e-ISSN: 3063-3648

# STRATEGIC INFRASTRUCTURE DEVELOPMENT: DRIVING ECONOMIC PROSPERITY AND JOB CREATION

Ben Brahim S. B. \*1

S3 Studi Pembangunan ULM Banjarmasin karindangan34@gmail.com

#### Sidderatul Akbar

Fisip ULM Banjarmasin sidderatulakbar@gmail.com

# Oggy Akmadani

Institut Agama Islam Sultan Muhammad Syafiuddin Sambas oggy.akmadani98@gmail.com

#### **Abstract**

Strategic infrastructure development is a key component in driving economic growth and creating jobs in a country. Infrastructure such as roads, harbours, airports and telecommunication networks not only facilitate the movement of goods and services, but also attract investment and encourage the development of various economic sectors. In addition, the process of infrastructure development itself creates direct and indirect employment. However, the success of infrastructure development depends on careful planning, effective implementation and sustainable management. With the right approach, strategic infrastructure development can be a powerful catalyst for achieving economic prosperity and creating sustainable employment opportunities.

**Keywords:** Development, Strategic Infrastructure, Economic Prosperity, Job Creation.

# Introduction

Infrastructure development is one of the main pillars in driving economic growth and improving people's welfare. Good infrastructure, such as roads, harbours, airports, electricity networks, and telecommunications, is the foundation for efficient and productive economic activity. (Gileva & Peskova, 2020). With adequate infrastructure, logistics costs can be reduced, accessibility between regions increased, and the distribution of goods and services becomes smoother. This not only encourages the growth of the industrial and trade sectors, but also opens up opportunities for the development of previously isolated areas, thereby creating equitable development (Afsar & Hossain, 2020). (Afsar & Hossain, 2020).

In addition, infrastructure development also plays an important role in creating jobs and improving national competitiveness. Large-scale infrastructure projects can absorb a significant amount of labour, both during construction and long-term

-

<sup>&</sup>lt;sup>1</sup> Correspondence author

operations. Good infrastructure also attracts foreign investment, which in turn leads to more employment opportunities and technology transfer. In a global context, countries with developed infrastructure tend to have a stronger position in global value chains and are able to offer a more conducive business environment for investors. (Prabhakar, 2024).

In the era of globalisation and intensified economic competition, the availability of adequate infrastructure is key for a country to compete regionally and globally. Indonesia, as a developing country with great economic potential, still faces significant challenges in terms of infrastructure development. (Neumark & Wohl, 2024)..

In the last few decades, Indonesia has experienced good economic growth. However, this growth has not been fully supported by adequate infrastructure. The infrastructure gap is still one of the main obstacles in realising Indonesia's economic potential optimally. According to World Bank data, the quality of Indonesia's infrastructure still lags behind neighbouring countries in the Southeast Asian region, such as Singapore, Malaysia and Thailand. (Lewis, 2023).

This infrastructure gap impacts various aspects of the economy. High logistics costs, reaching 24% of national GDP by 2022, are one consequence of the lack of efficient transport infrastructure. This reduces the competitiveness of Indonesian products in the global market and hinders the growth of the industrial sector and MSMEs. (Goswami & Paul, 2024)...

On the other hand, Indonesia also faces challenges in terms of job creation. With the number of the labour force growing every year, the need for new jobs is becoming increasingly urgent. The open unemployment rate, which is still in the range of 5-6%, shows that there is still a lot of potential labour that has not been optimally absorbed in the economy. (Zheng, 2021).

In this context, strategic infrastructure development is seen as a solution that can provide a multiplier effect. In addition to improving connectivity and economic efficiency, infrastructure development also has the potential to create a large number of jobs, both directly and indirectly. (Burghes et al., 2021)..

The Indonesian government has realised the urgency of infrastructure development. Through various policies and programmes, such as the National Strategic Project (PSN) and the Public Private Partnership (PPP) scheme, the government is trying to accelerate infrastructure development in various sectors. However, implementation in the field still faces various challenges, ranging from funding issues, land acquisition, to technical capacity and project management. (Leifer & Duarte, 2020).

