Development Index (GDI); Gender Empowerment Index.

I. INTRODUCTION

The COVID-19 global outbreak has exerted a profound influence across multiple sectors, prompting countries worldwide, including Indonesia, to ready themselves for its impact. In Indonesia, this pandemic has not merely disrupted the public health system but also deeply affected healthcare services and the economy [1], [2]. Beyond its health ramifications, COVID-19 has cast social and economic repercussions on society. The correlation between socio-economic disparities and the rate of COVID-19-related fatalities became notably evident during the initial wave in 2020, with a more pronounced effect observed among women. The surge in COVID-19 instances among vulnerable populations, particularly noticeable in subsequent waves, arose from limited testing accessibility for men and a higher prevalence of COVID-19 cases in women [3], [4].

Multiple studies have indicated that, overall, women are more prone to experiencing anxiety and post-traumatic stress symptoms than men during the COVID-19 pandemic [5]. Individuals facing socio-economic disadvantages are more

vulnerable due to the accumulation of social conditions that exacerbate the pandemic's impact on women within the community. Indeed, instances of COVID-19 have been more prevalent in environments marked by socio-economic deprivation, a trend observed across various nations [6], [7]. Exogenous shocks, particularly those exacerbated by the disproportionate impact of COVID-19, have severely affected socioeconomically vulnerable communities. This burden is especially heightened in community-oriented societies like Indonesia, where the repercussions of disruptions are often felt throughout entire households [8].

The COVID-19 pandemic and the enforcement of restrictive policies have prompted a reorganization of livelihoods and life in rural areas, revitalizing the centrality of households. This crisis has disrupted markets and impacted material well-being, leading to a shift in women's economic engagement. With men increasingly dominating production and marketing, concerns about inequality have surfaced. Women face inflation-related pressures, challenging their access to resources, while assuming additional responsibilities in household upkeep and provision.

These burdens disproportionately affect women in households [9]

Indonesia, being a sizable country, recorded a male population of 136.66 million, accounting for approximately 50.58% of the total population in 2020. Consequently, the female population stood at 49.42%, totaling 133.54 million individuals. The ratio of men to women has shown an upward trend, documented by the Central Statistics Agency (BPS), increasing from 101 men for every 100 women in 2000 to 101 men for every 99 women in 2020. In contemporary times, women are expected to embody strength, empowerment, independence, intelligence, and creativity. Consequently, women often take on dual or multiple roles simultaneously to contribute to developmental endeavors.

The economic challenges faced by women in Indonesia are intrinsically tied to poverty. Women in business fall into four main groups: those unable to engage due to poverty, those yet to attempt it, women in micro-enterprises, and those in small to medium enterprises. The contribution of women, especially in micro-businesses, significantly impacts the national economy, constituting 60% of over 30 million micro, small, and medium entrepreneurs. Despite this, female entrepreneurs encounter obstacles, particularly in marketing, access to capital, human resources, technology, and limited control over production assets. To support these entrepreneurs, there is a critical need for close institutional assistance that offers rapid and accessible business development services tailored to women's needs.

Women's limited access to formal business opportunities is evident in their predominant involvement in the informal sector, often engaging in jobs devoid of advanced equipment and technology. Such roles frequently lack adequate social and legal protections, welfare guarantees, and entail unhealthy working conditions, resulting in lower income levels. The International Labour Organization (ILO) noted a wage disparity between men and women in Indonesia, revealing a 19% difference in earnings in 2012. On average, women earned 81% of what men earned, despite possessing similar educational levels and experience.

Statistics from the Gender-Based Socio-Economics Indicators (KPP and PA, 2010) indicated that in 2009, women accounted for 28% of the trade sector and 14% in the industrial sector. The agricultural sector boasted the largest female workforce at 39%, yet a significant portion worked without wages due to family-owned businesses, with around 80% lacking agricultural counseling. Access to credit for women entrepreneurs remained notably limited compared to men, with only 11% of women having access compared to 14% of men. Furthermore, within the small industry sector, 95% of women were junior high school graduates, representing 40% of the workforce. These disparities illustrate the challenges women encounter in securing equal opportunities, facing barriers in access to formal employment, fair wages, and credit facilities.

