

## **Policies for the Development and Management of Workers' Lifestyles in Vietnam's Industrial Zones in the Context of the Fourth Industrial Revolution**

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### **Abstract**

This paper analyzes the policies for the development and management of workers' lifestyles in industrial zones in Vietnam in the context of the Fourth Industrial Revolution. The rapid expansion of industrial zones has created job opportunities but has also posed significant challenges regarding working conditions, income, social welfare, and lifestyle transformations among workers. The research findings indicate that industrial zone planning must be accompanied by the development of social infrastructure, ensuring access to housing, healthcare, education, and worker support services.. At the same time, managingf workers' lifestyles should focus on work-life balance, enhancing cultural and spiritual well-being, and fostering a sustainable working environment. Research findings indicate that industrial zone planning must be accompanied by developing social infrastructure, ensuring access to housing, healthcare, education, and worker support services. In particular, the role of labor unions and worker support policies should be strengthened to reduce labor disputes and enhance workforce quality. The paper also proposes solutions for the effective development and management of workers' lifestyles, thereby contributing to the sustainable development of industrial zones and Vietnam's economy in the Industry 4.0 era.

**Keywords:** policy, lifestyle management, workers, industrial zones, Industry 4.0

### **1. Introduction**

#### *1.1 Research context*

In the context of the Fourth Industrial Revolution (Industry 4.0), the development of industrial zones in Vietnam not only serves as a driving force for economic growth, but also brings about profound transformations in workers' lifestyles. This necessitates the formulation of comprehensive development policies and lifestyle management strategies to safeguard workers' rights, enhance workforce quality, and meet the demands of a modern economy. According to

the General Statistics Office (2023), industrial zones have attracted large-scale foreign direct investment (FDI), generated hundreds of thousands of jobs, and contributed to export growth, thereby providing, thereby providing essential resources for socio-economic development projects.

Additionally, the process of industrialization and modernization has driven the economic shift from agriculture to industry and services, fostered sectoral and regional linkages, and improved labor productivity and workforce quality (Ministry of Construction, 2023). Amid globalization and digital transformation, the Vietnamese government has prioritized industrial zone development as an effective tool for attracting investment, modernizing the country, and expanding international cooperation. A notable example is Decree No. 35/2022/ND-CP, "Regulations on the Management of Economic Zones and Industrial Zones," issued on May 28, 2022. This decree sets the direction for developing industrial zones based on the urban-service model and eco-industrial parks, emphasizing energy efficiency, greenhouse gas reduction, corporate social responsibility, and the application of digital government models for management (Government of Vietnam, 2022).

However, the COVID-19 pandemic, coupled with the rapid advancements of Industry 4.0, has posed significant challenges to industrial production and workers' lives. The rapid technological transformation demands that workers quickly upskill to operate modern production lines, increasing the need for workforce training and development (Vietnam General Confederation of Labor, 2021; Vietnam General Confederation of Labor, 2022). Simultaneously, prolonged work pressure, low wages, and precarious housing conditions have negatively impacted workers' mental well-being and overall quality of life. These challenges not only affect individual workers but also weaken family cohesion, heightening the risks of social issues such as psychological stress, depression, and anxiety disorders.

Recognizing these realities, policies for industrial zone development and workers' lifestyle management are considered crucial for ensuring labor rights and improving the quality of life. Proposed solutions include infrastructure investment, the development of standardized housing and dormitories for workers, and the provision of adequate healthcare and education services. Additionally, training programs should be implemented to enhance both professional and life skills, enabling workers to adapt to Industry 4.0 requirements. Further, policies aimed at protecting labor rights—such as social insurance, reasonable rest periods, and financial support during hardships—should be promoted to alleviate workers' economic burdens.

### *1.2 Research gaps*

According to the World Economic Forum's report on "The Future of Jobs Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution", it is stated that the Fourth Industrial Revolution will have a strong impact on the career trends and occupational structures of countries. The question is how businesses, governments and individuals will respond to these changes to prevent technological change from being accompanied by talent shortages, mass unemployment and increasing inequality in training and upgrading the qualifications of workers.

