



The Role of High-Quality Human Resources in Dung Quat Economic Zone in the Development Process of The Vietnam's Central Economic Region

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ABSTRACT

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A rapid and sustainable economic growth requires three basic factors: the adoption of new technologies, the development of modern infrastructure facilities, and the enhancement of human resources quality. The process of developing human resources involves transforming the quantity, quality, and structure of the workforce to better meet the demands of the economy. In the process of promoting industrialization and modernization, human resources play a decisive role, especially high-quality human resources. This is also a critical factor for the development of the productive force and economic growth rate of a country. Within the scope of this article, the author focuses on analyzing the role of high-quality human resources in the development of the Dung Quat Economic Zone (EZ) in the central economic region of Vietnam.

FINDINGS AND DISCUSSION

1. Briefs on the central economic region of Vietnam

Strategically situated in the central region of Vietnam, Dung Quat Economic Zone (EZ) has emerged as a key player in the nation's industrial development. Its deep-sea port, oil refinery, and presence of tens of thousands of workers and engineers define its importance. After more than 27 years of operation, Dung Quat EZ has attracted over 340 valid projects with a total registered investment capital of approximately USD 17.6 billion. This includes 57 foreign investment projects (with a registered capital of around USD 1.8 billion) and 289 domestic investment projects (with a registered capital of around USD 15.8 billion). Among these, 249 projects are operational. Notable gigantic projects include Dung Quat's Oil Refinery No. 1, Hoa Phat-Dung Quat Iron and Steel Production Complex, Doosan Enerbility Vietnam, General Electric Manufacturing Plant, and Messer Gas Plant.

Dung Quat EZ's potential to generate substantial industrial output, particularly in heavy industries, is evident.

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As a cornerstone of Vietnam's industrialization and modernization efforts, Dung Quat EZ is expected to drive the growth of related industries and services, playing a crucial role in propelling the development of the central region. The demand for highly skilled labor with technical expertise and level of mastery is crucial due to the specific requirements of modern industrial sectors.

Envisioned as a future hub for industry, services, and urban development, Dung Quat EZ will serve as a significant international gateway for the central economic region. Its development trajectory aligns with the concept of a multi-sectoral and diversified economic zone, with a primary focus on petrochemical refining industries. Additionally, Dung Quat EZ will cover other large-scale industries such as mechanics, steel rolling, gas, cement manufacturing, consumer goods production, and other sectors.

Currently, Dung Quat EZ is a "leverage" for the socio-economic development of Quang Ngai and the Central region; Dung Quat EZ has developed into one of the dynamic marine economic centers, with an important multi-sectoral and multi-industrial economy of the country. In its purpose, the primary focus is of taking the coastal urban landscape as its attraction, with the foundation of developed infrastructure facilities to boost the marine economy, towards prosperity. To serve this focus, one of the factors contributing to the development process is high-quality human resources.

2. The role of high-quality human resources for the development of the Vietnam's central economic region

High-quality human resources have made changes to the economic zone and Quang Ngai province; and, it also impacts the development process of Quang Ngai province and the Central region.

First: on the contribution to promoting the development of high-quality human resources for industrialization in the Central region and the whole country

Dung Quat Economic Zone (EZ) is a mix economic zone that has been developed diverse industries and multi-sectoral zone; its focus is Petrochemicals, centralizing a number of cutting-edge industrials, in large-scale, and with high competitive advantages. Once a vast expanse of white sand, Dung Quat has evolved into a bustling industrial hub over the past 27 years, employing tens of thousands of individuals from across Vietnam and over 40 countries.

In recent years, Dung Quat EZ has witnessed a 'surge' in investments, with several large-scale projects, collectively worth tens of billions of USD, have officially commenced operations, such as: Doosan Heavy Industries Complex (USD 260 million investment), Polypropylene Production Project (Valued at USD 182 million), Dung Quat Refinery No. 2 (a massive USD 2.5 billion investment), Messer – Quang Ngai Industrial Gas Production Plant (a USD 133 million project), Hoa Phat Dung Quat Steel Complex (a VND 52,000 billion investment), among others. Currently, Dung Quat EZ has attracted over 52,000 workers, contributing to the construction plants, manufacturing, and operational activities of the various industrial plants.

Amidst its remarkable growth, Dung Quat EZ has cultivated a team of highly skilled professionals equipped with extensive experience and expertise in various domains. This team comprises chief engineers, chief architects, and senior specialists in fields such as: Economic Management, Foreign Investment, Legal Affairs, Finance and Banking, E-commerce, Social and Environmental Management, to name but a few. Also, the work environment in Dung Quat EZ demands a high level of proficiency, discipline, and industrial conduct from its employees. In addition, high-quality human resources here receive basic and in-depth training in foreign languages and professional knowledge.

In addition to cultivating a highly skilled workforce through its educational institutions, the foreign direct investments (FDIs) and companies in Dung Quat EZ has also implemented various initiatives to further enhance the capabilities of its employees. These initiatives include: Providing engineers and technicians with opportunities for overseas training programs, getting foreign experts to provide on-site training and mentorship, arranging specialized training Programs, among other solutions.

