Chapter 3

Indonesia Country Report

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CHAPTER 3

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Introduction

Indonesia's population of more than 230 million people is 38 percent of the total population in the ASEAN. With an area covering 1.99 million sq km of various landscape characteristics, Indonesia boasts of a naturally inherent diversity. It is these large and diverse population as well as differences in geographic and development stages across regions that pose as challenges to the provision of adequate public infrastructure, as described in Box 1.

Box 1: Diverse Conditions of Indonesia's Infrastructure

Based on the Global Competitiveness Index (GCI) 2013, Indonesia's infrastructure still lags behind, with its quality ranked 78th (out of 139 countries) in 2012-2013.

From 2008-2013, the qualities of the port infrastructure and electricity sector were perceived as inadequate, although that of the electricity sector slightly improved in 2013. Telecommunications led other sectors in infrastructure although internet access and quality persisted as issues (Pradono and Syabri, 2013).

The transportation of goods, especially on a large scale, is conducted through

sea networks. Port facilities affect competitiveness, particularly when port infrastructure deficiency hampers the trade and transport of goods and pushes output price higher in both domestic and international markets. Major large-scale port facilities are mostly operated by Pelindo, the state-owned enterprise (SOE) on port operations. The seaport in Tanjung Priok, however, is considered as over its capacity (World Bank, 2011a). The number of ports from 2004-2009 did not change, and only 110 ports are operated by Pelindo while 533 others are not.

Access to electricity that is provided by the central government is still an issue, especially in the eastern part of the country, where more than 20 percent of households have no electricity access.[1] In particular, around 50 percent of households in Papua and Nusa Tenggara regions are without electricity access. There is also the issue on cost of electricity provision, considering that electricity generation come from fuel mostly imported by the central government. In this case, there is an effort to diversify electricity generation sources to gas, coal, hydro, and geothermal (Bappenas, 2010).

Road infrastructure conditions vary greatly across regions (Ministry of Finance, 2012). Paved roads built by provinces and local governments in most of the Kalimantan region are on average less than 60 percent of the total road length[2], while those in the Java region are more than 90 percent of the total road length. The Java region has the longest municipality-level roads (World Bank, 2011b), implying that connectivity may not be much of a problem relative to other regions, especially Kalimantan and the eastern part of Indonesia.

There is also a high disparity in road access and road qualities within each province. Some local governments have 100-percent paved roads, while others have less than 10 percent of paved roads such as those in West Sumatera, East Kalimantan, and Gorontalo provinces (Ministry of Finance, 2012).

Meanwhile, households' access to safe drinking water across regions varies from 40 percent to 70 percent of their population. While water quality is relatively better in rural regions, the low access to safe drinking water is mostly in urban regions such as in Banten and DKI Jakarta province. Management of water utilities remains in the control of the local government, particularly since PDAM (the water utility company) is owned by local governments.

The government opts for a relatively prudent fiscal policy. Its budget in 2007-2013 ranges from 16 percent to 18 percent of GDP and grew around 12 percent per year in the last two years (Table 3.A.1 in Annex). Tax revenues comprise 60 percent to 78 percent of total revenues, while non-taxes revenues have declined from above 30 percent in 2011 and 2012 to 21.7 percent in 2013.

The type and composition of government spending are indicators of the government unit's flexibility in implementing its development plan. In the central government's budget, around 30 percent to 33 percent is allocated to regions, although majority of the budget is still channelled to technical ministries' coffers.

On the overall, the budget deficit ranges from 2 percent to 4 percent of total expenditures. To cover such deficit, the central government has issued bonds called *Surat Utang Negara* (SUN). However, there is also a lack-of-absorption issue, as shown in Table 3.A.1 in the Annex, in which the overall realised budget is in a surplus position.[1]

Indonesia's government is exerting efforts to attract private sector participants and find external financing on infrastructure projects. Moreover, it has also committed itself to the ASEAN connectivity objective, focusing on cooperating with the ASEAN on infrastructure projects that exploit economies of scale across member states. Such cooperation may warrant that every initiative takes into account each country's national plan and development approaches on infrastructure provision, such as in public-private partnerships (PPP). Based on this context, the following section discusses Indonesia's fiscal situation, existing sources of financing for infrastructure, position on ASEAN connectivity, and institutional framework for PPPs.

Fiscal Situation and Public Sources of Infrastructure Financing

In terms of infrastructure financing, a lumpy infrastructure spending implies

[1] The creation of government bonds to close the deficit was started in 2003 after the issuance of Law 24/2002. These government bonds are either denominated in a foreign currency or in Rupiah (IDR), and were effectively adopted in 2006.

that large resources are needed in a short period of time for an estimated benefit to be received in the future. Thus, the spending needs to take into account uncertainties during the preparation and execution of the projects as well as future costs on the maintenance and use of the infrastructure. Furthermore, the government would generally also need funding from private sectors and/or external (foreign) funds. In case infrastructure projects are financed through loans, it is the private sector that would assess the financial condition of that country's public sector.

Indonesia's macroeconomic condition has improved over time in terms of the levels of government debt, interest rate, and inflation (see Table 3.1 on fiscal sustainable indicators). With budget deficit only hovering between 0.5 percent and 1.2 percent of GDP, its debt level could be reduced substantially to around 24 percent of GDP in 2013 (Ministry of Finance, 2013). A fiscal rule that caps annual deficits at 3 percent of GDP and accumulated debt at 60 percent of GDP ensures that fiscal discipline is working at both the central and subnational (province and local) levels.

