Fenomena: Journal of the Social Sciences

Vol. 23 No. 2 (2024): 195-208

Available online at https://fenomena.uinkhas.ac.id/index.php/fenomena/

Post-Construction Challenges in Infrastructure Development: An Ecotheological Perspective on Achieving SDGs

Andriani¹

¹ Universitas Islam Negeri Syekh Wasil Kediri, Indonesia Email: andriani@iainkediri.ac.id¹

DOI: https://doi.org/10.35719/fenomena.v23i1.598

Received: Sept 25, 2024 Revised: Oct 2, 2024 Accepted: Nov 10, 2024 Published: Dec 19, 2024

Abstract:

The construction of Dhoho Airport in Kediri is expected to stimulate local economic growth but also presents notable risks to achieving the 17 Sustainable Development Goals (SDGs). This study provides a critical evaluation from an Eco-Theology perspective, an approach rarely used in Indonesian infrastructure and SDG research, thereby offering fresh ethical-environmental insights. Using a qualitative descriptive method, data were gathered from literature, official documents, and interviews. The findings reveal partial SDG achievement (Goals 1, 4, 8, 11, and 17), while others remain unmet (Goals 2, 3, 5–7, 12–16). Major challenges include conversion of productive agricultural land, heightened noise and air pollution (noise levels reaching 43.72% in Grogol Village), and increased risks of landslides and flooding due to inadequate water management in hilly areas. Originality and Significance this research fills a gap by integrating eco-theological ethics into infrastructure evaluation, highlighting moral responsibilities often overlooked in policy debates on sustainability. The study bridges theology, ecology, and development studies, emphasizing that sustainable infrastructure must address not only technical and economic goals but also humanity's ethical duty to protect and care for the environment.

Keywords: Evaluation, Challenges, Dhoho Airport, SDGs, Ecotheology

Abstrak:

Pembangunan Bandara Dhoho di Kediri diharapkan dapat mendorong pertumbuhan ekonomi lokal, namun juga menimbulkan risiko signifikan terhadap pencapaian 17 Tujuan Pembangunan Berkelanjutan (SDGs). Studi ini memberikan evaluasi kritis dari perspektif Eco-Theology, pendekatan yang jarang digunakan dalam penelitian infrastruktur dan SDGs di Indonesia, sehingga menawarkan wawasan etis-lingkungan yang baru. Menggunakan metode deskriptif kualitatif, data dikumpulkan dari literatur, dokumen resmi, dan wawancara. Hasil penelitian menunjukkan pencapaian sebagian SDGs (Tujuan 1, 4, 8, 11, dan 17), sementara yang lain belum terpenuhi (Tujuan 2, 3, 5-7, 12-16). Tantangan utama meliputi konversi lahan pertanian produktif, peningkatan polusi suara dan udara (tingkat kebisingan mencapai 43,72% di Desa Grogol), serta risiko longsor dan banjir yang meningkat akibat pengelolaan air yang tidak memadai di daerah berbukit. Keaslian dan Signifikansi penelitian ini mengisi celah dengan mengintegrasikan etika ekoteologi ke dalam evaluasi infrastruktur, menyoroti tanggung jawab moral yang sering diabaikan dalam debat kebijakan tentang keberlanjutan. Studi ini menjembatani teologi, ekologi, dan studi pembangunan, menekankan bahwa infrastruktur berkelanjutan harus tidak hanya memenuhi tujuan teknis dan ekonomi tetapi juga kewajiban etis manusia untuk melindungi dan merawat lingkungan.

Kata Kunci: Evaluasi, Tantangan, Bandara Dhoho, SDGs, Ecotheology

Correspondent andriani@iainkediri.ac.id (Andriani)

Author:



How to cite:	Andriani, A. (2024). Post-Construction Challenges in Infrastructure Development: An		
	Ecotheological Perspective on Achieving SDGs. Fenomena, 24(2), 195-208.		
	https://doi.org/10.35719/fenomena.v24i2.592.		
Publisher:	Centre for Research and Community Service (LP2M), UIN Kiai Haji Achmad Siddiq		
	Jember		

INTRODUCTION

Infrastructure development plays a vital role in enhancing regional economic growth and national connectivity. One landmark example is Dhoho Kediri Airport, the first airport in Indonesia built without State Budget (APBN) funding through a private unsolicited PPP scheme by PT Gudang Garam/Surya Dhoho Investama. Since its soft launch in April 2024, it has served over 20,000 passengers and is projected to catalyze economic transformation, tourism growth, and inter-regional trade in southern East Java (Antara News, 2024). Previous studies highlight that airports can drive job creation, logistics expansion, and market access for agricultural products (Detik.com, 2023; Putra, 2024). However, these benefits are often accompanied by environmental and social risks such as land conversion, air and noise pollution, relocation, inequality, and cultural disruption (DJKN Kemenkeu, 2022).