Furthermore, Dung Quat Economic Zone Management Board, investors and business owners also focus on educating political ideology, instilling strong values of professionalism, work ethic, and social responsibility among employees through ongoing education and awareness programs. The EZ's workforce has earned a reputation as 'trademark' for its expertise and professionalism.

As a result of these comprehensive efforts of logically planning and science-based investing, Dung Quat Economic Zone has established itself as a leading center for quality of human resources, providing high-quality personnel not only for the EZ's own operations but also for other regions across Vietnam.

Second: on its contributions to socio-economic development and political stability of Quang Ngai province and the Central region.

Socioeconomic development is a multifaceted endeavor that requires various resources, including human capital, material resources, and financial resources. However, it is human capital that serves as the driving force towards progressing.

Currently, the distribution of foreign investment projects in Vietnam exhibits a geographical disparity, with a concentration in the northern and southern regions. This uneven investment pattern has resulted in a widening gap in economic development between these regions and the central region. Recognizing this imbalance, the advancement of the central region's economy has become an imperative to achieve national equilibrium. In light of this pressing need, the Dung Quat EZ Management Board has adopted a proactive approach, establishing robust mechanisms and policies to attract, develop, and manage its human resources.

The establishment of Dung Quat EZ stands as a landmark decision in Vietnam's economic and political landscape, paving the way for transformative socioeconomic development. This strategic initiative has opened up opportunities for the central region to bridge the development gap with its northern and southern counterparts. Aligned with the nation's focus on heavy industry, Dung Quat EZ has emerged as a cornerstone in the development strategy for the central economic region.

Along with science and technology, the influx of capital investments, the high-quality workforce of Dung Quat EZ has played a pivotal role in propelling the socioeconomic growth and political stability of Quang Ngai province and the broader central region. This development has served as a crucial stepping stone to match the pace of progress in the northern and southern regions, creating opportunities for the central region to flourish and break through barriers. The positive impact of Dung Quat EZ is evident in Quang Ngai's success in attracting numerous investment projects, fostering robust industrial growth, and expanding commercial and service sectors.

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In 2023, the Dung Quat EZ Management Board issued investment policy's approval decisions, approval investor, and investment registration certificates for 12 projects with a total registered investment capital of approximately VND 11,656 billion (equivalent to USD 507.39 million). Of these, 7 are FDI projects with a total registered investment capital of USD 365 million. Additionally, 41 projects had their investment capital adjusted, including 13 projects with increased capital totaling VND 26,863 billion (equivalent to USD 1.134 billion). Investment attraction targets for the EZ and industrial parks in 2023 exceeded the set plan by 621% (USD 1,081.69 million and 150 million, respectively), representing a 791% increase compared to 2022.

The establishment of Dung Quat EZ has sparked a wave of positive socioeconomic transformations in Quang Ngai province. In 2023, the province's GRDP (Gross Regional Domestic Product) increased by 2.24% compared to 2022 (exceeding the planned target of -3.5% to -3%). Budget revenue surpassed the central government's target by 19.9%. Transportation and warehousing revenue surged by 17.2%. Export turnover grew by 7.6%. Agricultural, forestry, and fishery production witnessed a notable increase of 3.5%. Moreover, the province has annually created and secured employment for tens of thousands of workers. Dung Quat EZ has also emerged as a 'shining star' in attracting investment to Quang Ngai. Numerous large-scale projects are under ongoing development, including gas plants, thermal power plants, steel mills, and eco-tourism resorts.

The remarkable growth of Dung Quat EZ has extended its positive influence beyond its borders, significantly impacting other economic zones within the central economic region. By 2023, Chu Lai Open Economic Zone had attracted 197 projects with a total registered investment capital of approximately VND 74,000 billion in various sectors, including industry, trade, services, and urban housing. Nhon Hoi Economic Zone and industrial parks have drawn 405 projects with a total registered investment capital of VND 148,721 billion. Lang Co-Chan May Economic Zone has attracted 175 investment projects that remain in effect, with a total registered investment capital of VND 115,765 billion.

Dung Quat EZ has exerted a profound impact on the socioeconomic landscape and political stability of Quang Ngai province and the broader central region. This impact is manifested in economic growth, political stability, and an improved quality of life for the region's residents. Today, Quang Ngai and the central region have emerged as attractive destinations for both domestic and foreign investors. This success is inextricably linked to the availability of a high-quality workforce in the region.

Third: Initially exploring a new way to internationalize the qualifications of Vietnamese human resources through joint ventures in Dung Quat EZ.

With hundreds of investment projects from dozens of nations, Dung Quat EZ has attracted a large labor force and has played a role in creating a skilled workforce. However, developing a high-quality workforce for the EZ requires a strategic approach and time. One emerging method for cultivating a skilled workforce in Dung Quat EZ is the collaborative model of "three-party": the schools, the contractors, and the enterprises.