Table 3.1: Fiscal Sustainability: Summary of Indicators

Components	2007	2008	2009	2010	2011
External debt stocks (million US$)	147,854	157,906	179,394	195,172	213,541
External debt stocks to GNI (%)	35.7	32.1	34.5	28.4	26.0
Short-term to external debt stocks (%)	12.6	13.0	13.4	16.9	17.9
Multilateral to external debt stocks (%)	12.6	12.6	11.7	11.6	10.7
Interest payments (million US$)	4,996	4,461	4,301	4,944	5,749
Reserves to external debt stocks (%)	37.2	31.4	35.4	47.6	49.9
Current account balance (million US$)	10,493	125	10,628	5,144	2,070

Source: World Bank (2013).

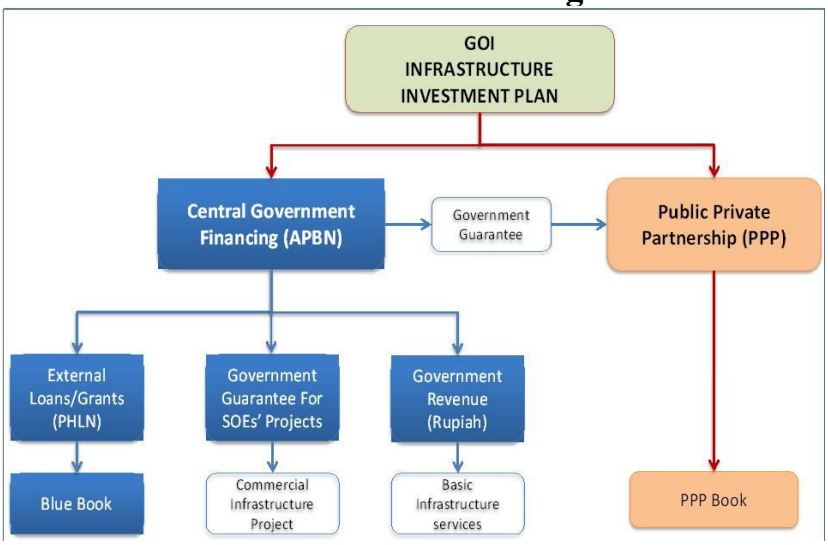
However, the Organization for Economic Development (OECD) projected that an increase in infrastructure spending by 20 percent would add a 0.2-percent increase in debt-to-GDP ratio from the baseline estimated in RPJMN 2010-2014 (Pisu, 2010). There is also an issue with the pattern of appropriations in which half of the amount is disbursed during the last three months of the year (Pisu, 2010), largely due to administrative and auction problems. Another problem is the decline in the proportion of the national savings to only around 16 percent to 21 percent of GDP in 2009-2012. Fluctuations in the current account balance may signal an underlying uncertainty on exchange rates, thus increasing the risk on the use of foreign funds.

Indonesia's infrastructure spending prior to the Asian crisis was around 8 percent of GDP, and since then has not recovered to that level again (World Bank, 2011a). The potential contribution of infrastructure spending should be pushed up to 7 percent of GDP so as to gain momentum and not just settle with the official estimate of 5 percent of GDP (Bappenas, 2011; Tan, 2011).

A 2011 study by the Asian Development Bank (ADB) notes that the limited capital financial instruments in Indonesia's domestic financial market may lessen the options on how the PPP projects' financing scheme would be managed. A more developed capital market is needed if it were to support infrastructure reforms in terms of financing. Long-term and reliable capital is also favourable compared to short-term capital as the latter could make macroeconomic conditions more vulnerable.

The public sector's contribution to infrastructure financing can be in the form of either a government budget allocated to technical ministries or state-owned enterprises (SOEs), or external grants, as shown in Figure 3.1. The central government may guarantee PPPs. Except for the external grants/loans, the same flow of funds can be applied to the subnational (i.e., provincial and local government) level. In such level of government as well as for cross-functional governmental arrangements, the government's guarantee is channelled to the local SOEs (Pradono *et al*., 2012).

Figure 3.1: Sources of Infrastructure Financing



Source: Alisjahbana (2012).

Broadly defined, the central government's spending on infrastructure is around 2 percent to 4 percent of GDP. Its fund allocated through budget tended to have taken off after 2010 based on data in Table 3.2, which shows that the allocated budget for the last two years was around IDR120 trillion to IDR160 trillion. The central government's infrastructure spending is mostly disbursed through technical ministries' programmes rather than through SOEs or other central government agencies. For example, from 2007-2012, around 75 percent to 85 percent of the total infrastructure spending of the central government was allocated through technical ministries, implying that financing scheme from the public sector is mostly conducted directly by the government (Table 3.2).

Table 3.2: Central Government Infrastructure Spending

By Agency	2007	2008	2009	2010	2011	2012[1)]
Technical Ministries (US$ billion) [2)]	5.10	6.80	7.81	7.54	10.49	14.26
Technical Ministries (as % of total infrastructure spending)	85.19	86.48	85.52	75.86	83.48	88.33
SOEs and other CG agencies (US$ billion) [2)]	0.89	1.06	1.32	2.40	2.08	1.88
SOEs and other CG agencies (as % of total infrastructure spending)	14.81	13.52	14.48	24.14	16.52	11.67
Government Infrastructure Spending (% of GDP) [3)]	2.6	3.2	3.5	3.6	4.3	2.6
Government Infrastructure Spending (% of GDP) [4)]	1.5	1,6	1.6	1.5	1.7	

Notes: 1) Data for 2012 are budget data.
2) Infrastructure spending as stated in Budget Directorate which includes _____ and not only basic infrastructure;
3) GDP is nominal data from World Bank database;
4) Estimate from Goh, *et al*. (2012) for basic infrastructure (energy and public works)
Source: MOF 2013**.**

Meanwhile, the central government spending is not disaggregated by sector. Rather, it is disaggregated based on technical ministries or on function, where the allotment for infrastructure specifically may not be directly stated. The size of the central government spending on infrastructure is still lower than administrative expenses. In some years, the infrastructure spending allocated by the Ministry of Public Works was slightly higher than the education spending or military spending (Figure 3.A.2 in Annex).