Economic recovery aims to facilitate a region-focused approach, revitalizing both rural and urban areas by boosting demand and supply in affected markets. In the short term, it strives to diminish reliance on external aid by generating temporary employment and augmenting incomes. Long-term objectives involve establishing local conditions that stimulate economic resurgence and job creation. In challenging circumstances such as disasters or conflicts, a critical hurdle in economic recovery is the limited purchasing power of local communities, hindering their access to essential goods and services. Moreover, poor accessibility to external, more lucrative markets compounds the situation [10].

The Gender Development Index (IPG), introduced by the United Nations Development Program in 1995, gauges gender-based inequalities in achieving human development. By assessing men's and women's Human Development Index ratios, the IPG reveals development achievements across genders. Gender-based development assessments scrutinize treatment disparities in education, health, and economics. To gauge these achievements, the UNDP established a GDI measurement method, evaluating gender development components based on their inherent dimensions.

Initially, the Gender Development Index evaluated disparities in Human Development Index components based on gender. The IPG figures were intricately linked to the Human Development Index (HDI). In 2014, the UNDP devised a new approach to compute GDI as a distinct metric, discerning gender-oriented human development accomplishments.

II. RESEARCH METHODS

In the realm of qualitative research, this study embarked on an exploration of post-pandemic economic recovery and gender dynamics in Indonesia, adopting a methodological approach that encompassed multiple provinces. This qualitative inquiry aimed at comprehensively understanding the nuanced effects on women's roles within the economic milieu, utilizing various methodologies to gather in-depth insights.

Grounded in a qualitative paradigm, the research relied heavily on primary data sources, namely direct observations, interviews, and documented materials. These sources were pivotal in capturing a comprehensive understanding of the subject matter. Direct observations provided real-time perspectives, while interviews offered a human-centric dimension by collecting diverse experiences and voices. The inclusion of documentation enriched the study by offering historical context and structured information.

The study spanned three distinct provinces—West Sumatra, Lampung, and East Java—each contributing unique socio-economic landscapes, cultural intricacies, and gender dynamics to the overarching research. For instance, West Sumatra's matrilineal society provided a lens into women's economic roles within this cultural framework. Lampung's agricultural

prominence shed light on women's participation and challenges in this sector, whereas East Java's industrial landscape offered insights into women's engagement in urban economic settings.

Citations and references were crucial throughout this research journey. For instance, Badan Pusat Statistik (BPS) [11] provided essential statistical data for Indonesia's demographic analysis, while international development agencies like the United Nations Development Programme (UNDP) offered conceptual frameworks for gender-based Human Development Index (HDI) analysis.

By incorporating diverse primary data sources and focusing on these specific regions, this research unveiled a comprehensive narrative of the evolving post-pandemic economic landscape, particularly in terms of women's roles and challenges. These empirical insights, supported by meticulous data collection methods and informed by credible sources, provided a robust foundation for understanding the intricate interplay between economic recovery, gender dynamics, and regional variations in Indonesia.

III. RESULTS AND DISCUSSION

A. Post Covid 19 Economic Growth of East Java, West Sumatra and Lampung

The economic landscape of East Java Province emerges as a substantial contributor, ranking as the second-largest economy in Indonesia. Its growth trajectory aligns closely with the national and provincial levels, particularly outshining other significant regions in Java. Notably, East Java relies on three primary sectors, namely the processing industry (constituting 29.03% of the Gross Regional Domestic Product or GRDP), trade (18.18%), and agriculture (12.80%) (BPS East Java Province, 2019). Geographically, East Java stands out for its developmental potential owing to its strategic location and a diverse array of tourist attractions, ranging from mountains and lakes to caves and numerous waterfalls spread across its various districts and cities. Often hailed as the industrial and financial hub of Eastern Indonesia, East Java plays a pivotal role in the regional economy.

However, recent data from the Central Statistics Agency indicates that East Java's economic growth has taken a negative turn, experiencing a contraction. This downward trajectory raises concerns about the economic resilience of the province in the post-Covid-19 era. The contraction underscores the challenges faced by East Java in navigating the economic fallout of the pandemic, signaling a need for strategic interventions and recovery measures to restore positive growth trends. The interplay between local economic characteristics, geographical advantages, and the impact of external factors such as the pandemic requires careful consideration for effective policy responses and sustainable development in East Java Province.

East Java Economic Growth 2019-

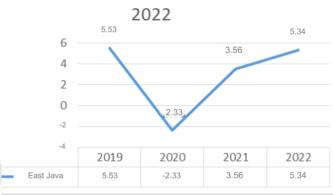


Figure 1. East Java Economic Growth

Source: BPS East Java Province.