This report points out that it is necessary to pay attention to regulations related to mobility and benefits between jobs and equivalent treatment in the law of different forms of labor and employment (World Economic Forum, 2016). Management of workers and factors related to workers must be based on a flexible legal and policy system that responds to new needs of workers. In the thesis of two authors Andy Cerika & Sinan Maksumic on "The Effects of New Emerging Technologies on Human Resources: Emergence of Industry 4.0, a Necessary Evil?", it was pointed out that the fourth industrial revolution can lead to a reduction in the number of workers in organizations and factories. However, along with that is the requirement to increase the quality of human resources and human resource management institutions. The interaction between new technologies and professional employees has supplemented the capacity for innovation and improved productivity in manufacturing organizations. However, the Fourth Industrial Revolution can also be considered a threat when a large part of the workforce is not yet ready to accept and integrate the changes brought about by the Fourth Industrial Revolution. This can create problems, consequences, and even crises for workers in terms of lifestyle and training needs to adapt, especially in developing countries (Andy Cerika & Sinan Maksumic, 2017). In Vietnam, there have been many studies on social governance in the Fourth Industrial Revolution associated with social changes in the labor market. A typical example is the article by Bui Sy Loi on "Improving the law on labor market development in accordance with the requirements of the 4.0 Industrial Revolution" which affirmed that Vietnam is not outside the influence of the fourth industrial revolution, especially when our country's labor force is still abundant but lacks capacity and skills... Vietnamese workers do not have the mindset to change, accept new things, or work in a rut. The capacity for innovation and creativity in science and technology of highly qualified workers is still weak... According to the author, to achieve the goals of amending the Labor Code, it is necessary to focus on solving 05 major policy groups including: (1) Protecting the basic rights and obligations of workers according to the provisions of the 2013 Constitution in the fields of labor, labor relations and labor market; (2) Ensuring the legitimate rights and interests of employers regarding labor; (3) Perfecting the labor market institution; enhancing the effectiveness and efficiency of State management of labor; enhancing the role and position of the Trade Union in labor relations; ensuring and promoting gender equality; (4) Improving the feasibility of the Labor Code and ensuring the consistency and unity of the legal system; (5) Establishing a national labor legal corridor compatible with basic international labor standards according to the 1998 ILO Declaration and meeting the requirements of international trade integration;...

In general, the attention of scholars mainly takes into account the importance of preparing to welcome new trends in human resource development and the role of related entities such as enterprises, the Government or the adaptability of workers themselves. A common point that most authors emphasize is that the 4.0 Industrial Revolution will create major changes, even a revolution in the issue of labor and employment. These studies also point out the need to manage social changes - a consequence of the integration process and adaptation to the new revolutionary context. However, studies on the relationship between social management and changes in workers' lifestyles in industrial zones in the context of the 4.0 Industrial Revolution have only

been mentioned as a small aspect of the larger issue of social management of common issues of workers and the workforce in the new context. This is a big gap in current studies on this issue. Thus, the development of industrial zones not only drives economic growth but also lays the foundation for a fair, modern, and sustainable society. Government attention to industrial zone development and workers' lifestyle management has led to key policy initiatives that improve working conditions, enhance workforce quality, and ensure labor safety - thereby paving the way for the country's industrialization and modernization in the digital era. This research is conducted mainly by document research method. Policies will be synthesized and analyzed in the research content sections. In addition, data in other research reports are used to illustrate and clarify the current situation of workers' lives in industrial zones.

## 2. The current development of industrial parks and workers' lifestyles in Vietnam's industrial parks

### 2.1 The current development of industrial parks in Vietnam

As of October 2023, Vietnam had established 416 industrial parks, of which 369 were located outside economic zones, 39 were within coastal economic zones, and 8 were in border-gate economic zones. The total natural land area of these industrial parks reached approximately about 129,900 hectares, while the total industrial land area covered about 89,200 hectares (General Statistics Office, 2023).

In 2023, the Prime Minister approved and adjusted investment policies for 13 new industrial park infrastructure projects, with a total area of approximately 3,858 hectares. These projects contributed to expanding the system and improving infrastructure quality in these areas (Department of Economic Zone Management, 2023).

