

Analysis of the Unemployment Rate in Kedungwaru District, Tulungagung Regency

Panjalu Danang Santoso¹, Dwi Ima Herminingsih², Nunun Nurhajati³

Public Administration Study Program, Faculty of Social and Political Sciences
Tulungagung University

panjaluds8@gmail.com¹, dwima.hermin@gmail.com²,
nununnurhajati@gmail.com³

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Abstract:

This study examines unemployment in Kedungwaru District, Tulungagung Regency, an area with the highest population density and the most dynamic economic activity in the regency, yet one that still faces serious employment challenges. It aims to analyze unemployment types based on Sadono Sukirno's theory and to identify their influencing factors, using a descriptive qualitative approach across five villages: Tawangsari, Ringinpitu, Majan, Tanon, and Ngujang. Data were collected through interviews with eight informants, field observation, and documentation, then analyzed using the Miles and Huberman interactive model, with validity verified through source, technique, and time triangulation. The results show that all four types of unemployment, namely frictional, structural, cyclical, and technological, occur with varying degrees of severity, with structural unemployment being the most dominant and technological unemployment having a permanent impact on older workers. Key contributing factors include low human resource quality, an imbalance between the labor force and available jobs, technological advancement, skills mismatch, low wages, and inadequate social protection. The study recommends developing market-oriented job training, strengthening minimum wage enforcement, and expanding social security coverage for informal workers.

Author Correspondence:

Panjalu Danang Santoso, Faculty of Social and Political Sciences, Tulungagung University
Email: panjaluds8@gmail.com

Keywords:***Unemployment, Kedungwaru District, Causal factors*****Introduction**

One of the important signs that indicate the economic condition of an unstable region is the high number of unemployed population. The problem of unemployment is a complex problem and occurs in almost every region in Indonesia, both at the provincial, district, and city levels, because it encourages an increase in poverty rates and causes socio-economic tensions in the community. Yulianti (2025) found that the number of high school graduates significantly affects the unemployment rate in Indonesia, while Andini (2025) proves that the unemployment rate has a positive and significant effect on the poverty rate. Minister of Finance Purbaya Yudhi Sadewa also emphasized that national economic growth has not been able to create enough formal jobs, and new jobs will grow significantly if economic growth reaches the range of 6.7% (Zilky & Sari, 2025).

In Tulungagung Regency, the open unemployment rate (TPT) was recorded at 4.61% in 2023 and 4.03% in 2025 (Tulungagung Central Statistics Agency, 2021), a figure higher than neighboring districts such as Trenggalek and Ponorogo and above the East Java Province average of 3.88% (East, 2025). Among the 19 sub-districts in Tulungagung Regency, Kedungwaru District is the area with the most dynamic economic activity as well as the highest population density, with an estimated working-age population of 90,650 people by 2025 (Statistics, 2025). The Regent of Tulungagung stated that the transformation of the regional economy from the agricultural sector to industry and services is still slow, with the average length of schooling of the population is only 8.68 years and the Pure Participation Rate of high school/equivalent is 62.73%, a condition that hinders the provision of ready-to-use labor (Basso, 2025).

Various macro data show that unemployment in Tulungagung Regency is still a serious problem, but behind these figures lies a more complex and urgent reality to be unraveled. Kedungwaru District, as an area with the highest concentration of population and economic activity, has the potential to become the epicenter of various forms of unemployment, ranging from hidden unemployment to technology-induced unemployment. Therefore, this study does not stop at statistical descriptions, but it is necessary to carry out a qualitative dissection of the reality of unemployment in the field. Based on this background, this study aims to (1) analyze the unemployment rate in

Kedungwaru District, Tulungagung Regency based on its types according to Sadono Sukirno's theory, and (2) identify the factors that affect the unemployment rate in the region. Theoretically, this research is expected to enrich scientific studies on the phenomenon of unemployment at the sub-district level, while practically this research is expected to be a consideration for local governments in designing job training programs, empowering MSMEs, and creating jobs that are relevant to the characteristics of the local population.

Sukirno (2004) explained that unemployment is not only caused by low demand for labor, but also by an imbalance between labor supply and demand due to low quality of human resources, skill mismatches, and lack of job vacancy information. Based on this theory, unemployment can be classified into four types, namely frictional unemployment arising from the movement of workers between jobs, structural unemployment due to changes in economic structure, conjuncture unemployment due to a decrease in aggregate demand, and technological unemployment due to the replacement of human labor by machines. The study of the factors that cause unemployment has also been enriched by previous studies, including the imbalance in the number of workers and jobs, the impact of automation and termination of employment, the effect of wages on unemployment, and skill mismatch. In addition, Kuhn and Skuterud (2004) identified the phenomenon of internet job search paradox, which is a condition when easy access to online job vacancies can actually prolong the duration of unemployment due to excess information, unrealistic expectations, and low company response rates.