Because of decentralisation, a part of the government's budget for infrastructure

is disbursed through local governments' budget.[2] Note, however, that while the consolidated budget in Table 3.3 has risen (around US$9.14 billion in 2007 to around US$24.9 billion in 2012), 65 percent of the total government spending is still controlled by the central government. Infrastructure spending from the local government budget, on the other hand, has been around 20 percent to 30 percent only of the total government spend on infrastructure. Provincial governments' share of the infrastructure spending has been quite low, despite the increase from less than 5 percent to around 8 percent, to 10 percent in the last four years.

Although the central government's allotment is the dominant source for public sector infrastructure spending, the central government is unlikely to ignore local governments' role either on the preparation or on the operation of services. This is because the functions are quite differentiated across all levels of governments. Functionally, it is the local governments that provide the most basic services of infrastructure, such as roads, drinking water, hospitals, and schools.

Table 3.3: Central, Subnationals, and Local Governments Infrastructure Spending

By Agency	2007	2008	2009	2010	2011	2012[1)]	2013[1)]
Central Government (US$ billion) [4)]	5.98	7.87	9.13	9.94	12.56	16.15	18.84
Central Government (% to Total Central Spending) [3)]	65.41	62.83	68.71	67.92	64.77	64.79	62.00
Province (US$ billion) [2)]	0.45	0.56	1.14	1.57	1.84	2.55	3.21
Provincial Government (% to Total Province Spending)	4.90	4.51	8.57	10.75	9.47	10.22	10.56
Local Government (US$ billion) [2)]	2.71	4.09	3.02	3.12	5.00	6.23	8.34
Local Government (% to Total Local Government Spending)	29.68	32.66	22.72	21.33	25.76	24.99	27.44

Notes: Values in IDR is converted to US$ based on exchange rate of US$1 = IDR10,000.
1) Data in 2012 are budget data, and realised spending is for central government for 2011 data;
2) Infrastructure is defined as spending on public facilities that also includes housing;
3) Total spending has excluded transfer to provinces and local governments;
4) Central government spending for infrastructure allocated through Technical Ministries and SOEs or other central agencies.
Source: MOF 2013.

[2] Provincial and local governments' sources of revenues, however, mostly come from transfers from the central budget. Around one-third of the central government's budget is allocated as transfer fund for both provincial and local governments (Ministry of Finance, 2012).

The share of infrastructure spending on public utilities at each level of government ranges from 2 percent to 17 percent. On the overall, as shown in the Annex's Table 3.A.2, the share of housing and public utilities is more than 15 percent at both provincial and local government levels.

Table 3.4 shows variations across regions' provincial and local government infrastructure spending. Except for DKI Jakarta (where there are no figures available for its local government in Table 3.4), the provincial as well as local government infrastructure spending is quite low (although mostly developed infrastructure) in the densely populated Java region. At local government levels within each province, there is a high variation in the share of infrastructure spending. In 2011, around 214 out of 524 local governments had allocated less than a tenth from their total budget to infrastructure spending. Only 16 local governments—mostly resource-rich regions in East Kalimantan—allocated more than 30 percent of their budget for infrastructure spending.

Table 3.4: Province-Local Governments' Infrastructure Spending 2011 (as % to Total Expenditures): Pattern across Provinces

Region	Province Infrastructure Spending	Local Governments Infrastructure Spending			
		mean	min	max	standard deviation
Nanggroe Aceh Darussalam	21.74	9.99	4.25	17.49	3.73
Sumatera Utara	21.10	12.18	1.18	27.46	5.66
Sumatera Barat	18.17	10.97	5.21	21.78	4.63
Riau	3.35	20.06	12.12	35.12	7.12
Jambi	25.34	22.19	9.75	71.28	17.33
Sumatera Selatan	22.00	17.91	6.56	31.98	6.60
Bengkulu	10.45	9.98	1.34	17.34	5.36
Lampung	17.80	13.82	4.69	29.56	6.72
DKI Jakarta	17.06				
Jawa Barat	8.04	9.91	3.34	18.47	4.87
Jawa Tengah	8.99	7.47	0.00	14.74	3.09
DI Jogjakarta	13.60	5.85	3.44	7.59	1.88
JawaTimur	6.76	8.98	3.13	32.34	5.11
Kalimantan Barat	16.88	15.00	9.44	29.16	4.89
Kalimantan Tengah	16.25	18.65	5.23	27.92	6.92
Kalimantan Selatan	12.51	16.10	4.97	26.46	6.69
Kalimantan Timur	19.78	28.20	6.44	47.18	11.02
Sulawesi Utara	17.13	13.85	3.80	31.28	8.37
Sulawesi Tengah	14.50	11.19	4.99	21.56	4.78
Sulawesi Selatan	13.76	11.39	4.85	20.18	4.40
Sulawesi Tenggara	14.09	11.92	6.81	26.96	6.17

Region	Province Infrastructure Spending	Local Governments Infrastructure Spending			
		mean	min	max	standard deviation
Bali	2.96	6.97	3.18	14.93	4.16
Nusa Tenggara Barat	20.64	10.96	3.74	35.12	9.43
Nusa Tenggara Timur	6.64	10.47	5.05	21.49	5.02
Maluku	19.58	13.32	4.70	27.21	6.57
Papua	11.33	14.84	3.81	30.33	7.04
Maluku Utara	22.99	17.03	0.53	34.09	12.20
Banten	18.48	10.99	6.00	19.78	4.53
Bangka Belitung	23.92	12.22	1.03	17.11	5.37
Gorontalo	15.63	13.70	7.49	25.35	6.31
Kepulauan Riau	9.48	13.77	0.66	18.32	6.18
Papua Barat	7.69	16.35	5.00	30.73	7.41
Sulawesi Barat	18.90	9.71	7.04	13.87	2.73

Source: calculated from MOF (2013).