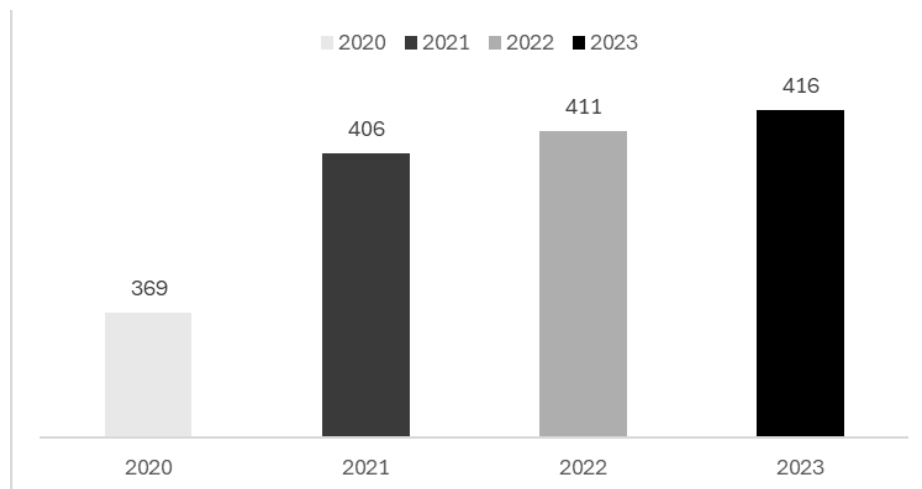


Figure 1. Number of Industrial Parks from 2021 to 2023

Source: Report by the Department of Economic Zone Management

Notably, the number of industrial parks increased by 47 from 2020 to 2023, highlighting a strong recovery and growth trend in the economy following the impact of the COVID-19 pandemic. Despite certain challenges, under the decisive direction of the government, Vietnam's economy has achieved positive milestones, as evidenced by an estimated GDP growth rate of 5.05% in 2023, with the industrial and construction sectors contributing 1.51 percentage points (General Statistics Office, 2023).

Among the established industrial parks, 296 are currently operational, covering approximately 92,200 hectares of natural land and 63,000 hectares of industrial land. Meanwhile, 119 industrial parks are still under construction, with a total natural land area of nearly 37,500 hectares and industrial land of about 24,700 hectares. The total leased industrial land area reached approximately 51,800 hectares, representing an occupancy rate of about 57.7%; for operational industrial parks alone, the occupancy rate was as high as 72.4% (Department of Economic Zone Management, 2023).

In addition, the economic zone system has also demonstrated strong growth. Specifically, 26 border-gate economic zones have been established across 21 border provinces, covering a total area of up to 766,000 hectares. Meanwhile, 18 coastal economic zones have been developed across 17 coastal provinces and cities, with a combined land and water area of nearly 871,523 hectares. Of this, approximately 100,000 hectares have been designated for functional zones such as free trade zones, industrial parks, and commercial, tourism, and service areas (Department of Economic Zone Management, 2023).

The development of industrial parks is not just an economic indicator but also reflects a structural shift in labor from agriculture to industry and services. This is evident in the increasing number of workers employed in industrial parks, contributing to higher productivity and improved workforce quality. Noteworthy achievements in industrial production growth, averaging 12.3% annually over the 20 years from 1986 to 2005, and the industrial sector's share of approximately 30% of GDP between 2011 and 2020, have positioned Vietnam among the world's top 22 exporting countries. Additionally, Vietnam's global competitiveness ranking improved by 16 places over the decade from 2009 to 2019, reaching 42nd in UNIDO's ranking. The industrial sector has shifted towards manufacturing, which contributed 16.7% of national GDP (UNIDO; General Statistics Office, 2023).

Foreign direct investment (FDI) attraction has also been a highlight. By the end of 2023, total registered FDI in industrial parks reached nearly USD 36.61 billion, a 32.1% increase compared to the previous year. Notably, capital contributions and share purchases surpassed USD 8.5 billion, a substantial 65.7% increase, reflecting robust investor confidence in Vietnam's industrial and manufacturing landscape, with foreign-invested projects representing 64.2% of total manufacturing investment (Ministry of Planning and Investment, 2023).