Therefore, the researcher feels interested in studying strategic infrastructure development and its impact on economic prosperity and job creation is very relevant and important.

#### **Research Methods**

The study in this research uses the literature research method. Literature research method, also known as literature study or literature review, is a research method that focuses on collecting and analysing information from various written sources relevant to the research topic. (Firman, 2018); (Suyitno, 2021).

#### **Results and Discussion**

# Strategic Infrastructure Development in Indonesia

Strategic infrastructure refers to facilities, systems, and assets that have a critical and fundamental role in supporting a country's vital functions, including national security, economy, public health, and public safety. It includes critical elements such as energy networks (power plants, transmission and distribution lines), transportation systems (roads, railways, ports and airports), telecommunications networks, water treatment and distribution systems, healthcare facilities, government data centres and defence infrastructure. (Luong & Azuma, 2022).. The existence and reliability of these strategic infrastructures are critical because disruption or damage to any of their elements can have a significant impact on national stability, economic sustainability, and the welfare of society as a whole. Therefore, the protection, development and maintenance of strategic infrastructure is a top priority in the development and national security policies of many countries. (Ramadan & Morshed, 2024).

Strategic infrastructure development in Indonesia has been a major focus of the government in recent years, with the aim to improve connectivity, drive economic growth, and enhance national competitiveness. The Indonesian government has launched various massive programmes and projects to improve and develop infrastructure across the country. This includes the construction of toll roads, ports, airports, power plants and telecommunication networks. One of the key initiatives is the National Infrastructure Development Programme that aims to accelerate infrastructure development in various strategic sectors. (Zarezankova-Potevska, 2021)...

In the transport sector, Indonesia has made significant progress with the construction of the Trans Java and Trans Sumatra toll road networks, as well as increased port and airport capacity in various regions. Major projects such as the Jakarta Mass Rapid Transit (MRT) and Light Rail Transit (LRT) in several major cities are also under development to address congestion issues and improve urban mobility. In the energy sector, the government is focusing on building new power plants and expanding the transmission network to increase the electrification ratio and support industrial growth. (Das & Roy, 2023).

Despite significant progress, strategic infrastructure development in Indonesia still faces many challenges. The main obstacles include funding issues, difficulties in land acquisition, and the complexity of coordination between government agencies and the private sector. (Fenner, 2020). To address this, the government has adopted innovative

approaches such as Public Private Partnership (PPP) schemes to attract private investment in infrastructure projects. In addition, focus has also been placed on equalising infrastructure development outside Java to reduce regional disparities and promote more inclusive economic growth across Indonesia. (Kui & Pramono, 2023).

# Impact of Infrastructure Development on Economic Prosperity

Infrastructure development has a very significant impact on a country's economic prosperity. Firstly, good infrastructure can improve overall economic efficiency and productivity. For example, a modern and integrated transport network enables faster and cheaper movement of goods and services, reduces logistics costs, and expands market access. This in turn can improve the competitiveness of domestic industries and boost export growth. (Zuofa, 2020).

Second, infrastructure development can create a large number of jobs, both directly and indirectly. Large-scale infrastructure projects require a significant amount of labour for construction and maintenance. In addition, better infrastructure can also boost the growth of other sectors of the economy, which in turn creates more employment opportunities. This increase in employment contributes to a reduction in unemployment and an increase in people's income. (Buryk, 2020).

Third, quality infrastructure can attract foreign direct investment (FDI) into the country. Foreign investors tend to favour locations with good infrastructure to set up their production facilities or offices. The availability of reliable electricity, advanced telecommunication networks, and efficient transport systems are important factors in investment decisions. This increase in FDI can bring new technologies, management skills, and capital that are indispensable for economic growth. (Kumar & Singh, 2024).

Finally, infrastructure development can help reduce economic disparities between regions. By building infrastructure in less developed areas, the government can open up access to wider markets, improve connectivity, and foster local economic development. This can help spread the benefits of economic growth more evenly, reduce over-urbanisation, and create economic opportunities in previously isolated areas. (Venugopal, 2024). Ultimately, equitable infrastructure development can contribute to social and political stability, which is an important foundation for long-term economic prosperity.

