

Chapter 14

Public-Private-People Partnership (PPPP) for Infrastructure Development in Indonesia

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Abstract There is a continuous increase in the investment gap between government financing and infrastructure development. Therefore, to reduce this gap, the government used the services of the private sector to participate in infrastructure development under the public-private partnership (PPP). However, this scheme tends to often overlook the involvement of the surrounding communities around a project development area, with the ability to jeopardize the sustainability of the project. This research, therefore, proposes a new concept referred to as public-private-people partnership (PPPP). Questionnaires were used to collect data from a survey of 46 respondents. The result showed that the PPPP concept has the ability to benefit and support the livelihood of people living around the project area, thereby ensuring its sustainability.

Keywords Infrastructure needs; public-private partnership (PPP); public-private-people partnership (PPPP)

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14.1 Introduction

The global infrastructure investment gap is estimated between US\$1 and \$2 trillion annually. According to Ransdell [1], the annual investment gap in Asia is \$200 to \$400 billion, however, this analysis excludes China. In Indonesia, the government has estimated that the need for infrastructure investment till 2020 is approximately \$169.7 billion, with its ability to only afford \$15.1 billion, leaving a gap of \$154.6 billion [2].

Bennon et al., [3], stated that the difference between estimated infrastructure spending requirements and the available investment capital from traditional sources are obtained from public pension funds [4], bank infrastructure [5], the private sector/regional initiatives [6], and hybrid of deep discount project bonds/land leases [7], most of which utilize the public-private partnership (PPP) scheme.

However, the use of this method has not achieved its optimal objective in filling the investment gap for infrastructure [8] due to lack of transparency in the PPP contract process [9]. Furthermore, society often failed to benefit from the scheme, because it lacked merits and positive pullover effects [10], with the concessionaire to accept its risk [11]. As a result of this, particular refinements of the PPP framework are needed, that focuses on the indirect impact [12].

To obtain leverage effects, this study proposes the application of a public-private-people partnership (PPPP) scheme for infrastructure development in Indonesia. Therefore, this research addresses peoples' role in accepting the PPPP.

14.2 Literature Review

According to Guevara [8], PPP is the general terminology in the area of contracts and business, where the term “partnership” is defined as: “A voluntary association of two or more persons in carrying out a business for profit.” Similarly, ‘public’ is related to the process of involving an entire community, state, or country. At the same time, ‘private’ is the process of involving an individual, as opposed to the public or the government. Therefore, Guevara [8] defined PPP as a contractual agreement typically carried out by the association of a public and private party.

The London Underground PPP project, failed to achieve its aim because the contract had no provision for the direct control of taxpayers’ cash flow to the company. According to Khoteeva and Khoteeva [13], there was an overestimated reliance of the government on the private sector’s money. The failure was also due to the different project partner and socio-political factors. Soomro [14], stated that in many cases, there were public protests towards infrastructure privatization related to social welfare. This was also because the PPP project failed to reduce the desirable characteristics expressed in the purchasing process and fulfillment of the end-users expectations [15].

Kuronen et al., [16] reported that the “people” in PPP denotes a public-private-people partnership (PPPP), which offers an alternative approach for urban planning to establish interactions between the developer and the end-user. Therefore, they need to be both organizers and the guiding principle in every step of the program’s development [17].

The people in PPPP are identified as local communities, NGOs, professional organizations, academic institutions, and media [18]. Furthermore, PPPP is a reinforcement of the grassroots economy, due to peoples’ partnership with the government in the designing, planning, and provision of architectural designs [19, 20]). The societal partnership has the ability to positively

influence its citizens' engagement that results in public acceptance of the project and pressure on all organizations to complete it as soon as possible [10b].

PPPP is currently being implemented in countries, such as in Finland (Helsinki), Nigeria, Hong Kong, China, India, and Nepal. Table 14.1 shows further numerous possibilities used to examine PPPP.

Table 14.1 The Development of PPPP

No	Author(s)	Output	Role of people in PPPP	Country
1	Kuronen et al. [16]	To reduce carbon dioxide emissions	"a promising approach to decrease the carbon emissions	Helsinki
2	CTO [21]	Building ICT	To set up networks (land, labor etc.), as well as demand and utilize value added services	Nigeria
3	Thomas Ng et al. [22]	Infrastructure planning and policy formulation	To realize the changes associated with public aspirations and demands for infrastructure planning and policy formulation.	Hong Kong
4	Zhang et al. [23]	A post-disaster reconstruction	"People" provide the "missing link" in traditional PPP to achieve effective and integrated partnership between multiple participants.	China
5	Modi [24]	The policy of Narendra Modi	"Jan Andolan" (people's movement) with the total "Jan Bhagidari", including housing, health, education, and the adoption of orphan children or physical infrastructure.	India
6	Acharya [25]	Building hydropower	The local people are urged to invest with the potential to receive shares of up to 24%	Nepal

14.3 Methodology

A survey was conducted to analyze the importance of people's role in PPPP. It was divided into a local Indonesian and global contexts. This was an online survey conducted from September 1 to 12, 2018 using a total of 46 respondents, as shown in Table 14.2.