Overall, the expansion of industrial parks in Vietnam has yielded significant economic outcomes, including enhanced capital mobilization, job creation, increased industrial output, and

accelerated structural transformation toward higher value-added sectors. However, to maximize efficiency, further efficiency gains require comprehensive improvements in spatial planning, human capital development, targeted policy incentives, and robust environmental governance.. These efforts will play a crucial role in sustaining economic momentum and strengthening Vietnam's competitive positioning amid global integration and the technological disruptions of Industry 4.0.

## *2.2 Current situation of workers' lifestyles in Vietnam's industrial zones*

In the context of a rapidly transforming economy and expansion of industrial zones, workers in these areas are experiencing significant socioeconomic and lifestyle adjustments. While industrial zones drive employment generation, FDI inflows, and economic modernization, persistent challenges related to working conditions, housing, and labor intensity continue to constrain improvements in workers' welfare and overall quality of life.

### *(1) Living conditions and housing*

Most workers in Vietnam's industrial zones are migrant laborers relocated from rural to urban or peri-urban regions to access industrial employment. However, due to limited disposable income and escalating rental costs, the majority of workers lack access to adequate housing options. According to a 2023 report from the Ministry of Construction, only about 20% of workers have access to social housing or dormitories with certain standards, while the majority live in informal or substandard rental accommodations. These areas are typically very small, with an average space of only 3-5m<sup>2</sup> per person, falling below minimum living space and health standards. Living in poor-quality housing leads to adverse health and productivity outcomes. Firstly, inadequate living conditions directly undermine physical and mental well-being. Most rental areas have deteriorating infrastructure, lacking basic amenities like water supply and drainage systems, clean water, and proper sanitation. Electric wiring is often patched up, the space is cramped, and fire safety systems are substandard, posing significant safety risks and exacerbating vulnerability to accidents and disease.

Additionally, workers' living costs are elevated in the absence of targeted housing subsidies or support mechanisms. Although rents in these informal housing areas are much lower than in commercial apartments, workers often face premium utility charges that further erode disposable income. As a result, a large portion of workers' income goes toward rent, reducing their ability to save and improve their quality of life. The cramped living space and poor sanitation also contribute to various health problems for workers. Living in small rooms without natural light and with poor ventilation increases the risk of respiratory diseases, skin conditions, and hygiene-related issues. Moreover, the stress from poor living conditions can exacerbate psychological distress, including depression and anxiety disorders.

### *(2) Work and working hours*

Currently, most workers in Vietnam's industrial zones are exposed to high labor intensity and extended working hours. Especially in manufacturing industries such as textiles, electronics,



footwear, and food processing, workers often engage in repetitive, high-speed production processes with limited task variation. The monotonous nature of the work but the need for high concentration contributes to occupational fatigue and stress-related disorders. According to a 2023 survey by the Vietnam General Confederation of Labor, the average worker in industrial zones works 48 to 60 hours per week, including overtime. Although the Labor Code stipulates that the standard working time is 8 hours per day and not more than 48 hours per week, many workers must work overtime regularly, sometimes up to 10-12 hours a day, especially during peak production periods. Some companies enforce mandatory overtime, and workers who refuse may be subject to wage penalties, forfeiture of performance bonuses, or termination of employment contracts.

Moreover, workers often have limited autonomy over work schedules, as shifts are dictated by production requirements. Shifts can last from morning to evening or include night shifts, depending on the industry. In some factories, workers have insufficient rest intervals and truncated meal breaks, contravening labor welfare standards.

Another factor that drives excessive overtime is the inadequacy of base wages. According to regulations, the regional minimum wage ranges from 3.25 million to 4.68 million VND per month (according to Decree 38/2022/ND-CP), but with the increasing cost of living, this amount is insufficient to meet subsistence requirements, necessitating supplementary income through overtime. To earn more, most workers have to accept overtime. Statistics show that about 70% of workers work at least 2-3 extra hours a day to supplement their income, and during peak periods, overtime hours can reach 100-120 hours, exceeding the legal limit. Not only do they face time pressure, but workers also are exposed to suboptimal workplace environments. Many factories have thermal stress, poor air quality, excessive noise, and exposure to hazardous substances. Some industries, such as garment and footwear, require workers to stay in fixed positions for long hours without much movement, while other industries, like mechanical work or food processing, require workers to maintain static postures or endure physically demanding conditions. Furthermore, continuous production cycles reduce rest opportunities, increasing the risk of musculoskeletal disorders and fatigue-related accidents.