Methodology

This study uses a descriptive qualitative approach because it aims to understand the phenomenon of unemployment in depth, holistic, and contextual, not just looking at statistical relationships between variables (Sugiyono, 2016). The research was carried out in five villages in Kedungwaru District, namely Tawangsari, Ringinpitu, Majan, Tanon, and Ngujang Villages, which were selected based on the criteria of heterogeneity of regional characteristics, population size, livelihood structure, and indications of different unemployment problems. The data used consisted of primary data and secondary data. Primary data was obtained through semi-structured interviews with eight informants consisting of job seekers or unemployed and village government officials, while

secondary data was sourced from official documents and statistical reports of the Central Statistics Agency (BPS) of Tulungagung Regency, sub-district profiles, and relevant academic literature. The research instruments used include interview guidelines, stationery, and documentation devices in the form of cameras and voice recorders (Sugiyono, 2019). Data collection techniques are carried out through in-depth interviews, field observations of economic activities and social conditions of the community, and documentation studies (Cresswell, 2009).

Data analysis was carried out using the Miles and Huberman interactive model which consisted of four interrelated stages, namely data collection, data reduction, data presentation, and conclusion drawing (Idrus, 2009). The validity of the data was tested through credibility criteria with the source triangulation technique, which is comparing statements from various informants such as the unemployed, village officials, and labor office officers; triangulation technique, which is matching the results of interviews with field observations and documentary evidence; and time triangulation, which is checking data at different times to ensure the consistency of information.

Result and discussion

Kedungwaru District is located in the northern and eastern part of the center of Tulungagung City with an area of 29.47 km², bordered by Ngantru District in the north, Sumbergempol in the east, Tulungagung in the south, and Kauman in the west. This district is the area with the largest number of working-age residents in Tulungagung Regency, which is around 90,650 people with a labor force of 62,500 people, and an average population density of 3,045 people/km² (Statistics, 2024). The Open Unemployment Rate (TPT) in this sub-district is estimated to reach 4.2%, slightly higher than the average of Tulungagung Regency. The region's economy is supported by three main sectors, namely the processing industry in the form of convection household industries and large-scale factories, large trade and retail supported by a strategic position on the Surabaya-Trenggalek national route, and agriculture which includes rice, corn, and sugarcane commodities.

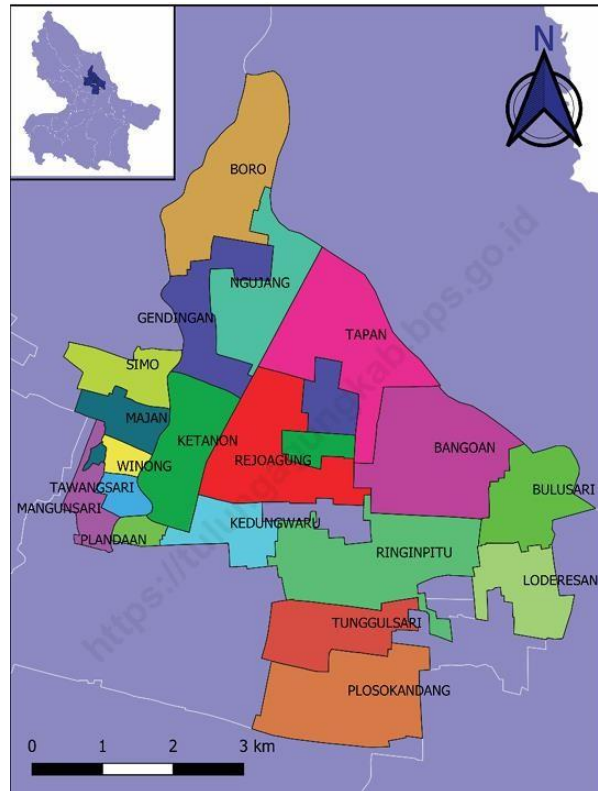


Figure 1. Kedungwaru District Administration Map

Source: Kedungwaru District in 2024 Figures, Central Statistics Agency of Tulungagung Regency

The results of the analysis based on the theoretical framework of Sadono Sukirno (2004) show that the four types of unemployment were found to occur in Kedungwaru District with different characteristics and severity. Frictional unemployment was identified in the young productive age group (20-30 years) with a vocational or high school education background who voluntarily left their old job to seek better financial compensation and career development. One of the informants, AL (24 years old, a vocational school graduate, Ringinpitu Village), revealed that he quit his old job as a digital admin because he wanted to get a better salary and develop his talents, but some of the applications he submitted had not come to fruition (Interview, June 15, 2026). This type of unemployment is voluntary and temporary, but the duration tends to extend to 4-8 months due to unrealistic salary expectations, low company response rates, and skill mismatches with job market needs. This condition is in line with BPS data which shows that vocational and high school graduates have the highest TPT in East Java (Statistics & East, 2024), and is relevant to the phenomenon of the internet job search paradox stated

by Kuhn and Skuterud (2004), where the ease of access to online job vacancy information has the potential to extend the duration of unemployment.