In fact, the following two directions of this collaboration have been taking place in Dung Quat EZ:

The first way is cooperating with foreign invested enterprises to train the workforce, levelling the workforce up through in-site training or overseas trainee programs. During the construction of the Dung Quat Oil Refinery, the project owner signed a contract with the Petro Consult Consortium (Romania), involving companies from Romania, Germany, and the United States. These companies undertook the responsibility of training the operational personnel for the Dung Quat Oil Refinery. The consortium initiated training sessions at the Vung Tau's Petroleum Training Center, providing instruction in English, basic equipment knowledge, and petrochemical refining processes to hundreds of Vietnamese engineers. As part of the training program, the project owner and the consortium arranged for these engineers to undergo internships at two Romanian refineries that share similar technology, equipment, and design capacity with the Dung Quat Refinery. The internship duration ranged from 6 to 18 months.

To meet the demands of constructing and installing the oil refinery's equipment lines, Dung Quat College of Technology collaborated with Technip Group and Apave Vietnam & Southeast Asia to establish the Technip-Apave-Dung Quat Welding Training Center. Technip Group and Apave provided nearly USD 100,000 worth of practical training equipment to train advanced-level welders. Apave-Vietnam & Southeast Asia assumed the responsibility of providing primary instruction and issuing international welding certificates ranging from 3G to 6G. Besides, Dung Quat College of Technology has also played a crucial role in training and supplying tens of thousands of workers to enterprises operating within Dung Quat EZ and Quang Ngai Industrial Park (VSIP Quang Ngai). Within VSIP Quang Ngai alone, several large companies have placed training orders with the college. These partners include Properwell Vietnam Co., Ltd., which has requested training for 1,400 workers; South Sea LeatherWares Co., Ltd., which has requested training for 1,000 workers; and Xindadong Textiles Vietnam Co., Ltd., which has requested training for 460 workers.

The second way is linking with facilities with training and coaching capabilities to improve workers' skills.

In anticipation of the workforce requirements for the Dung Quat Oil Refinery's construction, Dung Quat College

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of Technology has proactively taken the initiative by collaborating with companies and domestic training institutions to implement on-site training programs. In 2023, Dung Quat College of Technology partnered with Esuhai Group to provide trainings, including technical skills, foreign language proficiency, and workplace etiquette, to prepare students for employment upon graduation. Additionally, the college has established linkages with the Open University of Ho Chi Minh City, Vietnam Maritime University (Hai Phong), and the University of Fire Prevention and Fighting to offer training in various fields such as finance and banking, business accounting, and fire prevention and fighting, and so on, in response to the specific requests of enterprises.

Apparently, the local workforce has been developed strongly towards collaborative training between educational institutions, contractors, and enterprises, showing the effectiveness of the "three-legged stool" model of workforce development. This collaborative approach has yielded promising results, offering a replicable model for fostering a skilled workforce in Vietnam's industrialization and modernization.

Fourth: showing the initial know-hows to promote the development of high-quality human resources from the practice of a key economic zone and a economic region

The development of high-quality human resources in Dung Quat EZ in recent times has presented several observations, which can be lessons for economic zones nationwide. Specifically, it can be mentioned:

The needing of a close and synergistic approach that brings together various stakeholders in developing a high-quality workforce. This collaborative effort should encompass the entire spectrum of workforce development, from training and recruitment to career advancement. Typically, it can be seen in examples of Japanese, Romanian, and Korean companies. The strength of these linkages lies in the mutual benefits and shared values between employers and employees, fostering a sense of responsibility and collective ownership.

A necessity of implementing a science-based approach of education to improve the quality of human resources. Dung Quat EZ has drawn valuable insights from the human resources development strategies implemented by the EZ Management Board and the provincial government. This strategy has been executed consistently with unwavering commitment, garnering the support of all stakeholders throughout the EZ's development trajectory.

The facilitating of a conducive working and living environment, securing well-beings of employers and employees. In contrast to many industrial and economic zones in Vietnam that lack basic convenience of living and staples (that is, 'five-nos' of no-housing, no-markets, no-schools, no-leisure activities, and no-safe), Dung Quat EZ has established a relatively robust social welfare system for

most of its workers. It encompasses a total area of 45,300 ha, divided into five functional subdivisions: Subdivision 1 (North Dung Quat urban, industrial and service subdivision); Subdivision 2 (Chau O – Binh Long Urban, Industrial and Service Subdivision); Subdivision 3 (the South of Dung Quat Urban, Industrial and Service Subdivision); Subdivision 4 (Southeast Dung Quat Urban and Service Subdivision); Subdivision 5 (Ly Son urban subdivision).

CONCLUSION

Dung Quat EZ has emerged as a driving force for the development of Quang Ngai province and the central region of Vietnam. This remarkable progress is significantly attributed to the availability of a high-quality workforce, a crucial factor in sustaining the EZ's momentum and impact. As the EZ embarks on its expansion and modernization journey, the importance of a skilled workforce remains the decisive factor. In this context, it can be concluded that recognizing the development of a high-quality workforce as a transformative step towards achieving sustainable development in the central economic region of Vietnam is essential.

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