In terms of external grants/loans, the Bappenas Blue Book (2012) notes that most loans and grants for infrastructure projects, generally channelled via technical ministries (such as the Ministry of Public Works), go to urban areas. Meanwhile, Table 3.5 shows that around 80 percent of infrastructure financing from external funds comes in the form of loans. Depending on the implementing agencies, these external funds can be channelled to technical ministries, SOEs, or provincial and local governments. Table 3.A.3 and Table 3.A.4 in the Annex break down the allocation of grants and loans to provinces and local governments. Most infrastructure projects funded at the local level consist of roads infrastructure, while those at the provincial level are (clean) water infrastructure. Meanwhile, loans to SOEs for period 2010-2014 mostly go to PT PLN as the country's electricity SOE (Table 3.A.5 in Annex).

Table 3.5: Financing Infrastructure: Grants and Loans 2010 -2014

Indicator	Total 2010-2014	Infrastructure Project Assistant 2010-2014
By Type		
Loan (US$ million)	18,353.72	13,982,300
Grant (US$ million)	5,516.53	577,024
Counterpart Fund (US$ million)	3,053.76	2,295,019
by Implementing Agencies		
Ministries/Agencies	18,567.68	8,304,327
State-owned Enterprises (SOEs)	7,347.93	7,358,931
Local Governments	1,008.40	1,191,085

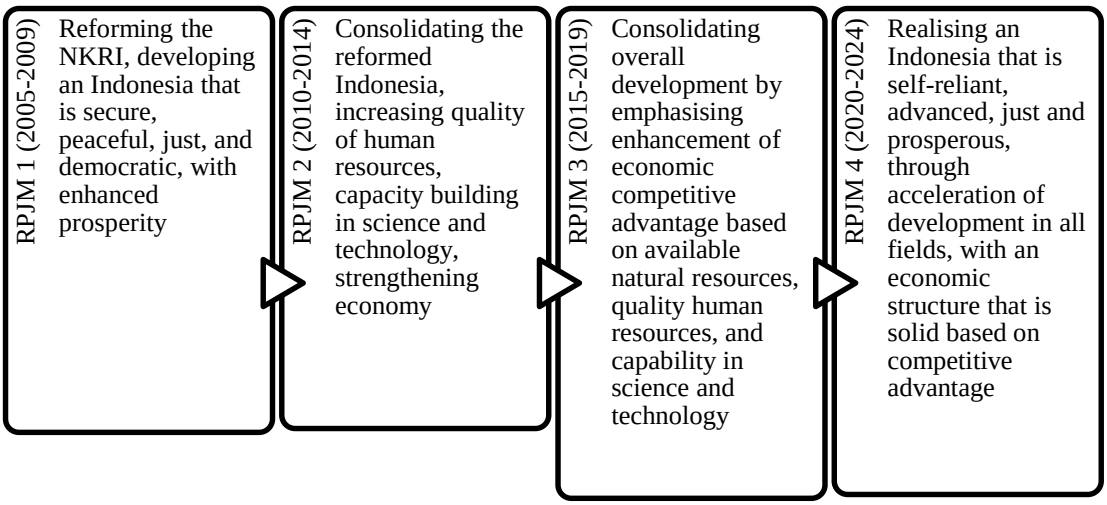
Source: Blue Book Bappenas (2012).

Development partners' commitment to infrastructure projects can be viewed in Table 3.A.6 in Annex. The World Bank, ADB, and International Finance Corporation (IFC) have shared funds given to the Indonesia Infrastructure Guarantee Fund (IIGF). The types of project funded by the World Bank and ADB have been varied, while AusAID and JICA usually have specific location or targeted regions for their funding.

National Development Plan for Infrastructure

Law 17/2007 translates the national development vision and mission for the period 2005-2025 of the National Long-term Development Plan (RPJPN) into main objectives for every five-year development period (2005-2009, 2010-2014, 2015-2019, and 2020-2025). For each five-year planning stage, the National Medium-term Development Plan (RPJMN) provides the roadmap for the elected president, which is then supposed to be followed even by the provincial and local governments. Figure 3.2 features the vision and mission of each RPJMN. Note that for the period 2015-2019, the focus is on handling economic disparity and improving competitiveness on natural and human resources, and technology.

Figure 3.2: Stages of Development: Long-Term Development Planning (RPJPN) 2005-2025



Source: Law 17/2007.

Infrastructure projects are national priorities in the context of building country competitiveness. In fact, based on RPJMN 2010-2014, infrastructure investment is estimated to be around US$14.3 billion, of which 35.75 percent would come from public sector (government) financing. Spending on infrastructure in 2010-2014, which aims to mostly focus on transportation and electricity, is still below the commitment target stated in RPJMN 2010-2014.

Thus, the government has issued Presidential Regulation 32/2011, or the Master Plan for the Acceleration and Expansion of Indonesia's Economic Development (MP3EI) 2011-2025 (Fiscal Policy Office, 2012). This long-term planning document aims for an economic growth rate of 7 percent to 9 percent per year. It has a potential to identify and scale up investments or spending on infrastructure (World Bank, 2011a). Table 3.6 shows indicative investments for infrastructure up to 2020 of around US$177.4 billion. High investments of around US$68.1 billion are needed by infrastructure for power and electricity, roads, and railway systems.