Structural unemployment is the most dominant and critical type in Kedungwaru District. This phenomenon is experienced by traditional workers with outdated manual skills amid a shift in economic structure towards a sector that relies on digital technology and automation. RJ (32 years old, junior high school graduate, Tawangasari Village), a former traditional wooden furniture craftsman, said that the traditional furniture market is getting quieter because consumers are switching to factory furniture sold online, while modern furniture factories need workers who are able to operate computer-based automatic machines, skills he does not have (Interview, March 15, 2026). A similar condition was experienced by DN (23 years old, STM graduate, Tanon Village) whose lathe and manual welding skills became obsolete after the factory switched to CNC machines and digital systems (Interview, March 11, 2026). This finding is consistent with the data of Kedungwaru District in the 2024 Figures which shows that most of the agricultural land in this area has changed its function to settlements, while the service sector is the main source of income, indicating a shift in the economic structure from agricultural to trade and services (Statistics, 2024).

Conjuncture unemployment was identified in workers in the micro, small, and medium enterprises sectors who are vulnerable to macroeconomic shocks, such as TG (23 years old, Ngujang Village) who lost their jobs in a tofu factory due to a decrease in turnover, and AJ (22 years old, Majan Village) whose clothing store closed due to lack of buyers. Although theoretically temporary, field findings show a recovery period that extends to 6-12 months without a responsive intervention policy, in line with the trend of Tulungagung TPT which gradually decreased from 6.65% in 2022 to 4.03% in 2025 in line with the post-pandemic economic recovery (East, 2025). Technological unemployment is the most worrying finding because it is permanent and irreversible. SK and SL, both elderly (57 and 59 years old) and with basic education from Tawangasari Village, lost their respective jobs as manual tailors and harvest workers after being replaced by automatic embroidery machines and combine harvesters (Interview, 10-12 March 2026). This group of poorly educated elderly workers generally do not have the

ability to participate in the reskilling program, so they are only able to survive on odd jobs with uncertain incomes.

In addition to analyzing the type of unemployment, this study identifies six main factors that systemically affect the unemployment rate in Kedungwaru District. First, the low quality of human resources is the root of the problem, as stated by one of the village heads that most residents are only educated in elementary and junior high school, making it difficult to access jobs that require digital skills (Interview, June 16, 2026), a condition that is in line with the low average length of school in Tulungagung Regency which is only 8.68 years (Basso, 2025). Second, the imbalance between labor force growth and employment occurs because the highest population density in this district is not balanced by adequate job creation, so that some job seekers are forced to migrate or survive in odd jobs.

Third, technological advances and automation have encouraged the increase in technological and structural unemployment, especially in the convection and agriculture sectors, as conveyed by the head of Tawang Sari Village regarding the case of a 55-year-old convection worker who was dismissed without severance pay after his business switched to automatic machines (Interview, June 20, 2026). Fourth, skill mismatches occur both horizontally and vertically due to the gap between the competencies of secondary education graduates and industrial needs, exacerbated by the lack of industrial involvement in curriculum development (Zahra et al., 2026). Fifth, the low wage level is a driver of unemployment, where informal sector workers in Kedungwaru District only receive wages of IDR 1,200,000 to IDR 1,700,000 per month, far below the Tulungagung Regency Minimum Wage in 2026 of IDR 2,628,190, a condition that encourages workers to change jobs (frictional unemployment) while increasing their vulnerability to layoffs. Sixth, the lack of social protection exacerbates the vulnerability of informal workers to layoffs because the majority are not registered with BPJS Ketenagakerjaan so they do not receive severance pay, old-age guarantees, or access to retraining when they lose their jobs, a condition that accelerates the fall of workers affected by layoffs into poverty.

Conclusion

This study concludes that the four types of unemployment according to Sadono Sukirno's theory all occur in Kedungwaru District with different severity. Structural unemployment is the most dominant and critical type, followed by technological unemployment which has a permanent impact, especially on elderly workers, as well as frictional and conjuncture unemployment which is temporary but tends to extend in duration. There are six main factors that affect the unemployment rate in this region, namely the low quality of human resources, the imbalance between labor force and employment, technological advances and automation, skills mismatches, low wage levels accompanied by weak implementation of minimum wage policies, and lack of social protection for informal workers.

Based on these findings, the local government of Tulungagung Regency and the Manpower Office are advised to strengthen supervision of the implementation of the minimum wage through routine inspections to convection and household industry centers in Kedungwaru District accompanied by strict sanctions for violators, initiate social protection programs for informal workers in the form of subsidies for BPJS Employment contributions, and develop competency training and certification programs based on market needs with a special approach for elderly and low-educated workers, including facilitating vocational school partnerships with industry through teaching factories and quality internships. At the village level, it is recommended to optimize labor-intensive programs based on local resources, assistance for sustainable MSMEs in convection centers, and the establishment of job readiness villages that provide information on vacancies, career consultations, and regular data collection of job seekers so that intervention policies can be carried out in a targeted and data-based manner and accurately.

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