



How to Manage Residual Impacts of Infrastructure Projects in Developing Countries

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ABSTRACT

Infrastructure projects in developing countries are crucial to improve the interconnectivity and equality of national economic development. However, infrastructure projects may lead to social impacts. For example, land acquisition may cause involuntary resettlement that may impact the livelihoods of Project-Affected People (PAP). The land is a critical resource for infrastructure development and the government has established regulations to stipulate land acquisition mechanisms and mitigate the social impacts. However, in practice, social impacts on PAP are usually insufficiently mitigated. Based on applicable regulation, the cost for land acquisition must be calculated with fair compensation, considering both physical and economic losses. It is common that residual impacts remain as some aspects are not fully counted such as: post-land acquisition life management and sustainability of life for squatters without legal ownership assets and are usually left behind. On the other hand, investors have concern with this risk as it can affect investment value and project sustainability. Here, we propose thoughts of improvements for a better practice of land acquisition mechanism and Institutional arrangement with a case study in Indonesia. The proposed improvement is expected to achieve a win-win solution for Project Proponent and PAP by minimizing the economic losses and increasing the benefits shared between land users and the affected communities. This paper also highlights the importance of Stakeholders' engagement on effective management of the residual impact of land acquisition for infrastructure development in Indonesia. In this case, Stakeholders include Regulators, Project Proponent, Financiers, Local Government, NGOs, and other relevant stakeholders).

Keywords: Infrastructure projects, land acquisition, infrastructure development, residual impacts, developing countries

SARI PATI

Proyek infrastruktur di negara berkembang punya peran yang sangat penting untuk meningkatkan interkoneksi dan pemerataan pembangunan ekonomi nasional. Namun, proyek infrastruktur dapat menimbulkan dampak sosial. Misalnya, pembebasan lahan dapat menyebabkan pemukiman kembali secara paksa yang dapat berdampak pada mata pencaharian Orang-orang yang Terkena Dampak Proyek (PAP). Lahan merupakan sumber daya penting untuk pembangunan infrastruktur dan pemerintah telah menetapkan peraturan untuk menetapkan mekanisme pembebasan lahan dan memitigasi dampak sosial. Namun, dalam praktiknya, dampak sosial terhadap PAP biasanya tidak cukup dimitigasi. Berdasarkan peraturan yang berlaku, biaya pengadaan tanah harus dihitung dengan ganti rugi yang adil, dengan mempertimbangkan kerugian fisik dan ekonomi. Biasanya sisa dampak tetap ada karena beberapa aspek tidak diperhitungkan sepenuhnya seperti: pengelolaan kehidupan pasca pembebasan lahan dan keberlanjutan kehidupan penghuni liar tanpa aset kepemilikan yang sah dan biasanya tertinggal. Di sisi lain, investor mengkhawatirkan risiko ini karena dapat mempengaruhi nilai investasi dan keberlangsungan

proyek. Di sini, kami mengusulkan pemikiran perbaikan untuk praktik yang lebih baik dari mekanisme pengadaan tanah dan pengaturan Kelembagaan dengan studi kasus di Indonesia. Perbaikan yang diusulkan diharapkan dapat mencapai solusi yang saling menguntungkan bagi Pemrakarsa Proyek dan WTP dengan meminimalkan kerugian ekonomi dan meningkatkan manfaat yang dibagi antara pengguna lahan dan masyarakat yang terkena dampak. Makalah ini juga menyoroti pentingnya keterlibatan Pemangku Kepentingan dalam pengelolaan yang efektif dari sisa dampak pembebasan lahan untuk pembangunan infrastruktur di Indonesia. Dalam hal ini, Pemangku Kepentingan meliputi Regulator, Pemrakarsa Proyek, Pemodal, Pemerintah Daerah, LSM, dan pemangku kepentingan terkait lainnya).

Kata Kunci: Proyek infrastruktur, pembebasan lahan, pembangunan infrastruktur, dampak residu, negara berkembang

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CHALLENGE

Sustainable and inclusive growth and development in many countries have been transiently on track. However, the Covid-19 pandemic poses cumulative challenges to sustain livelihoods and economic and social stability. Although public funding is limited, the demand for financial support is rising in multiple sectors, requiring policy makers to make difficult decisions to cope with the health crisis and minimize its detrimental economic, social, and developmental impacts.