Table 3.6: Investments Indicated for Infrastructure 2011-2014

Infrastructure Sector	US$ billion
Road	33.9
Seaport	11.7
Power and Energy	66.9
Airport	3.2
Railway	32.6
Water Utility	1.8
Telematic	24.2
Other Infrastructure	3.1
Total	**177.4**

Source: MP3EI.

Part of the MP3EI calls for connectivity improvement within and inter-areas called economic corridors. There are four regional corridors that would be developed: (1) Sumatera; (2) Java; (3) Kalimantan; (4) Sulawesi; (5) Bali-Nusa Tenggara; and (6) Papua and Maluku Islands. Each (island) corridor focuses and prioritises a dominant sector. For example, the Java corridor is intended as base for economic production, especially for services; the Bali-Nusa Tenggara corridor is for tourism; and the corridor in the eastern part of the country is for agriculture and extractive industries.

Table 3.7 shows the investments by corridor. Aside from the Java corridor,

much of the investment would be channelled to develop the Kalimantan and Sumatera corridors. These two corridors are intended as bases for energy sources and extractive sectors. Of the total indicative investment of US$400 billion, only around 12 percent are expected to directly come from the government budget, while around 49 percent would be financed by the private sector, and around 18 percent and 21 percent would respectively come from SOEs' investments and hybrid investments between public and private sectors. Furthermore, infrastructure investment would involve around US$177.4 billion—or 44.3 percent of the total indicative investment indicated in the MP3EI document (Table 3.6).

Table 3.7: Indicative Infrastructure Investment Based on Corridor

Corridor	Billion US$
Sumatera	71
Java	128
Kalimantan	95
Sulawesi	31
Bali-Nusa Tenggara	13
Papua - Maluku Islands	62
Total	**400**

Note: value of IDR is converted to US$ using exchange rate of IDR10,000 per US$.
Source: MP3EI, Book 3.

National Infrastructure Planning and ASEAN Connectivity

The ASEAN connectivity framework is part of a roadmap for the ASEAN Economic Community (AEC) in 2015. In this context, the ASEAN expects the regional connectivity to improve its overall economy, taking into account the equity consequences of the transition within the ASEAN region. Indonesia as a country with diverse regions, expansive area and large population would have to figure out how to align its commitment to ASEAN connectivity with its own national plans and priorities.

Fortunately, because Indonesia already has plans to develop its (island) regions, it considers the ASEAN connectivity framework as a platform that can complement and support its own infrastructure targets. The concept of economic corridors augurs well with the development in regional borders with other ASEAN countries, as in the case of the Sumatera, Kalimantan, and

Sulawesi corridors. Indonesia's commitment is high considering that it is the second highest contributor to the ASEAN infrastructure fund (AIF).

According to the Master Plan on ASEAN Connectivity in 2010, Indonesia will take part in the Brunei Darussalam, Indonesia, Malaysia and Philippine - East ASEAN Growth Area (BIMP-EAGA) and the Indonesia, Malaysia, and Thailand - Growth Triangle (IMT-GT). The BIMP-EAGA aims to improve infrastructure connectivity, especially in the remote areas, among Brunei Darussalam, Malaysia, Indonesia, and the Philippines. It has two corridors of development: (1) The Western Borneo/Kalimantan Economic corridor (WBEC); and (2) The Greater Sulu Sulawesi corridor (GSSC).

The connectivity in the West Kalimantan corridor will prioritise electricity and land/road infrastructure. Its power transmission project plans to take advantage of the power generation economies-of-scale in neighbouring Malaysia. By filling the gap in its own power infrastructure requirements, this Indonesian project can spur economic and trade development between the two relatively similar cultures and geographic areas. The project is funded by ADB and commenced in 2011. It also involves the building of shorter roads networks from Pontianak to Entikong, which are supported further by crossing-border facilities between Sambas and Entikong. This sub-project started in 2012.

The Sulu Sulawesi corridor aims to improve infrastructure connectivity between Indonesia, the Philippines, and Malaysia. Projects within Indonesia itself include building toll roads between Manado and Bitung, although this has yet to commence. In general, the Sulu Sulawesi corridor’s objective is to enhance connections mostly in marine transportation and ASEAN broadband penetration. Because of the high environmental impact involved in marine transport, conservation of marine biodiversity is a priority. Therefore, the environmental consideration given to the marine project translates into more regional cooperation in environmental coral triangle protection.

Meanwhile, the IMT-GT aims to expand cooperation on strategic sectors between the three countries, thus allowing them to take advantage of their complementary economic factors that can improve the competitiveness of the sector in the area. In terms of funding, the IMT-GT Blueprint for 2012-2016 needs around US$4.58 billion for projects located in Indonesia, and about US$320 million and US$328 million for projects in Malaysia and Thailand, respectively (Sidgwick, 2011).

In Indonesia, the IMT-GT will focus on the island of Sumatera. According to the IMT-GT Blueprint for 2012-2016, projects in Indonesia will mostly require the building of toll roads across Sumatera and improving facilities in existing main ports, such as Roll-On Roll-Off (RORO) networks, customs, and better road access to the ports. Some projects, such as the Sumatera toll roads and improvement of facilities at the Dumai port, are classified as PPP and have been included in the PPP Book by Bappenas. However, such projects still have to contend with issues of unconfirmed funding. Because of such funding issue, there are those who believe that it would be best to shift the financing of these projects to the government. On the other hand, if this would be externally funded, then it would be have to be included in Bappenas' blue book.

The other IMT-GT project involves power generation and transmission connectivity between Indonesia and Malaysia. It aims to build a power transmission network that uses existing power generation facilities from Malaysia. This project is to be initiated by the state-owned electricity company, PLN, with funding from ADB.