Based on the aforementioned data, the economy of East Java Province in 2019 stood at a growth rate of 5.53%. However, due to the implementation of social restrictions amid the Covid-19 pandemic, this growth rate nosedived to -2.33%. Notably, the province has showcased signs of economic recuperation post-pandemic. Nevertheless, the repercussions of the pandemic have been palpable, evident in the surge of affected workers in the East Java Provincial government, tallying up to 41,205 individuals. Among these, 272 companies unilaterally dismissed approximately 7,097 employees, predominantly from sectors like manufacturing, wood processing, trade, and hospitality. Additionally, 607 companies laid off about 34,108 workers, with major layoffs occurring in sectors such as hotels, restaurants, footwear, textiles, and manufacturing.

The year 2020 marked a historic downturn for the global economy due to the Covid-19 pandemic, causing a negative growth trajectory or recession in numerous countries, not only in developing or impoverished nations but also affecting some developed economics significantly. The IMF report for 2020 indicated a global economic contraction of 3.3%. Countries like the United States, Germany, England, and Japan encountered negative growth, whereas China (2.3%), Vietnam (2.9%), and Taiwan (2.98%) were among the few that sustained positive growth during this period.

In Indonesia, the pandemic triggered economic declines across most regions, except for West Sumatra. West Sumatra faced a contraction of 1.60% in its economy during the pandemic. However, certain sectors within West Sumatra exhibited positive growth, notably in information technology (9.76%), health services (8.83%), education services (5.03%), and agricultural, forestry, and fisheries (1.19%). These sectors benefitted from supportive policies such as remote work and education, providing a cushion against the economic downturn caused by the pandemic [10].

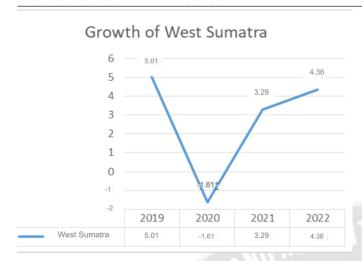


Figure 2. West Sumatra Economic Growth

Source: BPS 2023

The economic growth of provinces serves as a crucial entry point to Sumatra Island's economic landscape, driven by various factors such as domestic demand for household consumption, gross fixed capital formation, and government expenditure. In Lampung Province, recent trade records have depicted a trend towards a surplus in transactions, notably in the past few years. Specifically, in 2020, the value of exports surpassed that of imports, indicating a favorable trade balance [11].

As an integral part of Indonesia's development landscape, Lampung Province stands influenced by global climate and economic developments. Consequently, there exists a pressing need for comprehensive and accessible economic development data and information specific to this region. This data plays a pivotal role in closely monitoring the outcomes of economic development initiatives and conducting ongoing evaluations of the developmental process.

This emphasis on data availability underscores the significance of informed decision-making and policy evaluation within the economic realm of Lampung Province. By having access to accurate and updated economic data, stakeholders can better comprehend the province's economic trajectory, identify areas of growth, and assess the effectiveness of development strategies. Ultimately, this information serves as a cornerstone for informed planning, strategic interventions, and sustainable economic development within Lampung Province.

Lampung Province Economic Growth

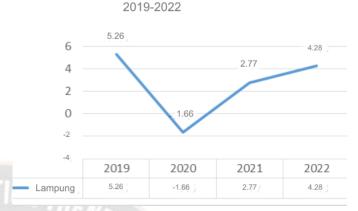


Figure 3. Lampung Economic Growth

Source: BPS

Figure 4. In the third quarter of 2020, Lampung Province's economy displayed signs of recovery despite contracting by -2.41% year-on-year (yoy). This contraction, while an improvement from the previous quarter's -3.57% yoy, notably fell short compared to the robust growth recorded in the same period of 2019 at 5.16% yoy. Although the economic downturn in Lampung was deeper than Sumatra's (-2.22% yoy), it showcased a relatively better performance compared to the national contraction (-3.49% yoy). In terms of regional ranking within Sumatra, Lampung held the sixth position out of ten provinces.

Figure 5. The economic upturn in Lampung during the third quarter of 2020 was driven by advancements across all expenditure components, despite their contracted state. Notably, household consumption, constituting the largest share of Lampung's economy at 59.09%, saw improvements. This increase was partially influenced by heightened public demand during the gradual adaptation to new habits, the dispersion of 13th-month salaries, and the Eid al-Adha holiday. Both government expenditure and investment also showcased signs of recovery compared to the previous quarter.