# Impact of Infrastructure Development on Job Creation

Infrastructure development has a very significant impact on job creation, both directly and indirectly. Directly, large infrastructure projects such as the construction of roads, bridges, ports and airports require a large workforce. From construction workers, engineers, architects, to project managers, a wide variety of jobs are created

during the planning and building phase. Even after the infrastructure is completed, labour is still needed for maintenance and operations, creating long-term employment. (Chinonso & Jonah, 2024).

Indirectly, infrastructure development fuels the growth of other economic sectors, which in turn creates more jobs. For example, the construction of a new highway can improve the accessibility of an area, encourage local business growth, and attract new investment. This can create jobs in sectors such as manufacturing, trade and services. Moreover, better infrastructure can also improve the productivity and efficiency of existing businesses, allowing them to expand and employ more people. (Kutsenko, 2020).

Furthermore, infrastructure development can trigger a multiplier effect in the economy. The increased income of workers involved in infrastructure projects will increase their purchasing power, which in turn will increase demand for goods and services in the local economy. This can encourage the growth of small and medium enterprises, as well as create more employment opportunities in supporting sectors. (Savchenko, 2020). In addition, better infrastructure can also encourage innovation and entrepreneurship, creating new types of jobs that did not exist before. Thus, the impact of infrastructure development on job creation is broad and sustainable, contributing significantly to economic growth and unemployment reduction (Tsyganov, 2021). (Tsyganov, 2021).

# **Challenges and Constraints in Infrastructure Development**

Infrastructure development, while critical to a country's development, is often faced with complex challenges and constraints. One of the main challenges is funding. Large-scale infrastructure projects require huge investments, which often exceed the government's budget capacity. This encourages governments to seek alternative sources of funding, such as public-private partnerships (PPPs) or loans from international financial institutions. (Ray et al., 2022). However, each of these options also has its own challenges, such as complex negotiations with private parties or increased debt risk.

The second challenge is technical and logistical. Many infrastructure projects involve advanced technology and require specialised expertise that may not always be available in-country. In addition, diverse geographical conditions, such as in Indonesia with its thousands of islands, add complexity to project planning and implementation. Logistical issues, such as the transport of materials and equipment to remote locations, can also be a serious constraint affecting project schedules and costs. (Ambituuni, 2020).

Social and environmental aspects are also a major challenge in infrastructure development. Often, large projects require land acquisition which can lead to conflicts with local communities. Inappropriate relocation and compensation processes can

result in resistance and project delays. On the other hand, the environmental impact of infrastructure projects is also a major concern. Ecosystem damage, loss of biodiversity, and increased pollution are some of the issues that must be addressed to ensure sustainable development. (Ahinsah-Wobil, 2023).

Finally, bureaucratic and governance challenges cannot be ignored. Coordination between government agencies, both central and local, is often a bottleneck in project implementation. Lengthy and complicated licensing processes, as well as potential corruption in project procurement and implementation, can hinder the efficiency and effectiveness of infrastructure development. (Soonyeekhun et al., 2024).. In addition, changes in government policies or priorities due to changes in political leadership can also affect the long-term viability and consistency of infrastructure projects. Addressing these challenges requires a comprehensive approach, involving improvements in planning, project management, and strengthening governance and transparency (Zhang et al., 2023). (Zhang et al., 2023).

# **Strategy to Optimise Infrastructure Development**

To optimise infrastructure development, a comprehensive and integrated strategy is required. One of the key strategies is careful and data-driven planning. The government needs to conduct an in-depth analysis of long-term infrastructure needs, taking into account factors such as population growth, economic development, and technology trends. (Sangiamvibool, 2024). This planning should involve a wide range of stakeholders, including local governments, the private sector, and communities, to ensure that projects are aligned with national development needs and priorities. In addition, the use of technologies such as geographic information systems (GIS) and digital modelling can assist in making planning more accurate and efficient. (Biswas & Mohapatra, 2024)..