The Covid-19 pandemic is creating greater challenges in our idea and goals as to how development can be sustainable, inclusive, and resilient. Infrastructure development is essential to meet those needs. In the global world, the need for investment in infrastructure is high, while fiscal space remains limited. One of the interesting case studies discussed is infrastructure development in Indonesia. Central government focuses on infrastructure development with various initiatives in agenda, including providing lands for infrastructure advancement. However, in practice, there are social impacts on PAP due to land acquisition, particularly those affected by involuntary resettlement, are usually insufficiently

mitigated. Based on the applicable regulation, the costs for land acquisition must be calculated with fair compensation, but it is common that residual impacts remain as some aspects are not fully counted. This happens a lot in many developing countries. Therefore, it is necessary to identify and analyze the social risks that occur in land acquisition for some infrastructure project. However, we need to consider the existing best practice with the capacity of the country, applicable regulations, and culture that can support the implementation of the project, as well as mitigate the risks that may occur.

Land acquisition can be considered one of the main difficulties in infrastructure investment. When a construction of a certain infrastructure project is planned, the project owners (usually government officials) must first negotiate with many landowners, which is a huge investment of time and money during periods of infrastructure construction (Yoshino *et. al*, 2019). The long process of land acquisition is the main factor that may cause project delay. Based on media monitoring of projects guaranteed by IIGF (showed in **Figure 1**), negative issues related to land acquisition dominate and become highlights in media coverage. From year to year, the trend of land problems tends to increase

compared to other environmental and social issues.

The complexity of land problems in Indonesia has forced the government to update regulations from year to year. Prior to the issuance of Law no. 2 of 2012, land acquisition requires a very long process. Project-affected communities are forced to hand over their lands and accept compensation from government (project proponent), sometimes even through social coercion. The amount of compensation is determined by the government, and the participation of landowners in the process is minimal. The new regulation carries out various transformation efforts in order to provide a fair replacement value by involving a licensed appraiser in accordance with the standards of the Indonesian Society of Appraisers (MAPPI). Community involvement in the process has also been regulated in Constitution No. 2 of 2012, where prior to the issuance of the Location Permit, public consultations were conducted to obtain public views on whether there is a potential project rejection. In the public consultation, the community has the right to file objections, so the Governor will form a team to assess the

objections to accommodate the concerns of landowners. After the Location Permit is issued, there is a mechanism for deliberation in the form of compensation, where the community has the right to choose that will later be accepted as stipulated in the Constitution. If the form of compensation given according to the landowner is not as expected, they may file an objection to the State Administrative Court before receiving a final appeal at the Supreme Court. Table 1 below shows regulations regarding land acquisition for infrastructure development and the differences policy between each other.

The law has brought clarity to what was a confusing and often contradictory legal landscape. It delineates the authority and its responsibility for procedural compliance and imposes hard deadlines that have greatly accelerated project timelines. For example, the completion of the New Yogyakarta International Airport - NYIA (Post-Constitution No.2 of 2012) took about four (4) years, while in Lombok (Pre-Constitution 2 of 2012) the process took 16 years (Guild, 2019). In 2020, the government issued a regulation as a legal umbrella on land acquisition for public use called the Constitution No.11 of