Additionally, due to high production pressure, many companies implement stringent performance management systems. Some set high production targets, and if workers do not meet the requirements, their wages may be deducted or their performance rated poorly during evaluations. This creates a high-stress environment, incentivizing output at the expense of worker welfare and long-term productivity.

### *(3) Mental and family life*

Besides the difficulties related to living conditions and work, workers' mental and family life in industrial zones in Vietnam also face many challenges. Due to the nature of migrant labor, most workers must leave their hometowns to work in large cities or concentrated industrial zones, resulting in prolonged family separation and infrequent opportunities for reunification. This has a

significant negative effect on their psychological well-being, personal relationships, and overall life satisfaction.

According to a 2023 survey by the Institute of Workers and Trade Unions, up to 60% of workers aged 18-35 live far from their families, many of whom have young children but are unable to bring their children due to prohibitive living costs and insufficient housing and educational support policies. As a result, many workers have to send their children back to their hometowns to be cared for by grandparents, leading to a great distance between parents and children. The fact that they can only visit family during holidays or Tet (Lunar New Year) further diminishes family cohesion and may contribute to emotional and developmental challenges for their children.

Not only do workers face difficulties maintaining their families, but their mental well-being is also severely affected by precarious employment, long working hours, and inadequate living environments. Due to long working hours, many workers lack time and resources for social participation, skill development, or leisure, all of which are essential for psychological resilience and human capital accumulation. Workers' dormitories often lack common living spaces, parks, playgrounds, or cultural and sports activities, leaving workers with few opportunities to relieve stress after work. According to surveys, more than 50% of workers report that they do not have regular recreational activities, and most of their time after work is spent resting in their rooms or browsing social media.

Additionally, the absence of psychosocial support networks increases vulnerability to mental health disorders, including depression and anxiety, and raises the risk of maladaptive coping behaviors such as substance abuse and gambling. Some workers turn to alcohol, gambling, or other unhealthy forms of entertainment to relieve stress. For female workers, especially those with young children, the compounded burden of work–family conflict and insufficient social support intensifies psychological distress and impedes labor force participation and productivity. On the other hand, due to the nature of shift work and irregular rest periods, many workers experience disruptions in social and marital relations due to nonstandard work hours and limited opportunities for interpersonal interaction. Many worker couples are subject to asynchronous schedules, contributing to marital discord and reduced household stability. Some couples are forced to live apart due to working in different industrial zones and can only meet a few times a year. This is one of the reasons for the higher divorce rate among workers compared to other labor groups. According to data from the Labor Federation of Ho Chi Minh City, the divorce rate among industrial zone workers reaches 30%, primarily attributable to economic hardship and insufficient time for family maintenance.



### **3. The status of policies for industrial park development and policies for workers to promote productive labor**

#### *3.1. Policies for industrial parks*

The government has issued an Action Program to implement Resolution No. 23-NQ/TW dated March 22, 2018, by the Politburo regarding the orientation for national industrial development policy until 2030, with a vision to 2045, along with Resolution No. 124/NQ-CP. According to Resolution No. 23-NQ/TW, the goal for 2030 is for Vietnam to complete industrialization and modernization, achieve status as a modern industrialized nation, rank among the top three ASEAN countries by industrial output, and develop internationally competitive sectors integrated into global value chains. By 2045, Vietnam aims to become a developed, modern industrial country.

To achieve this goal, the government prioritizes capacity-building and accountability among party committees and local authorities for the design and implementation of national industrial policy. The industrial development policy must be consistent with broader economic and social objectives, strengthen state governance capacity, clarify the respective roles of the public and private sectors, and broaden stakeholder engagement, including political, social, and business organizations. The government commits to combating vested interests, cronyism, corruption, and inefficiency in industrial policy formulation and implementation.

Specific goals for 2030 include: the industrial sector's share of GDP exceeding 40%, manufacturing and constituting approximately 30%, and manufacturing alone over 20%. The value of high-tech industrial products in processing and manufacturing industries should account for at least 45% of output. The average growth rate of industrial added value should be above 8.5% annually, with manufacturing and processing exceeding 10% per year. The Industrial Competitiveness Index (CIP) should rank Vietnam in the top three in ASEAN, and the workforce in industry and services should surpass 70%. Additionally, the goal is to establish large-scale domestic enterprises capable of competing globally.