Furthermore, enhancements were evident in the export components, particularly attributed to increased exports of crude palm oil (CPO), sugar, and other food-related industrial products. However, despite improvements, import components remained contracted, primarily due to decreased imports of consumer goods. These trends collectively depict a nuanced picture of Lampung's economic landscape, showcasing both areas of progress and continued challenges within various expenditure and trade sectors during the third quarter of 2020.

B. The Role of Women's Empowerment in Economic Development

Gender equality persists as a long-standing and resolvable issue [12]. According to UN Women (2016), this challenge transcends geographical boundaries, affecting nearly every corner of the globe, including the Asia Pacific region [13]. Despite robust economic growth, progress in women's economic participation across the Asia Pacific has been sluggish over the past two decades. UN Women [13] (2016) further asserts that at the current pace, achieving gender parity in the Asia-Pacific region would necessitate 118 years. Gender inequality has entrenched itself in the fabric of the region, compounded by inadequate funding for government institutions tasked with addressing women's equality issues.

A primary obstacle lies in insufficient investment, significantly hampering efforts to address gender disparities. Consequently, governments and stakeholders must elevate their attention and commitments to combat this issue. Policies issued by governments need to prioritize tackling gender inequality to effectively foster gender empowerment and development [13].

Women entrepreneurs engage across all facets of entrepreneurship, taking risks and identifying opportunities to leverage their strengths to bolster business development. Homebased businesses, prevalent among women entrepreneurs, span micro, small, and medium enterprises (MSMEs), operating within both formal and informal sectors.

The implementation of strategies addressing gender equality is measured through the Composite Gender Empowerment Index (IDP), gauging women's involvement in political, decision-making, and economic spheres. The Gender Empowerment Index (IDG) portrays gender roles in politics, economics, and decision-making processes, providing a comprehensive view of gender dynamics in various societal realm.

TABLE I. TABLE TYPE STYLES

Province /	Index (IDG)			Gender Development Index (IPG)		
Regency / City	2022	2021	2020	2022	2021	2020
WEST SUMATRA	65.48	65.12	58.28	94.72	94.34	94.17
LAMPUNG	68.24	67.96	69.06	90.58	90.37	90.33
EAST JAVA	74.42	72.36	73.03	92.08	91.67	91.07
INDONESIA	76.59	76.26	75.57	91.63	91.27	91.06

The Gender Development Index (GDI) and Gender Empowerment Index (GEI) in West Sumatra, from 2020 to 2022, have demonstrated an upward trend despite the lingering impact of the Covid-19 pandemic. However, the Gender Empowerment Index in West Sumatra remains below the

national level, while the Gender Empowerment Index for Lampung Province experienced an increase from 2020 to 2022. Conversely, the IDG (Index Development Gender) in East Java Province declined in 2021 to 72.36 but exhibited a recovery in 2022 to 14.42, while the IPG (Gender Empowerment Index) in East Java province witnessed a relatively more significant increase during the Covid-19 period. In summary, when considering these three provinces (West Sumatra, Lampung, and East Java), the Gender Empowerment Index lags behind the national growth rate. However, the IPG for West Sumatra and East Java surpasses the national growth rate, while only Lampung province falls below the national growth rate. These observations indicate variations in gender empowerment and development indices across these regions, highlighting the disparities and progress in gender-related metrics compared to the national benchmarks.

C. Women's Contribution to Income

The informal sector plays a crucial role in the economies of developing nations, serving as a significant source of income and employment. Entrepreneurs often opt for informal businesses over formal ones due to various influencing factors. In many cases, the preference for the informal sector stems from structural inequalities based on gender, income levels, education, social status, ethnicity, or religious factors. In Indonesia, gender bias often drives women to seek opportunities for decent income in the informal sector [14] (Sakai, 2022).

The Gender Empowerment Index (IDG) considers economic factors as pivotal indicators in measuring gender empowerment and development within a country. The economic dimension in the IDG specifically examines women's income contributions, reflecting their role and financial involvement. Women's income levels also shed light on their position within the labor market, indicating the extent of their inclusion or exclusion from the workforce. Additionally, women's income signifies their economic independence, influencing more equitable relationships and their capacity for autonomous control.