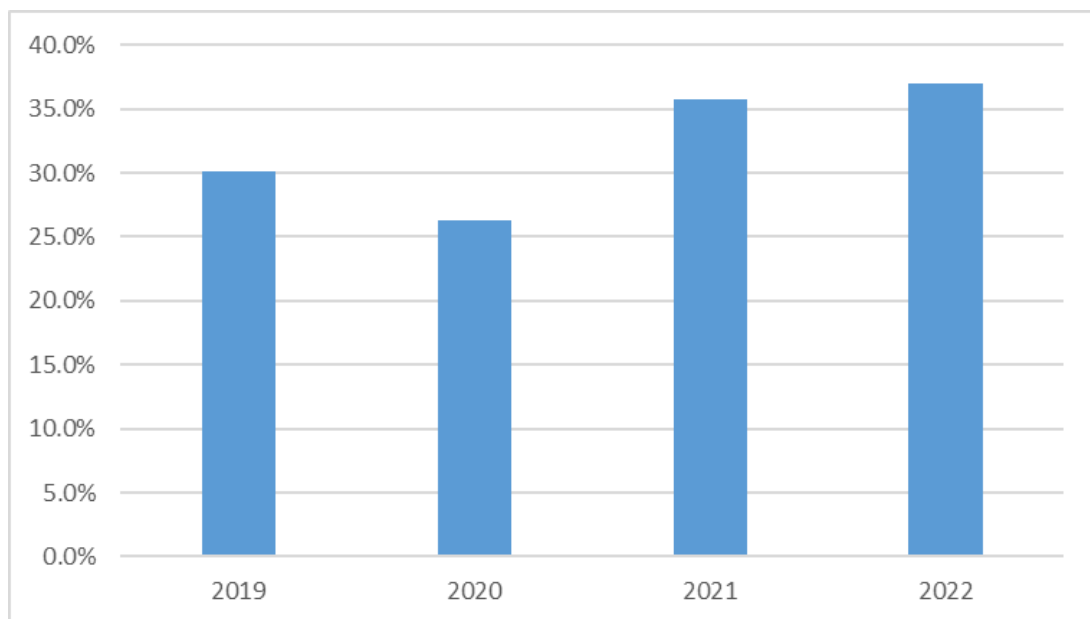


Figure 1. Trend of Land Acquisition Issues based on Media Monitoring

Table 1. Regulations regarding land acquisition for infrastructure development in Indonesia

Criteria	Pre-Law 2 of 2012	Post-Law No.2 of 2012	Law No. 11 of 2020	Presidential Regulation 62/2018
Fair Value (Titleholder)	No	Yes	Yes	Yes
Compensation for Social impact	No	No	Yes	Yes
Recognition of Non-Titleholder	*No	*No	No	Yes
Third-Party Appraisal Team	*No	*Yes	Yes	Yes
Compensation Preference	No	Not stated on Planning Document	Yes, stated on Planning Document	No
Assistance in livelihood restoration	No	No	No	No
Project Length	*16 years	*4 years	5 years	n/a

Notes: *Guild, 2019

2020 known as *Omnibus Law*. Some changes regulated in Omnibus Law allow compensation for social impact and compensation preference (stated on Planning Documentation). The length of the project in Omnibus Law which is calculated based on the issuance of Location Permit is made more realistic with the estimated validity period of five (5) years.

However, despite the many updates on land regulations, the complexity of land issues still leaves residual impacts. Some still unclearly stated things in the regulations include the recognition of non-title holders and livelihood restoration assistance. Recognition of non-title holders is not specifically regulated in laws and regulations, but currently there is the Presidential Decree No 62 of 2018 which regulates the handling of social impacts, including non-title holders.

Although land acquisition regulations are continuously updated, if we look at **Figure 1**, the trend of issues related to land is still increasing. There are three (3) main issues that have been in the media spotlight for projects based on IIGF monitoring (2022), which are i) unpaid compensation, ii) compensation rejection, and iii) relocation of public facility. Unpaid compensation and compensation rejection are

still the main issues. These two issues in most cases will be consigned (the compensation is entrusted to the court). Based on Law No.11/2020 and its derivative regulations, a consignment or deposit of compensation is carried out in the event that (i) the entitled party refuses the form and/or amount of compensation and does not file an objection to the court; (ii) the entitled party refuses the amount of compensation based on the decision of the district court/supreme court; (iii) the whereabouts of the entitled party are unknown; (iv) the object of land acquisition is still in dispute. What had happened is that most people who refused the amount of compensation did not file an objection to the court. The community saw the submission of objections to court as a complex process, so instead of dealing with a complicated process, they will end up receiving the amount of compensation. From the people's point of view, the regulation is seen unfair as there is no bargaining room and the resolution of the problem is only through the court. Therefore, the regulation should have a mechanism where owners of fixed assets are able to negotiate and thus can determine the form and amount of compensation.