To implement these goals, the government requires ministries, sectors, and localities to adopt a comprehensive policy mix: optimize spatial industrial distribution, restructure industry towards priority sectors, foster a competitive investment climate, promote enterprise development, enhance workforce skills, accelerate technological innovation, utilize resources efficiently, and ensure environmental sustainability and climate adaptation. The Ministry of Planning and Investment is tasked with completing the planning of industries according to the Law on Planning, prioritizing development in regions that have formed industrial clusters or have advantages in transportation, economic geography, labor, and logistics. The Ministry of Industry and Trade will pilot mechanisms for cluster development in industries with high competitive potential, such as automotive, agricultural machinery, industrial equipment, electronics, textiles, and footwear.

The Ministry of Agriculture and Rural Development will direct localities to reasonably allocate processing facilities for agricultural and forestry products, aligning them with raw material regions and product consumption, and form production-processing-consumption clusters for agricultural products in regions with large production volumes. The Ministry of Construction will complete policies for urban management and the construction material industry.

In addition, the government actively promotes investment in industrial parks and economic zones under Decree 35/2022/ND-CP, providing a suite of incentives such as tax exemptions/reductions, preferential land and credit terms, streamlined administrative procedures, and support for worker housing and utilities in line with social housing policy

Currently, the Ministry of Planning and Investment is drafting a Law on Industrial Parks and Economic Zones to establish a comprehensive, harmonized legal framework that facilitates the development of modern, sustainable industrial parks with efficient land use and strong regional integration. The draft Law will focus on six policy pillars: (1) strengthening inter-industry linkages; (2) developing specialized and high-tech parks; (3) promoting smart, green, and digital-economy parks; (4) integrating industrial parks with urban and service development; (5) expanding fiscal incentives for targeted sectors; and (6) streamlining administrative procedures to improve the investment climate.

The implementation of Resolution No. 23-NQ/TW and related policies reflects the government's strategic commitment to industrialization, modernization, improved competitiveness, sustainable development, and deeper integration into the global economy.

### *3.2. State policies for workers to promote labor and production*

The government has implemented various policies to support workers in industrial zones, aiming to create favorable conditions for increasing labor productivity and enhancing productive capacity. Workers in industrial zones are one among the ten groups entitled to social housing support under Article 49 of the Housing Law. In addition to dedicated housing projects within industrial zones, workers are also eligible to purchase social housing designed for low-income urban residents.

During the COVID-19 pandemic, the Prime Minister issued Directive 16/CT-TTg, prioritizing sustainable employment, improved living standards, and better working conditions for workers. For example, Resolution No. 68/NQ-CP (dated July 1, 2021) provided direct financial assistance to workers and businesses adversely affected by the pandemic. By June 30, 2022, a total of 36,434,593 workers, 394,440 employers, and 508,127 business households had received financial support amounting to 45,665.263 billion VND. Additionally, Resolution No. 11/NQ-CP (dated January 30, 2022) allocated over 82 trillion VND to post-pandemic economic and social recovery, benefiting nearly 728,500 employers and more than 49.7 million workers.

To effectively implement the Party's and the State's orientations, policies, and solutions related to sustainable employment, improved working conditions, and higher living standards for workers

in the current context, the Prime Minister has instructed: Ministers, heads of ministries, government agencies, and chairpersons of People's Committees of provinces and centrally governed cities: accelerate the implementation of measures directly linked to job security, living standard improvement, and workplace enhancement, as per government directives. They should urgently develop specific programs and plans and allocate adequate resources to guarantee effective policy implementation.

Localities are directed to further reform their economic growth models to align with sustainable development principles. Authorities are required to effectively implement new-generation free trade agreements such as the CPTPP, EVFTA, and RCEP, to maximize benefits for workers and enterprises. Legal frameworks are to be reviewed and harmonized with international labor standards to guarantee enhanced labor rights and working conditions.

The Prime Minister has also requested that financial resources be planned, allocated, and mobilized to develop infrastructure supporting workers' productive activities, living conditions, and educational needs. Measures must be taken to strengthen security, occupational safety, and environmental hygiene in both residential and workplace settings. Policies should be enacted to prevent workers from resorting to high-interest informal lending, while expanding access to microcredit to support financial stability.