The income donated by women showcases the proportion of their contribution compared to men in the non-agricultural sector at a national level. This income is influenced by factors such as the proportion of the workforce and the wages received. Unfortunately, the lower representation of women in the workforce significantly impacts their income, often resulting in lower earnings compared to men (Ministry of Finance, 2022). This disparity in workforce participation and remuneration further contributes to the economic imbalances experienced by women, emphasizing the need to address gender gaps in employment and income for more equitable economic landscapes.

TABLE II. TABLE TYPE STYLES

Province	Year	Revenue Contribution
West Sumatra	2020	37.57
	2021	37.43
	2022	37.58
Lampung	2020	29.52
	2021	29.39
	2022	29.26
East Java	2020	35.81
	2021	35.72
	2022	35.81

Source: BPS

Based on the provided data, West Sumatra stands out with a notably high proportion of women's workforce participation significantly influencing their income contributions. In 2020, women's income donations in West Sumatra were recorded at 37.57. This figure experienced a slight decrease of -0.14 in 2021 but rebounded with an increase of 0.15 in 2022, aligning with the region's economic recovery. Research by Elsa Yunara et al. [15] highlights a significant rise in the percentage of women's income donations in West Sumatra from 37.40% in 2017 to 37.57% in 2020, indicating an improving well-being trend among women in the province. This suggests progressive gender empowerment in Indonesia, particularly in West Sumatra. The Women's and Children's Empowerment Service in West Sumatra has concentrated its efforts on various empowerment initiatives, such as the "Embodying 100 Thousand Millennial Entrepreneurs and Women Entrepreneurs" program, aimed at fostering creativity in the economy [16].

Conversely, Lampung Province witnessed a decline in women's income donations. In 2020, it was recorded at 29.52, dropping to 29.39 in 2021, and further decreasing by -0.13 in 2022. This decline is attributed to the adverse effects of the Covid-19 pandemic, leading to a negative GDP of -7.43 in Lampung and directly impacting women heading affected families.

In East Java Province, women's income donations stood at 35.81 in 2020, experiencing a decrease of -0.9 in 2021. However, there was a positive turnaround in 2022, with women's income donations increasing by 0.9. This upward trend signifies the potential for East Java's post-Covid-19 economic recovery. The East Java Women's Empowerment Office (DP3AK) has implemented various initiatives for women, including providing resources to female heads of households through online motorcycle taxis, offering training in dressmaking, cake baking, and self-defense provisions like judo [16].

D. Women's Participation in Parliament

In recent years, women's involvement in Indonesian politics has shown signs of improvement, although significant disparities persist due to the prevalent dominance of men. Continuous efforts are underway to boost women's participation in politics, driven by the government's determination to minimize gender disparities. Enhanced representation of women is actively pursued through regulations mandating political parties' engagement in elections to nominate at least 30% female candidates for positions in the People's Representative Council (DPR), Regional Representative Council (DPD), and Regional Representative Councils (DPRD). These regulations were initially stipulated in Law Number 12 of 2003 on Elections, subsequently refined in Law Number 7 of 2017 concerning elections. Furthermore, sustained encouragement for women's active involvement in legislative bodies is facilitated through the implementation of a 'zipper system.' This system mandates that for every three parliamentary candidates, at least one should be a woman from each political party. To further propel women's role in political spheres, the government has imposed prerequisites on political parties, mandating that at least 30% of their central party management must comprise women.

However, despite these efforts, women's representation in the Indonesian Parliament remains significantly low. According to World Bank data in 2019, Indonesia ranked 7th among Southeast Asian countries concerning female representation in parliament. The limited presence of women in parliament significantly impacts policies related to gender equality and their capacity to effectively address the major issues faced by women. This disparity highlights the ongoing challenges in achieving gender balance and equitable representation within political structures, influencing the ability to address gender-specific concerns effectively.

TABLE III. INVOLVEMENT WOMEN IN PARLIAMENT: WEST SUMATRA, EAST JAVA AND LAMPUNG

Province	Year	Involvement Women's Parliament	
West Sumatra	2020	4.62	
	2021	10.77	
	2022	10.77	
Lampung	2020	20	
	2021	18.82	
	2022	18.82	
East Java	2020	18.33	
	2021	17.50	
	2022	19.17	
DDC 1			

Source: BPS data

Of the three provinces examined in this study, West Sumatra exhibited the lowest participation of Indonesian women in Parliament. In 2020, the participation rate was 4.62, which increased slightly in 2021 and 2022 to 10.77. However, this increment remains significantly below the national level, which stands at 20. According to data sourced from the West Sumatra Province DPRD Secretariat by December 2022, the representation of women in the West Sumatra Province Legislature comprised 7 members. Initially, there were 4 female members from the 2019-2024 election results, with an additional 3 members in 2020, bringing the total to 7 by 2022.