Relocation of public facilities mostly arises from special character lands such as Waqf, Village Treasury Land (*Tanah Kas Desa* - TKD), schools and other public facilities that require a new

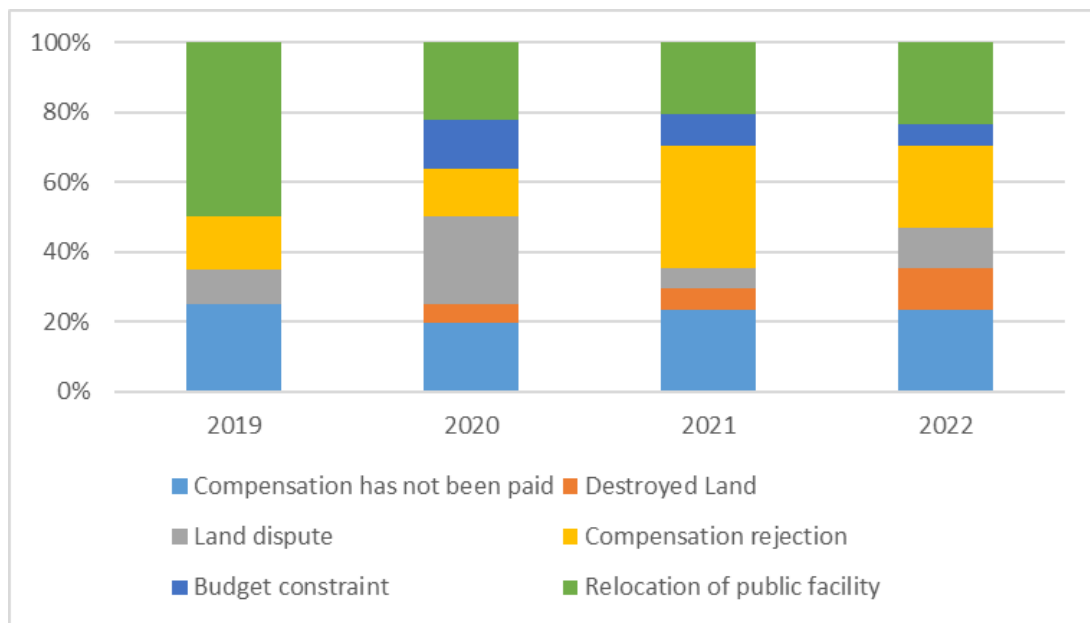


Figure 2. Issues related to Land Acquisition for Infrastructure Projects

relocation or replacement. After the issuance of Law No. 11 of 2020, issues related to special-character lands tend to decrease due to the determination of the status of special-character lands being raised in the planning stage. Figure 2 below shows issues related to land acquisition for infrastructure projects based on media monitoring conducted by IIGF.

PROPOSAL

Availability of land is the key to success in providing infrastructure. However, it is important to note that apart from the availability of land, residual impacts on landowners and project-affected people need to be minimized. Therefore, this policy brief proposes several strategies as discussed below.

REGULATION FRAMEWORK

Regulations related to land acquisition stated in the Omnibus Law include: i) land status completion must be carried out until the location is determined. This is for land acquisition on lands with special characteristics such as Forest areas, Waqf, customary land, or government-asset land; ii) settlement of forest area land status can be carried out through the

mechanism of forest-area release or borrow-to-use forest area; and iii) public consultations are carried out by involving the entitled parties, state/regional property managers, and affected communities, and set forth in the form of an agreement as the basis for submitting an application for location determination. The Omnibus Law applies the risk-based and strategic environmental assessment approaches that consider management of risks to health, safety, environment, involuntary resettlement, and carrying capacity of the environment, and consistency of activities with national, provincial, and regency/city spatial plans. The Omnibus law aims to increase investments for infrastructure development by ensuring project risks to be well managed. The government is responsible for providing land and is committed to managing the arising risks, while investors are responsible for providing quality infrastructure. High-quality infrastructure increases business activities and can potentially create a new employment in the region, which includes the Project-Affected People (PAP). It also provides more opportunities to encourage female participation in the workforce and to narrow income disparities (Yoshino et. Al, 2019). The

involvement of more women as participants among the PAP will be in line with the SDG which is Gender Equality. Therefore, more infrastructure projects should not only provide financial compensation for the affected people but also labor compensation due to the losses of steady income, with a heavier focus on women.