Additionally, housing development plans must be updated to remove barriers to worker housing construction in industrial zones. The government is promoting the development of integrated "industrial zone–urban–service" models that combine residential, industrial, and service infrastructure to attract and retain both skilled and unskilled laborers. Implement effective measures to prevent the spread of the COVID-19 pandemic, especially in industrial zones, export processing zones, and areas with large concentrations of workers. Provide support and reduce the negative impacts of the pandemic to ensure social security, helping workers and businesses recover and stabilize production and employment.

Regarding housing development and public utility projects for workers in industrial zones and economic zones, according to Decree 35/2022/NĐ-CP, the government actively promotes investment by organizations and individuals in the construction of worker housing and related public utilities within industrial and economic zones. The housing and facilities must comply with statutory requirements regarding construction standards, minimum area, quality, aesthetics, safety, and environmental protection.

Local People's Committees are mandated to facilitate worker access to healthcare, education, social, cultural, and sports services in industrial and economic zones. Provincial People's Committees are tasked with formulating and integrating housing, service, and public utility development plans for workers into provincial economic zone strategies, ensuring sufficient land allocation and resource provision.

Furthermore, to support workers' housing and improve their living conditions, the government has enacted the amended Land and Housing Law 2023. From January 1, 2025, workers in industrial zones will be entitled to housing support, including dormitories. According to Article 91 of the 2023 Housing Law, all workers employed by enterprises, cooperatives, and federations of cooperatives operating in industrial zones are eligible for subsidized dormitory accommodation. Enterprises responsible for industrial zone infrastructure, as well as cooperatives and federations of cooperatives, are obligated to invest in the construction of worker dormitories.

Also, under Article 100 of this Law, each worker may only rent a single dormitory unit, is prohibited from subletting or transferring the lease, and must vacate the premises upon termination of employment. After the termination of employment, the tenant must return the dormitory unit to the landlord.

Enterprises, cooperatives, and federations of cooperatives may only lease dormitory units to their own employees, and must ensure compliance with operational and management standards as stipulated in Article 90, Section 2, Point a of the 2023 Housing Law.

In the context of a slowing global economy, with risks and challenges affecting foreign direct investment (FDI), Vietnam's industrial zone development is expected to face both opportunities and heightened challenges due to global economic headwinds and shifting FDI trends. Therefore, (policy frameworks should be refined to capitalize on Industry 4.0, enhance FDI attraction and utilization, and fulfill the objectives of Resolution No. 50-NQ/TW, which emphasizes institutional innovation and the improvement of FDI quality and efficiency by 2030. In addition, recent Party and state directives stress the importance of sustainable industrial zone development, efficient land use, and environmental stewardship. Consequently, it is essential to operationalize these policy directions through a robust, coherent legal framework, ensuring that industrial and economic zones remain central to Vietnam's socio-economic development strategy.

#### **4. Some policy solutions for managing workers' lifestyles in industrial zones in Vietnam today**

In the context of the Fourth Industrial Revolution, Vietnam is undergoing a strong process of industrialization and modernization, with the rapid development of industrial zones. This has created significant opportunities for economic growth, attracting foreign direct investment, shifting the labor structure from agriculture to industry and services, and improving the productivity and quality of human resources. However, these economic achievements are accompanied by persistent challenges regarding workers' living and working conditions, particularly exacerbated by the COVID-19 pandemic and accelerated digital transformation. To ensure workers' rights and create a healthy living and working environment, multi-dimensional and evidence-based policy interventions are required. Below are some proposed policy solutions to develop and manage the lifestyles of workers in industrial zones in Vietnam in the age of the Fourth Industrial Revolution.