Table 14.2 Respondent Descriptions

Age (years)		Occupation		Education Level	
< 17 - 25	6.50%	Civil Servant Apparatus, Army/Policeman, State-Owned Enterprise	34.80%	Undergraduate Degree	27.90%
25 - 55	52.20%	Private Company Employee	32.60%	Master's Degree	58.10%
> 55	41.30%	Entrepreneur	19.60%	Doctorate Degree	14%
		Others	13.00%		

The following questions were put forward during the survey: 1.) How important is the role of society (people) in financing infrastructure? 2.) Is the societal context more prioritized towards a direct effect with infrastructure development? 3.) Are the above mentioned societal role in the following phase: land acquisition, planning, construction, or operational? 4.) Are most of the lands in the area of indigenous communal property? 5.) Is the indigenous communal property used for infrastructure development? 6.) Is the indigenous communal property used for infrastructure development? 7.) In what form does the society play a role in infrastructure financing: private, state, village, or special institution? 8.) Does society's involvement in financing improve its welfare around the infrastructure?

Next, the survey results attempted to devise the PPPP concept for the toll road infrastructure case in Indonesia.

14.4 Results

Based on the survey, the results showed that 39.1% respondent stated that “the role of society (people) in financing infrastructure is important”. In addition, there were 71.7% respondent said “Yes” that the societal context here more prioritized towards society.

The survey also revealed that 50% respondent stated that “societal roles in the following phase are land acquisition”. Otherwise, there were 69.6% respondent said “Maybe” that the indigenous communal property used for infrastructure development. Therefore, 45.7% respondent determined that society play a role in infrastructure financing in form of private-owned enterprises (cooperatives, limited companies). Finally, 80.4% respondent agreed to say “Yes” that society's involvement in financing improve its welfare around the infrastructure. More details, the survey results can be shown at Table 14.3.

Table 14.3 Result of Survey

No	Questions	Result
1	How important is the role of society (people) in financing infrastructure?	<ul style="list-style-type: none"> • 34.8% very important • 39.1% important • 23.9% enough
2	Is the societal context here more prioritized towards society, which has a direct effect with infrastructure development (the society who lives around the infrastructure development)?	<ul style="list-style-type: none"> • 71.7% said “Yes” • 28.3% said “No”

3	Are the above-mentioned societal roles in the following phase: land acquisition, planning, construction, or operational?	<ul style="list-style-type: none"> • 50% at land acquisition; • 19.6% at planning; • 10.9% at construction; and • 19.6% at operation
4	Are most of the lands in the area of the indigenous communal property?	<ul style="list-style-type: none"> • 26.1% said "Yes" • 17.4% said "No" • 56.5% said "Maybe"
5	Is the indigenous communal property used for infrastructure development?	<ul style="list-style-type: none"> • 8.7% said "Yes" • 21.7% said "No" • 69.6% said "Maybe"
6	In what form does society play a role in infrastructure financing?	<ul style="list-style-type: none"> • 45.7% in private-owned enterprises (cooperatives, limited companies); • 21.7% in State-Owned Enterprise/ Region-Owned Enterprise/ Village-Owned Enterprise; • 19.6% in Special Institution; and • others 13%.
7	Does society's involvement in financing improve its welfare around the infrastructure?	<ul style="list-style-type: none"> • 80.4% said "Yes" • 4.4% said "No" • 14.2% said "Maybe"

14.5 Discussion

From the above survey, it is summarized that PPPP can be significantly applied to infrastructure building development in Indonesia. The peoples' roles are mentioned in the land acquisition phase, with their willingness to surrender their land for infrastructure development [19]. According to Zhang et al. [23], people need to create private-owned enterprises in order to work with public or private, professional organizations. Communities are, therefore, surrounded by the infrastructure building to improve their welfare, as stated by the Asia News Monitor [20].

In Indonesia, the use of toll road infrastructure originated from PPP structure concept. Therefore, the State Asset Management Institute (SAMI) receives land acquisition funds that have already been allocated in the State Budget from the Ministry of Finance. Furthermore, it provides authority to the Toll Road Regulatory Agency (TRRA), based on the contracting agency through the Ministry of Public Works and Housing. The government, through the Ministry of Finance, provides Infrastructure Guarantee Fund (IGF) that offers a recourse agreement to the contracting agency of the toll road company (TRC).