Although many studies examine the economic impacts of airport infrastructure, few provide an integrative assessment of its alignment with the Sustainable Development Goals (SDGs). Existing literature tends to analyze economic or environmental impacts separately, overlooking socio-cultural aspects and the ethical dimensions of sustainability. Moreover, the potential of *ecotheology*—a religious-environmental framework emphasizing harmony between humans and nature (Ridwanuddin, 2017; Purniawan, 2020; Quddus, 2020)—remains underexplored in the context of infrastructure development. This leaves a notable research gap on how large-scale private airport projects intersect with SDGs and ecotheological principles.

Addressing this gap is essential because Dhoho Kediri Airport involves significant trade-offs: while promising economic growth and better connectivity, it also poses risks to food security, social cohesion, and environmental sustainability. A holistic analysis is required to ensure that infrastructure development aligns with global and ethical sustainability agendas.

This study aims to evaluate the extent to which Dhoho Kediri Airport contributes to or hinders the achievement of the SDGs, and to explore the potential role of ecotheology as a guiding principle for sustainable airport governance. Using a qualitative and multidimensional approach, this research offers critical insights and policy recommendations for balancing economic growth, social justice, and environmental ethics in future infrastructure projects.

METHOD

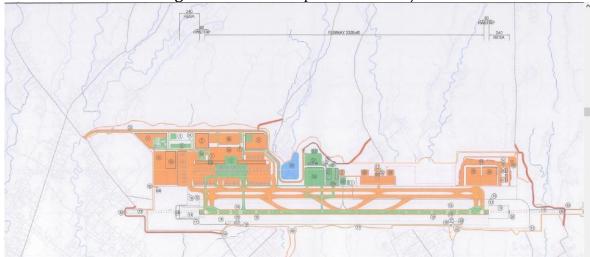
The phenomenon studied in this research is is highly urgent because it is related to strategic issues that have an impact on the development of science and practice in the field. This topic is worthy of study because there is a research gap in comprehensively and deeply discussing this phenomenon, even though the issue has important implications for policy-making and the development of more effective strategies. In-depth study is needed to understand the dynamics, challenges, and opportunities that arise, so that the results of this study can provide academic contributions as well as practical recommendations for stakeholders

This research uses a qualitative approach with descriptive analysis methods. The qualitative approach was chosen because it allows for in-depth and contextual exploration of the phenomenon (Rukin, 2016). Descriptive analysis is used to provide a comprehensive overview of the research subject based on available data. The data used are secondary data obtained indirectly through literature studies from various credible sources such as books, scientific articles, official reports, and relevant websites (Restu, 2021; Fatihudin, 2015). The data collection process was carried out by selecting relevant literature, recording important findings, and organizing information according to the research focus (Prihatiningsih, 2015).

Data analysis was conducted systematically through several stages. First, open coding was performed by reading all the literature and marking issues, concepts, or important findings relevant to the research questions. Second, the coding results were grouped into broader thematic categories, such as theoretical, practical, and policy aspects, to identify patterns and interrelationships between concepts. Third, comparative interpretation and analysis were conducted, which involved comparing findings from various sources, evaluating similarities and differences in perspectives, and relating them to theoretical frameworks and previous research. Finally, thematic synthesis was conducted, which involved compiling all findings into a comprehensive narrative that answered the research question while providing an in-depth understanding of the phenomenon under study. This analytical approach not only describes the existing data but also provides critical interpretations that enrich scientific discourse.

RESULTS AND DISCUSSION Result

Figure 1: Dhoho Airport Kediri Project



Source: www.skyscrapercity.com

From the picture above, it can be explained that the development of Dhoho Kediri Airport is a construction project for a modern regional transportation hub. Its purpose is to stimulate significant economic growth and development in the Kediri region. The available visual depicts a comprehensive infrastructure project featuring a single runway and a large terminal building, capable of handling commercial flights.

Table 1: Post-Construction Evaluation of Dhoho Kediri Airport in Realizing the SDGs

No	SDGs Indicator	Achievement
1	Without poriverty	Achieved
2	No Hunger	Not yet achieved
3	Healthy and Prosperous Life	Not yet achieved
4	Education Quality	Not yet achieved
5	Gender Welfare	Not yet achieved
6	Clean water and proper sanitation	Not yet achieved
7	Affordable Clean Energy	Not yet achieved
8	Decent work and economic growth	Achieved
9	Industry, Innovation and Infrastructure	Achieved
10	Reducing Inequality	Achieved
11	Sustainable Cities and Settlements	Achieved
12	Responsible Consumption and Production	Not yet achieved
13	Climate Change Management	Not yet achieved
14	Marine Ecosystem	Not yet achieved
15	Terrestrial Ecosystem	Not yet achieved
16	Peace, Justice and Strong Institutions	Not yet achieved
17	Partnership to achieve goals	Achieved
_		

Source: Observation data results

The post-construction assessment of Dhoho Kediri Airport reveals that progress toward the SDGs is partial and uneven. Achievements are primarily concentrated in economic and infrastructural domains, including poverty alleviation, decent work and economic growth, industry and innovation, reduced inequalities, sustainable urban settlements, and global partnerships. However, a significant number of targets remain unfulfilled, particularly those related to food security, public health, quality education, gender equality, clean water and sanitation, and affordable energy.