Contrastingly, women's involvement in parliament in Lampung province was promising in 2020, equivalent to the national average of 20. However, in 2021, it experienced a decline of 1.18 and remained stagnant in 2022. As per BPS data in 2022, the number of female board members totaled 16 across Regencies/Cities, Provincial, and Central boards.

In East Java Province, women's participation in parliament was 18.33 in 2020, but it decreased by -0.83 in 2021. However, there was a subsequent increase of 1.67 in 2022. In 2021, the East Java regional council included 21 female representatives out of 120 council members in the province.

E. Women as Professionals

The leadership participation of women in Indonesia's government sector continues to exhibit significant inequality. Data from the State Civil Service Agency indicates a notable increase in the proportion of women serving as State Civil Apparatus (ASN) in recent years. In fact, since 2017, the proportion of women has surpassed that of men, reaching 52.22% in 2020. This trend suggests substantial opportunities for female ASN members to hold positions within government institutions, offering the potential to represent women's voices at the ASN level [17].

However, in the private or corporate sector, disparities between women and men persist, both globally and in Indonesia. According to the WEF Global Gender Gap Index, only about 27% of managerial positions worldwide are occupied by women, and the proportion of women in senior managerial roles stands at 41%. In Indonesia, inequality in managerial roles is still prevalent. The 2020 WEF Global Gender Gap Index highlights a significant decline in the proportion of women holding senior managerial positions, dropping from almost half in 2019 to 29.8% in 2020. This indicates a considerable decrease in the representation of women in senior managerial roles within Indonesia.

TABLE IV. WOMEN PROFESSIONALS: WEST SUMATRA, EAST JAVA AND LAMPUNG

Province	Year	Women as Professionals
West Sumatra	2020	58.97
	2021	59.09
	2022	60.1
Lampung	2020	53.05
	2021	53.06
	2022	53.06
East Java	2020	49.65
HEND	2021	50.73
	2022	49.41

Source: BPS data

In 2020, the representation of women as energy professionals in West Sumatra was notably high, reaching 58.97%. This figure increased slightly in 2021 to 59.09% and is expected to experience a further increase to 60.1% in 2022. This percentage exceeds the national average, which stands at 49%. Conversely, in Lampung, the percentage of women employed as energy professionals was 53.05% in 2020, showing a marginal increase to 53.06% in 2021 and maintaining the same level in 2022.

However, in East Java, the percentage of women working as energy professionals was 49.65% in 2020, which rose to 50.73% in 2021, indicating an increase. Nevertheless, in 2022, this figure is expected to decrease significantly by -1.32%, reaching 49.41%. This decrease in the representation of women as energy professionals in East Java contrasts with the upward trends seen in West Sumatra and the stability observed in Lampung.

CONCLUSION

The analysis of the Gender Development Index (GDI) and Gender Empowerment Index (GEI) across West Sumatra, Lampung, and East Java from 2020 to 2022 reveals a consistent growth trend despite the impact of the Covid-19 pandemic. While West Sumatra's GEI remains below the national standard, its IPG surpasses the national level, indicating strides in gender development. Lampung Province experienced an increase in IPG during the same period, whereas East Java saw a fluctuation in IDG from a decrease in 2021 to an increase in 2022. East Java's IPG showed a relative increase during the pandemic. Observing these provinces' Gender Empowerment Index against national growth shows that West Sumatra and East Java's IPG levels are above the national trend, while Lampung lags behind. These insights underscore the varying degrees of gender development and empowerment across these regions.

Further exploration into regional economic growth's influence on gender inequality, using GDP per capita as a dependent variable alongside independent variables, can deepen

our understanding of societal welfare disparities. This study can serve as a foundation for in-depth case studies focusing on specific regions prioritizing gender inequality. Such research can validate and refine the findings, enabling a more localized gender analysis and targeted policy recommendations. To advocate for gender equality enhancement, disseminating these research findings to relevant Ministries, Institutions, and regional stakeholders will serve as vital advocacy tools, fostering an inclusive dialogue and encouraging proactive policy measures.