- **Investment in infrastructure and improving living conditions for workers:** One key solution is to prioritize substantial infrastructure investment to enhance workers' living standards in industrial zones. According to the Ministry of Construction's report (2023), only about 20% of workers have access to social housing or dormitories supported by companies, while the majority reside in substandard, overcrowded rental housing. Therefore, developing high-quality, affordable housing complexes and dormitories with integrated access to healthcare, education, and recreational amenities is imperative. This will not only raise quality of life but also enhance labor productivity and promote workplace cohesion.
- **Training and enhancing human resource quality:** The Fourth Industrial Revolution necessitates rapid workforce adaptation to advanced production technologies, with a premium on upskilling and reskilling. According to the Vietnam General Confederation of Labor (2021), strategic investment in vocational education, technology transfer, and continuous skill development is essential for sustaining productivity growth and product competitiveness. Therefore, tailored training programs - blending on-the-job learning with formal instruction - should address technical, digital, and soft skills, including occupational safety and personal development. Effective coordination among government, employers, and educational institutions is required to develop a workforce aligned with Industry 4.0 demands.
- **Improving welfare and social insurance systems:** Strengthening welfare and social protection systems is equally vital. These policies must guarantee comprehensive access to health and social insurance, adequate rest, and targeted financial assistance during hardship. According to the Vietnam General Confederation of Labor (2022), a significant proportion of workers continue to experience financial insecurity due to stagnant wages and escalating living expenses. Therefore, establishing robust, sustainable welfare mechanisms and crisis support policies will mitigate economic vulnerability and enhance workers' mental health.
- **Supporting Communication and Strengthening Family Bonds** The prevalence of labor migration and shift work in industrial zones has contributed to family fragmentation and weakened social cohesion. To address this issue, policy initiatives should foster family reunification and social integration. For example, the establishment of cultural and sports facilities, community engagement programs, and accessible childcare services by employers and local authorities is recommended. These programs promote social interaction and relaxation, but also reinforce family bonds and reduce the psychosocial costs of labor migration.
- **Applying digital technology and implementing a digital government model:** Leveraging digital technologies is essential for optimizing industrial zone governance, increasing operational efficiency, and minimizing environmental and occupational health risks. The Government's Decree 35/2022/ND-CP "Regulations on the Management of Economic Zones and Industrial Parks" has aimed at developing industrial zones according to urban-service models, with eco-friendly industrial zones aimed at reducing energy consumption and minimizing greenhouse gas emissions. Adopting digital governance frameworks enables real-time information management,

production monitoring, and stakeholder coordination, thereby supporting sustainable industrial development.

- **Developing green industrial zones and strengthening international connections:** Amidst global integration and the transition to a green economy, policy should prioritize the establishment of environmentally sustainable industrial zones. This will not only reduce the ecological footprint of industrial activity but also enhance Vietnam's attractiveness to foreign investors. Strengthening partnerships between enterprises, universities, and research institutes will facilitate technology transfer and the adoption of advanced management practices. This international cooperation not only broadens investment channels and supports the integration of global sustainability standards into Vietnam's industrial sector.

## **5. Conclusion**

The development of industrial zones in Vietnam, in the context of the Fourth Industrial Revolution (Industry 4.0), has resulted in profound transformations in workers' socioeconomic conditions. Alongside (expanded employment opportunities, increased income potential, and workforce upskilling, workers in industrial zones also face persistent challenges, including suboptimal working environments, fragmented social protection systems, elevated labor mobility, and accelerated shifts in both individual and collective lifestyles

To achieve sustainable industrial zone development and safeguard workforce welfare, it is essential to formulate holistic, evidence-based policies for lifestyle management and social protection. First, priority should be given to enhancing workplace safety, raising real incomes, and aligning statutory minimum wages with the cost of living to mitigate turnover driven by income instability. Additionally, enhancing skills, particularly digital skills, should be a priority to help workers adapt to the demands of modern production. Furthermore, the establishment of a comprehensive social welfare framework, encompassing affordable housing, accessible healthcare, quality education, childcare, and cultural infrastructure, is fundamental to improving workers' quality of life.

Concurrently, lifestyle management policies should emphasize sustainable well-being by promoting work-life balance, facilitating participation in cultural and recreational activities, and building social capital within the workforce. Strengthening the capacity of trade unions and associated institutions is critical to safeguarding labor rights, minimizing industrial disputes, and fostering harmonious labor relations.

Industrial zone development should be strategically integrated with vocational education, spatial planning, and modern social governance mechanisms. Such a multidimensional approach supports both career advancement and life quality for workers, and is essential for the long-term sustainability and competitiveness of Vietnam's economy and society in the era of Industry 4.0.



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