Environmental sustainability presents additional concerns, as indicators on climate action, responsible consumption, and the protection of marine and terrestrial ecosystems have yet to show meaningful progress. From an ecotheological standpoint, the evaluation highlights critical challenges, notably inadequate preservation of the natural environment, insufficient pollution and waste management, and limited integration of spirituality and local wisdom into development practices.

While economic benefits are evident, the predominance of growth-oriented achievements underscores the need for a more holistic approach to sustainability. Addressing these gaps requires participatory planning, inclusive governance, and interdisciplinary strategies that integrate ethical, ecological, and socio-cultural dimensions. Longitudinal monitoring and stakeholder engagement are essential to ensure that future infrastructure development aligns with ecological integrity and social justice, consistent with the broader vision of the SDGs.

Table 2: Post-Construction Challenges of Dhoho Airport in Kediri: An Ecotheological Perspective

======================================				
No	Indicator	Achievment		
1	Natural Environment	Not yet achieved		
2	Pollution and Waste	Not yet achieved		
3	Spirituality and Local Wisdom	Not yet achieved		

Source: Observation data results

From an ecotheological perspective, the airport project faces significant challenges. Natural environment protection, pollution and waste management, and integration of spirituality and local wisdom have not been achieved. The only area of success lies in economic benefits, such as job creation and investment growth. This imbalance highlights the need for a more holistic development approach that integrates ecology, spirituality, local cultural values, and economic progress.

Discussion

Post-Construction Evaluation of Dhoho Kediri Airport in Realizing the SDGs

The construction of Dhoho Kediri International Airport is one of the national strategic projects that is not only aimed at improving air transportation connectivity in the southern part of East Java, but also as a form of actualizing sustainable development at the local level. Based on observations and secondary data documentation, the construction of this airport has been proven to support several goals within the framework of the Sustainable Development Goals (SDGs) established by the United Nations (UN). At least five SDGs have been achieved through the construction of Dhoho Kediri Airport.

1. Goal 1: No Poverty

During the airport construction process, thousands of local workers were employed in construction, security, logistics, and technical roles. Once operational, the airport will create jobs in the transportation, public services, hospitality, and MSME sectors in the surrounding area (BPS Kabupaten Kediri, 2024). The increase in tourist and investor visits to the Kediri region has the potential to boost the people's economy, such as crafts, culinary, homestays, and service businesses UNDP (2023). Micro and small businesses around the airport gain wider market access (Kompas.com, 2024). There has been an improvement in access roads, public facilities, and the introduction of electricity and clean water networks to several areas around the airport. This has improved the quality of life for communities that previously had minimal infrastructure (Tempo.co, 2023).

2. Goal 4: Quality Education

The development of Dhoho Kediri Airport as a major infrastructure project can influence the education sector by opening up access, creating job opportunities, and developing the surrounding area. (BPS Kabupaten Kediri, 2024). The airport facilitates the mobility of lecturers, students, and university students to and from Kediri, strengthening connections with national/international campuses. Kediri students can more easily access internship or training programs outside the city (Kemendikbudristek, 2023).

3. Goal 8: decent work and economic growth

The airport construction has created jobs in both the construction and operational phases. Residents in the vicinity of the project, such as in Tiron Village, have experienced increased employment opportunities and involvement in economic activities related to tourism, trade, transportation, and accommodation. This is in line with SDG 8, which emphasizes the importance of creating productive jobs and inclusive economic growth. The community has welcomed the airport positively

because it encourages the growth of MSMEs and opens up new market access, especially for local products from Kediri. Economic activity in the informal sector has also increased, demonstrating the multiplier effect of this major infrastructure development. Dhoho Airport is projected to absorb 1,000–3,000 workers, both directly (airport, security, ground handling) and indirectly (SMEs, accommodation, transportation) (PwC Indonesia, 2023).

4. Goal 9: Industry, Innovation, and Infrastructure

Dhoho Kediri Airport was built under a PPP (Public-Private Partnership) scheme, which is an innovative form of infrastructure project financing and management. The airport was also designed as a green airport, integrating energy efficiency and environmental sustainability. The existence of this new infrastructure strengthens the connectivity of the southern region of East Java, which previously lacked air transportation services. According to News, The airport speeds up logistics distribution and expands the regional industrial network, especially for the agribusiness and manufacturing sectors in Kediri and its surrounding areas.

5. Goal 10: reducing disparities

One of the main problems of national development is the gap between the northern and southern regions of East Java. Dhoho Airport has been established as a strategic initiative to enhance access for the southern region to national and international economic growth centers. As population and goods mobility from the southern region increases, the socio-economic disparity between the northern region (such as Surabaya) and the southern region (such as Kediri, Tulungagung, and Blitar) can be mitigated.