The second strategy is to diversify funding sources and optimise budget utilisation. The government needs to explore various financing options, such as issuing infrastructure bonds, innovative public-private partnerships, and utilising pension funds for long-term infrastructure investments. It is also important to improve efficiency in budget utilisation, for example through the application of technology in project management and procurement. (Mushenyk & Chornobay, 2021). In addition, project prioritisation based on rigorous cost-benefit analysis can ensure that limited resources are allocated to projects that have the greatest impact on society and the economy.

Improving the capacity and quality of human resources is the third crucial strategy. This includes developing experts in various infrastructure-related fields, such as civil engineering, project management and environmental analysis. Continuous training and certification programmes need to be conducted to ensure that the local workforce has the skills needed to manage complex infrastructure projects. Collaboration with educational institutions and international organisations can help in

the transfer of knowledge and technology, as well as raising the standards of the national construction industry. (Tsyganov, 2021).

Finally, the implementation of good governance and transparency is an important strategy in optimising infrastructure development. This includes simplifying bureaucratic and licensing processes, strengthening oversight and accountability mechanisms, and increasing transparency in procurement processes and project implementation. The use of technologies such as blockchain to track the utilisation of funds and e-procurement to tender projects can improve efficiency and reduce the risk of corruption. (Kumari, 2024). In addition, community engagement in project monitoring and effective grievance mechanisms can help ensure that infrastructure projects are implemented in accordance with quality standards and provide optimal benefits to the community (Kuzmin, 2023). (Kuzmin, 2023).

#### Conclusion

Strategic infrastructure development plays a vital role in driving economic prosperity and job creation in a country. Good and integrated infrastructure, such as roads, harbours, airports, and telecommunication networks, is an important foundation for sustainable economic growth. By improving connectivity between regions, strategic infrastructure facilitates more efficient movement of goods and services, encourages trade, and attracts investment from both within and outside the country. This in turn creates a conducive environment for the development of various economic sectors, ranging from manufacturing industries to services and tourism.

Infrastructure development also plays a direct role in job creation, both during the construction process and in the long term. Large-scale infrastructure projects absorb a significant amount of labour, from construction workers to engineers and project managers. In addition, better infrastructure opens up opportunities for new businesses and expansion of existing businesses, which in turn creates more jobs in various sectors of the economy. Improved accessibility and connectivity also allows communities in remote areas to connect with economic centres, opening up access to better education and employment opportunities.

However, it is important to note that the success of strategic infrastructure development in driving economic prosperity and job creation depends on careful planning, effective implementation and sustainable management. The government needs to ensure that infrastructure investments are made efficiently, taking into account the long-term impacts on the environment and society. In addition, synergies between infrastructure development and human resource development are needed to ensure that the local workforce has the skills needed to take advantage of the economic opportunities created. With a holistic and sustainable approach, strategic infrastructure development can be a powerful catalyst in realising inclusive economic growth and improved overall community welfare.

#### References

- Afsar, R., & Hossain, M. (2020). *Dhaka's Changing Landscape*. Query date: 2024-09-29 17:06:23. https://doi.org/10.1093/oso/9780190121112.001.0001
- Ahinsah-Wobil, I. (2023). Development Authorities in Ghana as a Tool to Speed up the Development Agenda in Ghana with Strategic Financing for Infrastructure Projects. SSRN Electronic Journal, Query date: 2024-09-29 17:10:06. https://doi.org/10.2139/ssrn.4382953
- Ambituuni, A. (2020). Delivering Major Infrastructure Projects Effectively and Efficiently.

  Routledge Handbook of Planning and Management of Global Strategic
  Infrastructure Projects, Query date: 2024-09-29 17:10:06, 175-196.