REFERENCES

- Malahayati M, Masui T, Anggraeni L. An assessment of the short-term impact of COVID-19 on economics and the environment: A case study of Indonesia. EconomiA. 2021 Dec 1;22(3):291-313.
- [2] Al Fikri, F. F., Nugroho, R. A., & Sudarmo (2023). Sustainable Tourism Management in Post Pandemic: LessonLearned from Ponggok Village Tourism Community Governance. Pakistan Journal of Life and Social Sciences (PJLSS), 21(1). https://doi.org/10.57239/pjlss-2023-21.1.0028
- [3] Mongin D, Cullati S, Kelly-Irving M, Rosselet M, Regard S, Courvoisier DS. Neighbourhood socio-economic vulnerability and access to COVID-19 healthcare during the first two waves of the pandemic in Geneva, Switzerland: A gender perspective. EClinicalMedicine. 2022 Apr 1;46.
- [4] Talabi, F. O., Fajoye, A. J., Adelabu, O. T., Sanusi, B. O., Okunade, oshua K., Aiyesimoju, A. B., Bello, S. A., Olley, W. O., & Zannu, P. N. (2023). COVID-19 Sensitization and the Media in the World of Information Overload. Pakistan Journal of Life and Social Sciences (PJLSS), 21(1). https://doi.org/10.57239/pjlss-2023-21.1.0029
- [5] Flor LS, Friedman J, Spencer CN, Cagney J, Arrieta A, Herbert ME, Stein C, Mullany EC, Hon J, Patwardhan V, Barber RM. Quantifying the effects of the COVID-19 pandemic on gender equality on health, social, and economic indicators: a comprehensive review of data from March, 2020, to September, 2021. The Lancet. 2022 Jun 25;399(10344):2381-97.
- [6] Nordhues HC, Bhagra A, Stroud NN, Vencill JA, Kuhle CL. COVID-19 gender disparities and mitigation recommendations: a narrative review.

- InMayo Clinic Proceedings 2021 Jul 1 (Vol. 96, No. 7, pp. 1907-1920). Elsevier.
- [7] Panoram, P. (2023). Solution of Poverty Problems during the Covid-19 situation of the community in Krasang District, Buriram Province, Thailand. Pakistan Journal of Life and Social Sciences (PJLSS), 21(1). https://doi.org/10.57239/pjlss-2023-21.1.0031
- [8] Putra RA, Ovsiannikov K, Kotani K. COVID-19-associated income loss and job loss: Evidence from Indonesia. Journal of Asian Economics. 2023 May 30:101631.
- [9] Manda S. COVID-19, livelihoods and gender: Material, relational and subjective realities in rural Zambia. World Development Perspectives. 2023 Dec 1;32:100547.
- [10] Badan Pusat Statistik, Indeks Pembangunan Gender Provinsi Banten 2019.
- [11] BPS, Badan pusat statistik. 2020.

PITCE

- [12] Cameron L. Gender equality and development: Indonesia in a global context. Bulletin of Indonesian Economic Studies. 2023 May 4;59(2):179-207
- [13] UN Women. (2016). Regional director's opening remarks in commemoration of International Women's Day, Bangkok. http://www2.unwomen.org
- [14] Sakai M. Women and Entrepreneurship in Muslim Countries. InWomen Entrepreneurs and Business Empowerment in Muslim Countries 2022 Sep 27 (pp. 45-85). Cham: Springer International Publishing.
- [15] Elsa Yanuar Dkk. Pengaruh Pemberdayaan Perempuan Dalam Ekonomi Dan Politik Terhadap Pembangunan Perempuan di Provinsi Sumatera Barat. Jurnal Kajian Ekonomi dan Pembangunan. Vol 5, nomor 2, Juni 2023, p.79.
- [16] Sompa AT, Thaharah HA, Rizky L, Al Syahrin MN. Women's Economic Development and Sustainable Development Agenda Among Coffee Smallholders in Lahat, South Sumatera. InUniversitas Lampung International Conference on Social Sciences (ULICoSS 2021) 2022 Jan 6 (pp. 463-469). Atlantis Press.
- [17] Zhang J, Zhang Y. A qualitative comparative analysis of tourism and gender equality in emerging economies. Journal of Hospitality and Tourism Management. 2021 Mar 1;46;284-92.