6. Goal 11: Sustainable Cities and Settlements

With the construction of Dhoho Airport, the transformation of the surrounding rural areas into agropolitan areas has become increasingly apparent. Improved accessibility is driving the emergence of new residential areas, housing developments, and public services around the airport. Additionally, the local government is beginning to plan the area to be more environmentally friendly and integrated with public transportation. Spatial planning focused on mobility and connectivity further supports the creation of more inclusive, safe, and sustainable residential areas and cities in line with SDG 11 indicators.

Affected residents who were relocated to a new settlement (Ngolakan Hamlet) lived without electricity for nearly two years, highlighting disparities in the provision of basic facilities Merdeka.com (2022). Air services have been temporarily suspended until July 2025 due to a lack of operational support and minimal coordination with these 13 buffer zones, reducing infrastructure utility and broader welfare effects.

7. Goal 17: Partnership to achieve goals

The construction of Dhoho Airport demonstrates the synergy between the public and private sectors. PT Gudang Garam, through its subsidiary PT Surya Dhoho Investama, is the main contractor for this project, working in collaboration with the central and local governments. This collaboration model serves as a best practice in implementing sustainable development partnerships, as outlined in SDG 17. Through this partnership, infrastructure development does not entirely burden the state budget, while still adhering to principles of transparency and public accountability, and simultaneously bringing economic benefits to the community.

Dhoho Airport is the largest non-budgetary (unsolicited) Public-Private Partnership (PPP) project in Indonesia. Funding is entirely provided by PT Surya

Dhoho Investama (a subsidiary of PT Gudang Garam Tbk), with coordination from the Ministry of Transportation and the local government. This airport is an example of an innovative partnership that accelerates development without burdening the state budget. Gudang Garam, as the dominant actor in financing and management, could trigger an imbalance of power in project decision-making. Partnerships tend to be top-down, not yet fully involving civil society as equal partners.

There are also several SDGs that have not been or are insufficiently fulfilled, including:

1. Goal 2: Zero Hunger

The construction of airports and supporting facilities (toll roads, hotels, business districts) has led to the conversion of productive land into industrial and commercial land. This has reduced the amount of agricultural land, which has the potential to decrease local food production (BPS Kabupaten Kediri, 2024). Urbanization and rising land prices have led to increased prices for basic necessities in surrounding areas, limiting access to nutritious food for poor families. Changes in land use and potential pollution from airport operations (such as wastewater and emissions) could negatively impact the quality of the surrounding agricultural environment (Mongabay.co.id, 2023).

2. Goal 3: healthy and prosperous life

Airport operations and vehicle traffic around the area cause air and noise pollution that could potentially harm the health of local residents. The analysis states that airport construction and operations must be accompanied by emissions and noise mitigation measures (DJKN Kemenkeu). Regular public transportation to the airport is not yet available, so local residents often use private vehicles. This may increase local pollution and make it difficult for residents to access basic and medical services.

3. Goal 5: Gender equality

Many female workers in the Dhoho Airport area work as shop staff, stall workers, or souvenir sellers at the airport. When flight operations were temporarily suspended, many of them lost their income because the stores were temporarily closed (Radar Kediri). This situation reflects the uncertainty of informal work, without guarantees of workers' rights such as menstrual leave, maternity leave, or workplace safety protections. A study (PSPK UGM, 2023) revealed that formal job opportunities at the airport, such as ground-handling or operational roles, require certifications and technical skills that are predominantly held by men. Meanwhile, women tend to be stuck in informal or non-technical jobs (PSPK UGM, 2023).

4. Goal: clean water and proper sanitation

The airport construction is taking place on hundreds of hectares of agricultural land and vegetation in the subdistricts of Banyakan, Grogol, and Tarokan. This has resulted in a significant reduction in natural water catchment areas, increasing the risk of flooding and affecting groundwater quality. Residents displaced by land acquisition often occupy temporary settlements with incomplete infrastructure, including access to clean water, adequate sanitation systems, and proper drainage. This poses a risk of increasing diseases related to environmental hygiene (DJKN, 2024).

5. Goal 7: Clean and affordable energy

Clean and affordable energy Airport operations (aircraft, passenger vehicles, industrial air conditioning) contribute to fossil fuel consumption and high carbon emissions. Not all aspects of operations use environmentally (Kementerian ESDM, 2023). No reports have been found on the significant use of solar, wind, or biomass

energy in Dhoho Airport operations. The high solar radiation potential in Kediri has not been fully utilized for solar panels (PLN Kediri, 2023). There are few educational programs or incentives for the surrounding communities to transition to clean energy sources such as induction cookers, biogas, or rooftop solar power systems (Kompas.com, 2024).

6. Goal 12: sustainable consumption and production

Airport operations generate large amounts of waste from passenger, logistics, and food and beverage activities, particularly plastic waste, food waste, and single-use packaging. There is currently no optimal integrated waste recycling and treatment system in place at airports. Airport facilities consume a lot of electricity for air conditioning, lighting, and operations, as well as water for toilets, restaurants, and cleaning. Energy and water efficiency have not been fully implemented (e.g., not all toilets use water-saving systems) (UNDP, 2023). Although many SMEs have been assisted, not all have adopted sustainable principles, such as excessive use of raw materials, plastic packaging, or environmentally harmful production processes. Upper-middle-class communities more easily access consumer services around the airport (restaurants, souvenir shopping, hotels).