For private organizations, after winning a toll road tender, the investor forms a special purpose vehicle (SPV) for the finance project concept and build-operate-transfer (BOT), on the TRC. According to the finance project concept, to acquire toll road construction funds, TRC obtains equity from a sponsor and debt from senior/junior/subordinated bank. After purchasing the land from the government, it proceeds to build toll road construction till the concession phase.

The surrounding community comprises of cooperatives, and limited companies, designed to manage the "people's" money from the results of the land usage for toll road infrastructure to its acquisition phase. The PPPP conceptual framework for building toll road infrastructure is shown in Figure 14.1.

The conceptual framework of PPPP is a combination of the previously established PPP and people. Its advantage is to help the government in the execution of difficult and complex land acquisition transactions. Therefore, to ensure that the model is properly implemented, it needs a validation (e.g., in-depth interview with experts).

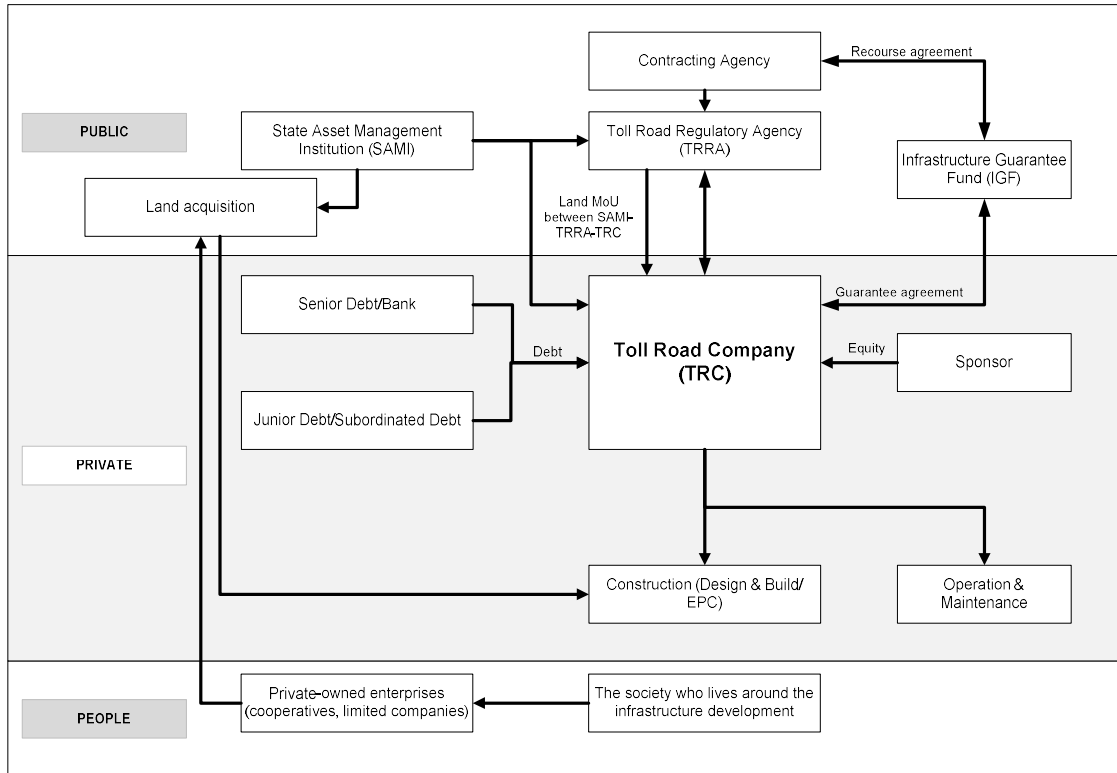


Fig. 14.1 Framework of Public-Private-People Partnership in Toll Road Infrastructure

14.6 Conclusions

In conclusion, the PPPP conceptual framework is a viable solution used to fill the infrastructure investment gap. It is constructed from the existing PPP pattern and plays a significant role in contributing to social welfare, by building toll roads, which has a direct impact on infrastructure development.

The people's role in PPPP is recommended to take the form of private-owned enterprises such as cooperatives and limited companies. These organizations are established for communities to become legally protected, with incurred benefits from the infrastructure building, to promote prosperity. The present research has demonstrated the potential of the proposed PPPP concept, however, it failed to address critical success factors and risk management, thereby, providing an avenue for future research.

Compliance with Ethical Standards

We declare that I ensured the objectivity and transparency in our research and that accepted principles of ethical and professional conduct have been followed. Prior informed consent was

obtained from individual participants included in the study before the research. No sensitive personal data was accessed. Anonymity of individual participant data is maintained.

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