The proposals that we submit in terms of the regulatory framework are as follows:

- A framework that provides a reference in the implementation of meaningful public consultations. This is to identify the affected stakeholders, methods of public consultations, and outputs that need to be generated. This is to ensure that all Parties receive the right information and room to convey input and wishes for their assets.
- Adoption of international best practice needs to pay attention to the local socio-cultural conditions in order to gain solutions to the existing gap. The Government and Project proponents/Investors need to understand PAP's interests regarding the prevailing socio-culture, as well as the parties who are representatives of the community. Therefore, the implementation of best practice must be flexible and government officials must understand the conditions in each area. Therefore, communication between the Government, Investors, and Lenders is crucial to formulate social impact mitigation by considering the social culture characteristics. For this condition, it is necessary to make an equal risk-allocation framework between the Government (central and regional) and Investors to ensure that risk management is carried out properly and fairly, both in terms of funding, implementation, and monitoring and evaluation.
- If land acquisition causes losses of income or livelihood for the PAP, Government and Investor, according to the risk allocation, must compensate them. It can be done by

compensating affected business owners for the cost of reestablishing commercial activities elsewhere, or by providing new employment aimed towards the displaced people. Furthermore, the most important thing is assistance to PAPs to ensure that the compensation received can be managed properly and they may continue living well.

- The government encourages creative financing, such as: Public – Private Partnership, Blended Financing, Trust fund, etc., by considering global standard, including the implementation of Environmental, Social, and Governance (ESG). The implementation of ESG will assist investors in making investment decisions as the project proponent has managed environmental and social risk and governance as well. Implementation of these standards will certainly reduce the project's social and environmental risks, which in turn can be an increase in project sustainability.

LAND BANK AS FINANCING INSTITUTION FOR INFRASTRUCTURE DEVELOPMENT

Land financing is one of the challenges for successful land acquisition and delivery project. This is due to the high demand for land, yet limited land availability. The government is trying to meet the land funding using state budget, but there are limitations. Therefore, it is essential to innovate by establishing a financing institution that not only undertakes land acquisition, but also manages these assets. What we propose are:

- Land Bank that can play a role in funding, procurement, and management of land assets to be used in infrastructure development. Land Bank can buy or rent to the landowner considering reasonable profits for both parties. This will certainly provide room for landowner to decide whether to lease his assets to the land bank and obtain benefits for the duration of the

lease or sell their assets. Furthermore, the Land Bank can lease its land to investors during the concession period and get a reasonable margin that is used for operations and investments.

- Land Bank is given a mandate to manage land, including managing environmental and social risks arising from assets acquisition. The risk management can be structured into land-rental fees to investors to ensure risk management sustainability for PAPs. Obviously, this must be supported by regulations, good resource capacity, and the support of all Stakeholders.
- Land Bank can get benefits from Land Value Capture from their assets. By developing a property with mixed-use development and improved locational accessibility, the land value and real estate's price around the transit nodes will increase significantly. With the increment of land value and property prices, the government can implement the Land Value Capture (LVC) model through special taxes and incentives for real-estate developers who obtain

benefits from the increment of land value and property prices. Integrated transport and land use development are encouraged as one alternative to alleviate fiscal constraint of public transport (Van Der Krabben et al, 2020). Other than LVC, land readjustment schemes can also be utilized. De Souza and Koizumi (2020) analyze the changes in land prices more than 30 years after the first land readjustment pilot project was initiated in Denpasar, Indonesia. Land adjustment is a scheme in which landowners collectively pool their lands and donate their property to the government where they will redesign the area with better infrastructure, public services, parks, etc. In exchange, landowners will receive an increase in property value from neighborhood improvement. Results from the difference-in-differences estimator indicate an increase in land prices of up to 49% in land readjusted areas when compared to urbanized areas without the planning instrument (De Souza and Koizumi, 2020).

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