7. Goal 13: climate change management

PT Angkasa Pura I, as the operator, is committed to implementing the concept of an eco-friendly airport, including greening, the use of LED lights, solar power plants, green buildings, and ISO environmental and energy certification (ANTARA News, 2024). However, this airport still contributes to CO₂ emissions from aircraft activities, ground handling, operational vehicles, and electricity, which need to be managed more effectively to support decarbonization targets. Approximately 300–428 hectares of forest, agricultural, and vegetation land were lost due to airport construction, leading to a decrease in water absorption capacity and an increased risk of flooding due to the loss of trees' water absorption functions and local microclimate degradation (Radar Kediri, 2024).

8. Goal 14 and 15: marine and terrestrial ecosystems

Erosion and sedimentation from airport construction and the relocation of vulnerable agricultural land carry sediment into rivers and ultimately into marine ecosystems. Excessive sedimentation can damage coastal habitats and coral reefs. Currently, there is no mapping of the impact of sedimentation on the marine waters around the downstream area (no visible mitigation efforts). Water pollution and waste from airport activities (vehicle maintenance, oil, hazardous waste) can flow through drainage systems into rivers, then into the sea, disrupting water quality and biota downstream. Currently, runoff management is not yet fully systematic (Infodong). Dhoho Airport was built on approximately 400 hectares of agricultural land, plantations, and vegetation (±428 ha), leading to the degradation of terrestrial biodiversity

The lack of water absorption due to land conversion causes frequent flooding in the western region of the Brantas River. This also has a negative impact on soil quality, agriculture, and natural vegetation in the surrounding area. Without vegetative restoration, the effects will be long-lasting. Only limited reforestation has been carried out in the airport zone by the Kediri Regional Government (gateway & park). However, the implementation of large-scale ecological restoration efforts such

as reforestation or local habitat restoration remains unclear for broader areas (Jawa Pos, 2023).

9. Goal 16: peace, justice, and strong institutions

The acquisition of land for Dhoho Airport covering an area of approximately 454 hectares, including around 200 hectares in Grogol Village, has triggered agrarian conflicts between residents and PT Surya Dhoho Investama (a subsidiary of Gudang Garam), related to differences in compensation and compensation procedures (PSPK UGM, 2023). Some residents have filed lawsuits and only received minimal increases in compensation, without any viable solutions for new housing or alternative livelihoods. The conflict resolution was managed by Grogol Village as a neutral local mediator, but the village government's involvement was limited in providing systemic solutions. It only mediated a compromise agreement without guaranteeing long-term justice for the affected residents. There is no public mechanism to evaluate the governance of the KPBU or the participatory land acquisition process.

A study on collaborative governance (PPP/BOT) states that there is no trust-building between the government, the private sector, and the community, causing initial obstacles in the implementation of the airport project due to limited inclusive communication. The dominant compensation model is currently cash-based, but it is not accompanied by psychosocial relocation facilities, or community involvement in CSR and post-transition policies for farmers who have lost their livelihoods (DJKN Kemenkeu, 2024). Decision-making regarding airport development is primarily carried out by central authorities and corporations, while women, civil society, and local institutions such as Islamic boarding schools are only involved in a symptomatic manner, not structurally (Tempo Nasional, 2023).

Post-Construction Challenges of Dhoho Kediri Airport: An Ecotheology Perspective

Overall, the construction of Dhoho Kediri Airport poses significant challenges to environmental sustainability, ranging from land use conversion, habitat degradation, to air pollution and noise disturbance. However, with the implementation of integrated environmental mitigation measures, as well as active community involvement in adaptation and compensation processes, these negative impacts have the potential to be substantially minimized. The impacts of airport construction from an ecotheology perspective.

1. Natural Environment

The challenge of preserving the environment around airports is contrary to the principle of maintaining the mizan (balance of nature). Destroying the ecological order that Allah has created in balance. Some of these challenges include:

a. Agricultural Land Conversion

Based on the analysis of Google Earth images between 2014, 2020, and 2023, around 427.95 Ha of agricultural land and gardens were converted for the airport area. According to official reports, more than 90% of the airport site (376-400 Ha) is agricultural land, and there is a shrinking agricultural land area of up to 130 Ha in 2020-2021, which has an impact on local food security.

b. landslide risk and water management

The project area covers a hilly landslide-prone area in Grogol Sub-district. Without proper water management mitigation from the Ministry of PUPR, the risk of flooding and landslides remains high (DJKN Kemenkeu, 2024).

c. Air and dust police

Measurements in Grogol Village showed that the noise indicator reached 43.72% as the main impact on the community environment around the airport (Lusiantini, et al, 2021).