  https://doi.org/10.1201/9781003036388-8
- Biswas, S. N., & Mohapatra, P. (2024). Evaluating the Impact of Physical and Digital Infrastructure for the Development of Tourism Business in North-East India, with Special Reference to Assam. Sustainable Strategic Business Infrastructure Development and Contemporary Digital Practices in Industry 5.0, Query date: 2024-09-29 17:10:06, 175-184. https://doi.org/10.1201/9781003492160-11
- Burghes, D., Hunter, J., & Ying, N. (2021). Mathematics education for sustainable economic growth and job creation: Setting the scene. *Mathematics Education for Sustainable Economic Growth and Job Creation*, Query date: 2024-09-29 17:06:23, 1-5. https://doi.org/10.4324/9781003048558-1
- Buryk, M. (2020). ANALYSIS OF STRATEGIC PLANNING IN THE ACTIVITIES OF THE STATE DEPARTMENT OF TRANSPORT INFRASTRUCTURE DEVELOPMENT. *Investytsiyi:* Praktyka Ta Dosvid, 17, 143-143. https://doi.org/10.32702/2306-6814.2020.17-18.143
- Chinonso, A. A., & Jonah, O. I. (2024). China's Belt and Road Initiative and Infrastructure Development in Nigeria: A Paradigm Shift or Failed Ventures Repackaged? China Quarterly of International Strategic Studies, Query date: 2024-09-29 17:10:06. https://doi.org/10.1142/s2377740023500100
- Das, P., & Roy, S. (2023). Youth Unemployment, Education and Job Training: An Analysis of PLFS Data in India. Reimagining Prosperity, Query date: 2024-09-29 17:06:23, 59-78. https://doi.org/10.1007/978-981-19-7177-8 5
- Fenner, M. (2020). 2020 Strategic Priorities for Services and Infrastructure. Query date: 2024-09-29 17:10:06. https://doi.org/10.53731/r79rpj1-97aq74v-ag4qd
- Firman, F.-. (2018). QUALITATIVE AND QUANTITATIVE RESEARCH. Query date: 2024-05-25 20:59:55. https://doi.org/10.31227/osf.io/4nq5e
- Gileva, T., & Peskova, D. (2020). Creation of the Strategic Personnel Development Programme. Proceedings of the "New Silk Road: Business Cooperation and Prospective of Economic Development" (NSRBCPED 2019), Query date: 2024-09-29 17:06:23. https://doi.org/10.2991/aebmr.k.200324.136
- Goswami, D., & Paul, S. B. (2024). Job Creation and Job Destruction in Indian Manufacturing. The Indian Economic Journal, Query date: 2024-09-29 17:06:23. https://doi.org/10.1177/00194662241251556
- Kui, D. O. K., & Pramono, R. (2023). A conceptual framework combining environmental worldview, organizational learning, and strategic planning contributing to

- sustainable development. Journal of Infrastructure, Policy and Development, 7(2), 2126-2126. https://doi.org/10.24294/jipd.v7i2.2126
- Kumar, S., & Singh, K. (2024). Analysing the Potential of Bitcoin to Become a Global Currency. Sustainable Strategic Business Infrastructure Development and Contemporary Digital Practices in Industry 5.0, Query date: 2024-09-29 17:10:06, 1-20. https://doi.org/10.1201/9781003492160-1
- Kumari, B. (2024). Healthcare Industry 4.0 to 5.0: A Psychological Study. Sustainable Strategic Business Infrastructure Development and Contemporary Digital Practices in Industry 5.0, Query date: 2024-09-29 17:10:06, 237-252. https://doi.org/10.1201/9781003492160-15
- Kutsenko, M. (2020). COGNITIVE DEVELOPMENT OF THE PROJECT TEAM IN STRATEGIC DEVELOPMENT MANAGEMENT OF THE ORGANISATION. *Market Infrastructure*, 46. https://doi.org/10.32843/infrastruct46-12
- Kuzmin, P. S. (2023). IMPLEMENTATION OF INFRASTRUCTURE PROJECTS FOR THE DEVELOPMENT OF RAILWAY TRANSPORT HUBS: EMPIRICAL ANALYSIS. Strategic Decisions and Risk Management, 13(4), 364-375. https://doi.org/10.17747/2618-947x-2022-4-364-375
- Leifer, M., & Duarte, C. (2020). Noncontextuality inequalities from antidistinguishability. *Physical Review A*, 101(6). https://doi.org/10.1103/physreva.101.062113
- Lewis, O. (2023). Infrastructure Investment and Job Creation under the U.S. 2021 Economic Stimulus Plan. International Journal of Social Science and Research, 1(2). https://doi.org/10.58531/ijssr/1/2/8
- Luong, T. A., & Azuma, Z. (2022). On the Road to Economic Prosperity. Query date: 2024-09-29 17:06:23. https://doi.org/10.1017/9781009029360
- Mushenyk, I., & Chornobay, L. (2021). FORMATION OF ENTERPRISE DEVELOPMENT STRATEGY WITH THE USE OF STRATEGIC CONTROLLING INSTRUMENTS. *Market Infrastructure*, 52. https://doi.org/10.32843/infrastruct52-17
- Neumark, D., & Wohl, E. (2024). Flying Blind on Job Creation Policies? A Case Study of California. Economic Development Quarterly, 38(3), 141-163. https://doi.org/10.1177/08912424241254797
- Prabhakar, A. C. (2024). Driving Economic Prosperity: Fostering Job-Oriented Sustainable and Inclusive Development in India. *Open Journal of Business and Management*, 12(4), 2854-2885. https://doi.org/10.4236/ojbm.2024.124147
- Ramadan, A., & Morshed, A. (2024). Optimising retail prosperity: Strategic working capital management and its impact on the global economy. *Journal of Infrastructure, Policy and Development*, 8(5), 3827-3827. https://doi.org/10.24294/jipd.v8i5.3827
- Ray, N., Das, S. K., & Chakraborty, M. (2022). Contemporary Strategic Business Infrastructure Development in Turbulent Economies. Nova Science Publishers. https://doi.org/10.52305/zjus1285
- Sangiamvibool, A. (2024). Enhancing business performance through strategic integration of Naga worship. Journal of Infrastructure, Policy and Development, 8(8), 5559-5559. https://doi.org/10.24294/jipd.v8i8.5559