Public Private Partnership: Institutions and its Adoption

In terms of the regulatory support on PPP, Pradono, *et al*. (2012) states that PPP development in Indonesia can be classified into the following stages:

1) Period prior to 1990, when the central government issued regulations that lay the foundation on private sector involvement on toll roads and IPPs (proposal);

2) Period 1990-1997, which further promoted the PPP scheme in the utilities sector although the 1998 economic crisis had hampered the continuation of the programme and handed much of the initiatives over to the central government through SOEs;

3) Period 1998-2004 is the consolidation period where improvements focused on regulatory support on infrastructure sectors and set up of institutions (i.e., KPPI was formed); and

4) Period from 2005 onwards, where the government tried to adopt a regulatory framework and to implement PPP projects based on international best practices. The government issued Government Regulations 67/2005 and 13/2010 on PPP. During this period, the role of institutions surrounding PPP regulations and sector laws was established and clarified.

Table 3.8 shows the regulatory framework of PPP. These regulatory reforms aim to create the path for private involvement in infrastructure projects on specific sectors, such as electricity and transportation. In Indonesia, such sectors are still dominated and monopolised by SOEs.

Table 3.8: PPP: Regulatory Framework

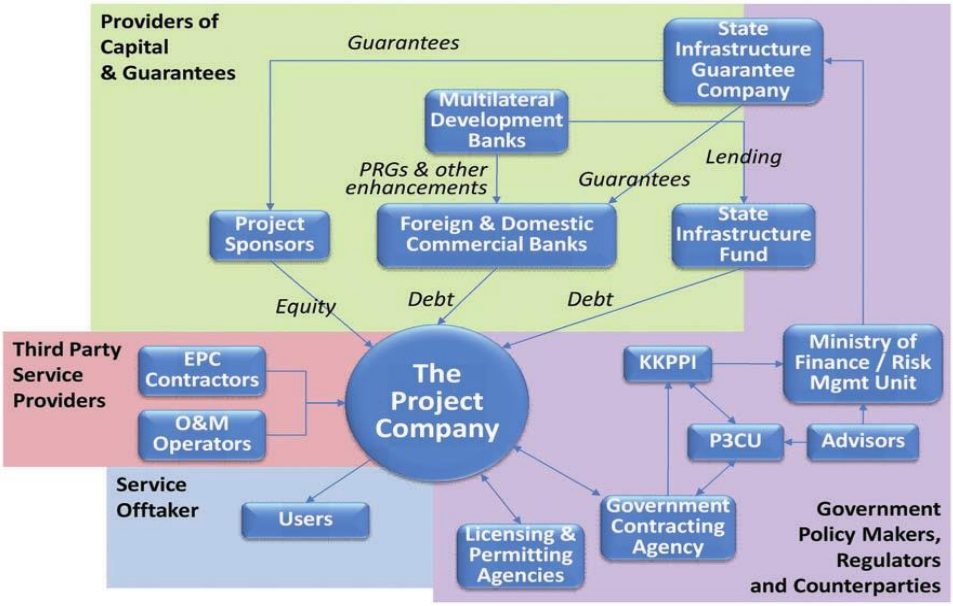
Year	Type of Regulation
2005	Government Regulation 67/2005
2006	MOF Decree 38/2006 on Risk Management
2007	Law 23/2007 on Railway Transport
2008	Law 17/2008 on Sea Transport and Port, Law on Energy, Law on Waste Management
2009	Law 1/2009 on Air Transport, Law 22/2009 on Land Transport, Law 30/2009 on Electricity
2010	Government Regulation 13/ 2010, Planning Ministry Decree no 4/2010, Government Regulation 78/2010 on PPP Financing Guarantee, MOF Decree 260/2010 on Financing Guarantee Guideline

Source: Fiscal Policy Office (2012).

Figure 3.3 classifies institutions involved in PPPs as either: (1) governments/regulators/counterparties; (2) providers of capital and guarantees; (3) project company; or (4) third-party service providers. The government unit that handles PPP project priorities is the National Development Planning Agency's (Bappenas) Public-Private Partnership Central Unit (P3CU). Bappenas has released a PPP plan document in 2010 that enumerates the types of PPP projects offered by the government for the period 2010-2014. According to the Bappenas document, the categories for PPP project selection and preparation are: potential projects, priority projects, and ready-to-offer projects. Here, the PPP units in Bappenas and/or Ministry of Finance assess the feasibility of such projects and evaluate the financing scheme. The project starts after the government contracting agency and the project company have reached an agreement. The government contracting agency can either be the central, provincial or local governments, depending

on the type of PPP infrastructure and its services. Meanwhile, the license or permits to operate or provision of services generally come from the technical ministry.

Figure 3.3: Institutions in PPP Framework



Source: Coordinating Ministry of Economic Affairs (2010).

On Project Development Facility (PDF), the government set up the IIGF to provide the guarantee fund and PT SMI to support feasibility studies on PPP projects in 2009. The provision of the government's guarantee funds is part of risks management in infrastructure projects to make the project more attractive for private sector participation. International development partners, and not just the government, also help find funds for the IIGF.

Meanwhile, PT SMI functions more as a facilitator between project owner and investor in project identification and preparation, which covers areas ranging from solicitation of government support, feasibility studies, financing schemes, socialisation and project marketing, as well as project financing execution.

The PPP schemes adopted in Indonesia, such as in the case of toll roads, are mostly modified Build-Operate-Transfer (BOT) arrangements, wherein the

government also contributes in the funding of the project. Generally under BOT schemes, private sectors fully fund the projects that have both economic and financial bankability (Pradono, *et al.*, 2012).