2. Pollution and sewage

Potential aircraft noise, air pollution, and waste from airport activities and toll road access. Damaging the rights of other living beings to live in a clean environment. Violates Islamic ethics in maintaining *thaharah* (cleanliness). Environmental and waste challenges include:

a. Air and Noise Pollution

Flight operations cause noise pollution and aircraft exhaust emissions that affect the surrounding population. Mitigation measures such as greening buffer zones at settlement boundaries and integrated transportation are needed (Mojok.co). The case study in Grogol Village shows that the noise indicator is the biggest environmental impact with a value of around 43.72% of respondents. Land use change is also significant (\~42.8%) (Lusiantini, et al, 2021).

b. Waste and Management System

The airport claims to use rainwater management systems for irrigation, solar panel technology, energy-efficient LED lighting, and waste recycling systems to support the green airport concept.

c. Land Conversion and Ecological Impacts

The construction of Dhoho Airport is carried out on \pm 376 ha of agricultural land in Banyakan, Grogol, and Tarokan sub-districts. More than 90% is agricultural and plantation land, which is converted to airport infrastructure and toll road access; causing a decrease in agricultural land area of \pm 130 ha on average (2020-2021) and posing a threat to local village food security.

3. Spirituality and local wisdom

The loss of cultural land and the relocation of communities without the involvement of the meaning of local spirituality. Eroding the sacred relationship of the community with their homeland as part of God's creation that has spiritual value.

a. Socio-Religious Transformation in Bulusari Village

Research by UIN Tulungagung shows that the people of Bulusari Village experienced social and religious transfiguration after the presence of Dhoho Airport refers to social religious transfiguration due to changes in the environment, culture, and local religious values.

b. Impact on Socio-Religious Activities (Bulusari Village)

The study from IAIN Sheikh Wasil Kediri explains the direct impact on local religious practices:

- 1) Positive: easier access to Hajj/Umrah; utilization of financial assistance for religious activities.
- 2) Negative: declining levels of participation in regular recitations, fewer TPQ (Taman Pendidikan Al-Qur'an) students, and the location of the cemetery being further away from residential areas. The community adapted by shifting activities to a closer place or rearranging the recitation schedule (Ramadhani, 2024).
- c. Local wisdom and cultural identity in airport architecture

Dhoho Airport carries a number of local cultural elements as a form of respect for Kediri and Mataraman heritage:

- 1) Traditional ornaments such as replica temples, jaranan statues, reliefs, and monuments are displayed in the passenger terminal as visual identities and local spiritual symbols.
- 2) East Java Governor Khofifah emphasized that the Kediri-Mataraman cultural icon at the airport strengthens the nuances of local wisdom which is a spiritual and cultural strength (Detik Jatim, 2024).
- d. Potential of Local Cultural Events as Spiritual and Tourism Attraction

Local wisdom-based events, such as kirab suroan at Petilasan Sri Aji Jayabaya, have brought in foreign visitors and even French citizens who are interested in Kediri's spirituality and local culture.

4. Economic benefits

Increased investment, logistics, and tourism as well as regional economic turnover. In *maqashid sharia*, the benefits must not damage other *dharuriyat* such as the environment and social justice. Some of the economic benefits include:

a. Local Economic Stimulus Center

Dhoho Airport is projected to become a new economic growth center for Greater Kediri, encouraging the hotel, restaurant, transportation, and other service sectors to develop significantly (Mojok.co, 2023).

b. Labor Absorption

It is estimated that the airport will directly absorb around 1,000 workers, and in total (including supporting sectors) it could reach 2,000-3,000 new jobs for local communities (Kementerian Perhubungan, 2024).

c. Boost East Java Regional Growth

Expect local economic growth to increase by approximately 1-2% for the Kediri region, and help strengthen growth in southern East Java and around the Wilis region (PwC, 2022).

5. Economic challenges and constraints

a. Limited Human Resources and Infrastructure Readiness

Farmers and MSME actors still face constraints in terms of limited business professionalization skills, marketing, and access to capital (e.g. to make fermented feed, waste management etc.) (PSPK, 2023).

b. Environmental and Social Value Risks

The transition of land from agriculture/settlement to airport area causes ecological impacts and potential community health issues, especially in Grogol and Bulusari. This requires a sustainable development approach (viewed through maqashid sharia, there are some environmental and health issues) (Ramadhani, 2024).

CONCLUSION

Post-construction assessment of Dhoho Kediri Airport indicates notable progress toward several SDGs, particularly poverty alleviation, education, economic growth, infrastructure, and reduced inequalities. However, critical gaps remain in areas such as food security, public health, gender equality, climate action, and inclusive governance. Ecotheological concerns also emerge, including farmland conversion, watershed degradation, and environmental pollution affecting surrounding communities.

Conceptually, this study enriches sustainability discourse by integrating an

ecotheological perspective into infrastructure evaluation. It argues that development assessments must transcend economic metrics by incorporating ethical and ecological dimensions, prioritizing community well-being. The qualitative approach further highlights the value of interdisciplinary frameworks to reconcile economic growth with social justice and environmental stewardship.