- Savchenko, O. (2020). COMMERCIAL ENTERPRISES STRATEGIC DEVELOPMENT MOTIVATIONAL COMPONENT IN CONDITIONS OF CHANGE. Market Infrastructure, 45. https://doi.org/10.32843/infrastruct45-24
- Soonyeekhun, W., Poolkrajang, A., & Papanai, R. (2024). Development of strategic participatory moral education management model in private vocational colleges. Journal of Infrastructure, Policy and Development, 8(9). https://doi.org/10.24294/jipd.v8i9.8322
- Suyitno. (2021). QUALITATIVE RESEARCH METHODS CONCEPTS, PRINCIPLES AND OPERATIONS. Query date: 2024-05-25 20:59:55. https://doi.org/10.31219/osf.io/auqfr
- Tsyganov, V. (2021). Complex of Models for Strategic Management of the Development of Large Transport Infrastructure. 2021 14th International Conference Management of Large-Scale System Development (MLSD), 8(Query date: 2024-09-29 17:10:06), 1-5. https://doi.org/10.1109/mlsd52249.2021.9600223
- Venugopal, K. (2024). Assessment of Investment Priorities by Rural Women. Sustainable Strategic Business Infrastructure Development and Contemporary Digital Practices in Industry 5.0, Query date: 2024-09-29 17:10:06, 161-173. https://doi.org/10.1201/9781003492160-10
- Zarezankova-Potevska, M. (2021). The Role of Education for Creation of Entrepreneurship Society. Engines of Economic Prosperity, Query date: 2024-09-29 17:06:23, 179-191. https://doi.org/10.1007/978-3-030-76088-5 10
- Zhang, J., Wang, X., Sha, C., Li, Y., Li, X., Tan, W., & Li, L. (2023). Digital Infrastructure System for Biomedical Research and Development. Strategic Study of CAE, 25(5), 92-92. https://doi.org/10.15302/j-sscae-2023.05.018
- Zheng, L. (2021). Job creation or job relocation? Identifying the impact of China's special economic zones on local employment and industrial agglomeration. *China Economic Review*, 69(Query date: 2024-09-29 17:06:23), 101651-101651. https://doi.org/10.1016/j.chieco.2021.101651
- Zuofa, T. (2020). Achieving Sustainable Major Infrastructure Projects. Routledge Handbook of Planning and Management of Global Strategic Infrastructure Projects, Query date: 2024-09-29 17:10:06, 71-102. https://doi.org/10.4324/9781003036388-4