Table 3.9 lists the distributed PPP projects as of 2012 based on sectors, implementing agencies, and location of the projects. Most PPP projects are on transportation toll roads and water supply, which are frequently administered in coordination with local governments. As of 2012, there are 13 PPP projects on toll roads, five projects on water supply, and four projects each on power and on solid waste and sanitation.

Table 3.9: PPP Projects: Based on Sectors/Sub Sectors, Implementing Agencies, and Targeted Regions 2010-2014

No	Sector/Sub Sector	Quantity	Project Cost (US$ Million)
1	Air Transportation	4	1,354.00
2	Land Transportation	3	136.00
3	Marine Transportation	4	2,875.12
4	Railways	3	4,783.00
5	Toll Road	14	33,147.53
6	Water Supply	18	1,978.82
7	Solid Water and Sanitation	6	453.00
8	Power	6	6,478.50
	Total	58	
No	**Type of Projects**	**Quantity**	**Project Cost (US$ Million)**
1	Ready-to-Offer Projects		
	Central Government	2	664.00
	Local Government	1	100.00
2	Priority Projects		
	Central Government	13	32,159.53
	Local Government	10	2,788.17
3	Potential Projects		
	Central Government	10	6,597.12
	Local Government	22	8,897.15
	Total	58	51,205.97
No	**Province**	**Quantity**	**Project Cost (US$ million)**
1	Nangroe Aceh Darussalam	1	21.00
2	North Sumatera	3	2,042.00
3	West Sumatera	3	48.00
4	Riau	4	5,543.53
5	Jambi	2	1,602.20
6	South Sumatera	4	2,526.83
7	Lampung	1	318.20
8	Banten	4	26,591.00
9	DKI Jakarta	2	812.50
10	West Java	13	4,027.16
11	Central Java	3	118.22

No	Province	Quantity	Project Cost (US$ million)
12	DI Yogyakarta	2	1,370.00
13	East Java	2	436.67
14	Bali	3	833.00
15	NTB	1	7.00
16	West Kalimantan	2	160.40
17	Central Kalimantan	2	23.00
18	South Kalimantan	1	26.76
19	East Kalimantan	2	2,980.00
20	North Sulawesi	1	353.00
21	West Sulawesi	1	1,335.50
22	Central Sulawesi	1	30.00
	Total	58	51,205.97

Source: pkps.bappenas.go.id

In the context of decentralisation, many PPP initiatives are conducted by local governments following the framework from the central government and in coordination with the provincial government. Local governments, in this case, are expected to initiate small-scale PPP projects. For example, for the period 2010-2014, local governments are expected to initiate 50 PPP projects (Pradono, *et al.*, 2012).

Lessons Learned from Private Sector Participation

The adoption of the PPP scheme remains slow due to the following issues (Fiscal Policy Office, 2012; Tan, 2011; Pradono and Syabri, 2013): Involvement of domestic and support financial sector; delays and uncertainty on land acquisition that also spur land speculation; low response on government risk support; and weak resource capability of PPP institutions, which may lead to poor project preparation and inferior feasibility studies.

As stated in Pradono, *et al.* (2012), challenges facing PPP projects pertain to the risks and revenues arrangements. Risk allocation is a major issue, especially in cases where the government contracting agency is at the subnational level (i.e., provincial or local). Since governments at the subnational level are generally revenue constrained, some might view PPP as an additional source of revenues. If the potential risks are not documented properly, it will be easy for the government contracting agency to downplay

the risks of the project. Lessons must be learned from failed PPP projects such as the Ungaran Potable Water Project in Semarang, which already spent US$10.22 million before it was stopped.

Most risks are borne by private partners who also operate the project. Also, there are royalties that must be paid irrespective of the profit or loss condition of the project. Learning from the Ungaran Project scheme, there is a need to revisit the PPP design so as to balance the benefit-and-cost sharing among the stakeholders.[3]

Meanwhile, the case of PPP projects in the electricity (power) sector is an example on how modified risk management and sector laws—apart from the general PPP framework—are needed to support the execution of PPP projects. Large-scale PPP projects are vulnerable to changes in the macroeconomic environment, such as economic or financial downturns. These project require a sound and in-line regulatory framework.

Unlike other public utilities projects, those in power generation would be distributed solely through PLN and so, the risks associated with an overestimate demand is not an issue. Nonetheless, the government needs to gradually set the electricity pricing, so that the cost structure of PLN makes the cooperation on power generation between PLN and the private sector feasible. In this case, financial facilities on currency hedging schemes as well as on how it would be aligned with government public financial management are important given that large PPP projects depend on external (foreign) fund.

According to Pradono, *et al.* (2012), another example of a PPP project that went well is the Jakarta Outer Ring Road (JORR) Project. This toll road project was operated in 2010 and managed by PT Jasa Marga, PT JLB, and PT JLJ. Like any other toll road projects under the BOT scheme, the JORR project is relatively working adequately, although the overall risk is still borne by the private sector. One of those risks is the delay in the land acquisition process. To mitigate this, the project was socialised among stakeholders during the preparatory stage that, to some extent, had ensured

[3] There are at least 12 PPP projects that were reportedly idle because investors withdrew from the projects, and feasibility studies (FS) have yet to resume (Investor Daily, 2013).

their accountabilities. The project also has relatively high financial feasibility with any risk to be compensated by tariff adjustments. The procurement process is still overseen by PT Jasa Marga, the SOE-operator of toll roads. Through a reform of Law 22/2009, there is already a separate body that monitors the procurement and operation, including tariff adjustments, of toll roads.