Despite these contributions, the study is limited by its reliance on secondary post-construction data and minimal engagement with local stakeholders. Future research should adopt participatory and mixed-method designs, conduct longitudinal impact studies, and compare findings across similar projects. Embedding ecotheological insights into planning can strengthen sustainability by aligning development with ecological integrity and equitable social outcomes.

REFERENCES

- ANTARA News. (2024). Menteri Luhut: Bandara Dhoho Kediri Kembangkan Konektivitas Ekonomi. https://www.antaranews.com.
- ANTARA News. Komitmen AP I terhadap pengurangan GRK: lampu LED, PLTS, green building, ISO lingkungan/energi. https://www.antaranews.com/berita/4132779/ap1-komitmen-kelola-bandara-dengan-prinsip-pengurangan-grk.
- ANTARA News. Penanganan banjir melalui embung dan kolam retensi oleh Kementerian PU. https://www.antaranews.com/berita/4485053/menteri-pusebut-area-bandara-dhoho-kediri-dibangun-pengendali-banjir
- BPS Kabupaten Kediri (2024). Statistik Kemiskinan Kediri.
- BPS Kabupaten Kediri (2024). Statistik Pendidikan Kabupaten Kediri.
- BPS Kabupaten Kediri (2024). Statistik Pertanian dan Ketahanan Pangan
- Detik Jatim. (2024). Khofifah Optimistis Bandara Internasional Dhoho Beri Multiplier Effect. https://www.detik.com/jatim/berita/d-7069172/khofifah-optimistis-bandara-internasional-dhoho-beri-multiplier-effect.
- DJKN Kemenkeu. (2024). Dampak Alih Fungsi Lahan dan Aspek Lingkungan Pembangunan Bandara. https://www.djkn.kemenkeu.go.id/kpknldenpasar/baca-artikel/17142/Bandara-Dhoho-Kediri-KPBU-Unsolicited-Pertama-di-Indonesia.html.
- Fatihudin, D. (2015). *Metode Penelitian: Untuk Ilmu Ekonomi, Manajemen, dan Akuntansi*. Sidoarjo: Zilfatama Publishing.
- Jawa Pos. (2023). Integrasi Ornamen Tradisional di Bandara Sebagai Identitas Lokal. https://www.jawapos.com/infrastruktur/013599450/bandara-internasional-dhoho-kediri-suguhkan-ornamen-tradisional-untuk-mempercantik-tampilan.
- Jawa Pos. (2023). Fasilitas inklusif bagi penyandang disabilitas dan ruang hijau publik. https://www.jawapos.com/berita-sekitar-anda/013350820/tugas-pemkab-kediri-membuat-kawasan-hijau-di-bandara-dhoho.
- Kemendikbudristek (2023). Peta Jalan Pendidikan Vokasi dan Dunia Kerja.
- Kementerian Perhubungan RI. (2024). Peresmian Bandara Dhoho Kediri. https://kemenhub.go.id
- Kompas.com (2023). Kawasan Sekitar Bandara Dhoho Diproyeksikan Jadi Kawasan Pendidikan Vokasi.
- Kompas.com (2024). Dampak Sosial Ekonomi Pembangunan Bandara Dhoho Kediri.

- Kompas.com (2024). Lahan Pertanian di Sekitar Bandara Dhoho Berkurang, Warga Protes.
- Kompas.com (2024). UMKM Kediri Raup Untung di Sekitar Bandara, Tapi Sampahnya Meningkat.
- Kompas.com. (2024). Energi dan Lingkungan: Menakar Jejak Bandara Dhoho
- Kompas.id. (2023). Bandara Dhoho Jadi Penyeimbang Pembangunan Wilayah Selatan dan Utara Jatim.
- Kompas.id. (2023). Bandara Dhoho: Kemitraan Swasta-Pemerintah Terbesar. https://www.kompas.id/baca/ekonomi/2023/10/08/bandara-dhoho-contoh-kemitraan-swasta-dan-negara)
- Lentera Today: Krisis koordinasi operasional bandara dengan pemerintah daerah. https://lenteratoday.com/post/item/219514/DPRD-Jatim-Prihatin-Mandeknya-Bandara-Dhoho-Kediri-Karena-Minim-Kolaborasi-dan-Dukungan?utm_source=chatgpt.com "DPRD Jatim Prihatin Mandeknya Bandara Dhoho Kediri, Karena Minim Kolaborasi dan Dukungan Lentera Today.
- Lusiantini, Shania Ismaili dan Abul Fida (2021). Analisis Dampak Pembangunan Bandara Dhoho Kediri Terhadap Kondisi Lingkungan dan Sosial Masyarakat (Studi Kasus : Desa Grogol, Kec. Grogol, Kab. Kediri). *Skripsi*: University Technology Yogyakarta.
- Merdeka.com. (2023). Permukiman warga terdampak tanpa aliran listrik pasca relokasi. https://www.merdeka.com/jatim/nasib-warga-terdampak-proyek-bandara-kediri-permukiman-baru-tak-teraliri-listrik.html?utm_source=chatgpt.com "Nasib Warga Terdampak Proyek Bandara Kediri, Permukiman Baru Tak Teraliri Listrik.
- Mojok.co. (2023). Risiko dampak lingkungan seperti polusi suara dan udara serta upaya mitigasi disorot. https://mojok.co/kilas/manfaat-dan-risiko-keberadaan-bandara-dhoho-bagi-warga-kediri-yang-perlu-diketahui.
- Mongabay.co.id (2023). Alih Fungsi Lahan Pertanian Akibat Infrastruktur.
- PLN Kediri. (2023). Statistik Rasio Elektrifikasi Wilayah Kediri
- Prihatiningsih, D. (2015). *Mudahnya Belajar Statistik Deskriptif*. Semarang: Saru Untung. PSPK UGM. (2023). Evaluasi Sosial KPBU Bandara Dhoho. https://pspk.ugm.ac.id
- PSPK UGM. (2023). Kajian Kebutuhan Tenaga Kerja: Dominasi Laki-Laki dalam Posisi Formal, Perempuan Banyak di Pekerjaan Informal. https://pspk.ugm.ac.id/kegiatan-kajian-kebutuhan-tenaga-kerja-dalam-optimalisasi-keberadaan-bandara-di-kabupaten-kediri/
- PPSPK UGM. (2023). Studi Potensi Ekonomi dan Infrastruktur Sekitar Bandara Dhoho. https://pspk.ugm.ac.id
- PSPK UGM. (2023). Studi Potensi Sosial Ekonomi Sekitar Bandara Dhoho. https://pspk.ugm.ac.id/studi-potensi-sosial-ekonomi-bandara-dhoho.
- Putra, M. R. I. E. (2024). Relasi Kuasa dalam Pembebasan Lahan Pembangunan Bandara Dhoho Kediri. *Huma: Jurnal Sosiologi*, 3(2), 178–190.
- Purniawan, Yustinus Andi Muda. 2020. "Ecotheology Menurut Seyyed Hossein Nasr Sallie McFague". *Jurnal Teologi* 9 (1): 69-84. https://doi.org/10.25026/jek.v9i1.15.
- PwC Indonesia. (2023). Case Study: Dhoho Airport Kediri. https://www.pwc.com/id/en/media-centre/infrastructure-news/september-2023/dhoho-airport.html

- Quddus, Abdul. 2020. "Teologi Konstruktif Atasi Krisis Lingkungan". *Ulumuna: Jurnal Studi Keislaman* 16 (2): 311-346. https://doi.org/10.21145/ulum.v16i2.10
- Radar Kediri (2023). Pemkab Siapkan Hotel dan Peluang Investasi Bandara Dhoho. https://radarkediri.jawapos.com/politik-pemerintahan/783538799/kerek-pertumbuhan-ekonomi-pemkab-kediri-siapkan-hotel-di-kawasan-bandara-kediri
- Radar Kediri. (2024). Pemkab Siapkan Kawasan Ekonomi Baru di Sekitar Bandara. https://radarkediri.jawapos.com
- Radar Kediri. (2024). Alih fungsi lahan pertanian menyebabkan degradasi sosialekologi & risiko banjir https://www.questionai.id/essays-e9xjpZCZhO6/mengapa-penerbangan-berdampak-negatif-pada.
- Radar Kediri. (2024). Kerek Pertumbuhan Ekonomi, Pemkab Kediri Siapkan Hotel di Kawasan Bandara Kediri. https://radarkediri.jawapos.com/politik-pemerintahan/783538799.
- Radar Kediri. (2024). Situasi legislasi Perbup KKOP sebagai tantangan regulasi lingkungan di sekitar bandara
- Ramadhani, A. A. (2024). Dampak Sosial Ekonomi Bandara Dhoho di Desa Bulusari. *Skripsi*: IAIN Kdiri. https://etheses.iainkediri.ac.id
- Restu. (2021). Metode Penelitian. Jakarta: Gramedia Pustaka Utama.
- Ridwanuddin, Parid. 2017. "Ekoteologi Dalam Pemikiran Badiuzzaman Said Nursi". *Jurnal Lentera* 1 (1): 39-61. https://doi.org/10.25514/lentera.v1i1.250.
- Rukin. (2016). Metode Penelitian Kualitatif. Surabaya: Jakad Media Publishing
- Tempo Nasional. 2023. Peran pondok pesantren sebagai bantalan sosial terhadap perubahan sosial pembangunan bandara: Bupati Kediri. https://nasional.tempo.co/read/1739297/bupati-kediri-ponpes-jadi-benteng-dampak-sosial-pembangunan-bandara
- Tempo.co (2023). Kontroversi dan Harapan Masyarakat Sekitar Bandara Dhoho.
- UNDP (2023). Progress Report on SDGs Implementation in Indonesia.
- UNDP Indonesia. (2023). SDGs Tujuan 12: Responsible Consumption and Production