Recommendations on PPP and ASEAN Connectivity

Establishing the role of institutions as a general approach has its advantage when issuing sector laws. Also, a simplified regulatory system improves project efficiency in terms of the price-cost recovery level of its investment. Once regulatory reforms and the needed PPP institutions are in place, there is now an opportunity to promote PPP for small- and medium-scale projects with the participation of subnational and/or local governments. The central government should encourage the subnational units, specially if the latter are already ready in terms of their capacity and their region's economies-of-scale to participate in infrastructure project.

One way to get subnational and local governments' involvement in the project is by aligning their public financial management with the PPP scheme. A relatively uniform regulatory framework applicable to subnational and local governments may ease the latter's adoption of the scheme.

A consistent execution of the central government framework in infrastructure project may not suffice when it is not complemented by a variety of financing schemes. Thus, attracting foreign direct investments from the private sector should be resorted to so as to complement the public sector's approach on infrastructure spending.

In Indonesia, the lack of infrastructure specifically in the transport and energy sectors has long been a concern as it hinders the country's competitiveness. In fact, addressing this concern not only helps Indonesia but the ASEAN region as well. An infrastructure project may have a distributive effect across the ASEAN borders, as it makes it possible for remote and poor regions to gain more economic access.

The establishment of the ASEAN Infrastructure Fund (AIF) is the first step towards creating another source of infrastructure financing. Indonesia, the second largest contributor of AIF (after Malaysia), can take advantage of this fund for its cross-border infrastructure projects.

Nonetheless, the AIF's US$485.2 million fund is still measly in comparison to the needed fund estimated at US$8 trillion (Das and James, 2013). The current AIF initiative, where ADB contributes and jointly manages the fund, needs to further involve other development partners so as to increase the fund size. More development partners may mean more private investments as well as opportunities to get more technical assistance on the management of these cross-border infrastructure projects.

In terms of the process and institutional issues, countries in the ASEAN have different regulatory frameworks and institutions. What is needed now is a common understanding among countries on how sharing and aligning regulatory frameworks can help and complement the ASEAN roadmap on cross-border infrastructure. For instance, sharing of databases on ASEAN nations' regulatory frameworks, at least on the transportation and energy sectors, can help align their schemes with the infrastructure projects under the Master Plan on ASEAN Connectivity. Furthermore, even subnational governments can learn a lesson or two from the differences in the stages of development as well as regulatory frameworks across nations. The ASEAN region may even consider setting up a sustainable learning centre on infrastructure development that aims to create awareness, identify, and learn from what is working and what is not from existing cross-borders infrastructure projects.

In sum, although there are challenges in coordinating cross-border infrastructure projects, the financial and economic viability of these projects is less of an issue, especially when there is an adequate joint fund—as in the case of the AIF—with additional support from bilateral organisations or private sectors. In its effort to improve the capacity of the public sector, the country should also factor in the capabilities at the subnational levels. In Indonesia's case, the subnational governments—not just the central government—should improve their learning process as well as their

accountability over the outcome of their cross-border infrastructure projects. When all stakeholders are on the same page with regard their knowledge and ownership, only then will the implementation of projects in the country become more effective. The success of Indonesia's existing projects can set the tone as well as create a good benchmark for future infrastructure ventures.

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Annex

Table 3.A.1: Summary of Central Government's Realised Budget (Audited): 2007-2013

	2007		2008		2009		2010		2011		2012		2013	
	Bil. US$	%	Bil. US$	%	Bil. US$	%	Bil. US$	%	Bil. US$	%	Bil. US$	%	Bil. US$	%
A. Revenues and Grants	**70.78**	**100.0**	**98.16**	**100.0**	**84.88**	**100.0**	**99.53**	**100.0**	**121.06**	**100.0**	**135.82**	**100.0**	**152.97**	**100.0**
I. Domestic Revenues	70.61	99.8	97.93	99.8	84.71	99.8	99.22	99.7	120.53	99.6	135.74	99.9	152.52	99.7
1. Taxes Revenues	49.10	69.4	65.87	67.1	61.99	73.0	72.33	72.7	87.39	72.2	101.62	74.8	119.30	78.0
a. Domestic Taxes Revenues	47.01	66.4	62.24	63.4	60.13	70.8	69.44	69.8	81.98	67.7	96.83	71.3	113.43	74.2
b. International Trade Taxes	2.09	3.0	3.63	3.7	1.87	2.2	2.89	2.9	5.41	4.5	4.79	3.5	5.87	3.8
2. Non-Taxes Revenues	21.51	30.4	32.06	32.7	22.72	26.8	26.89	27.0	33.15	27.4	34.11	25.1	33.22	21.7
II. Grants	0.17	0.2	0.23	0.2	0.17	0.2	0.30	0.3	0.53	0.4	0.08	0.1	0.45	0.3
B. Expenditures	**75.76**	**100.0**	**98.57**	**100.0**	**93.74**	**100.0**	**104.21**	**100.0**	**129.50**	**100.0**	**154.83**	**100.0**	**168.30**	**100.0**
I. Central Government Expenditures	50.46	66.6	69.34	70.3	62.88	67.1	69.74	66.9	88.37	68.2	106.95	69.1	115.44	68.6
II. Transfers to Regions	25.33	33.4	29.24	29.7	30.86	32.9	34.47	33.1	41.13	31.8	47.88	30.9	52.86	31.4
1. Balanced Funds	24.40	32.2	27.87	28.3	28.73	30.6	31.67	30.4	34.72	26.8	40.84	26.4	44.48	26.4
2. Special Autonomy and Adjustment Funds	0.93	1.2	1.37	1.4	2.13	2.3	2.80	2.7	6.41	4.9	7.04	4.5	8.38	5.0
III Suspend	-0.02	0.0	-0.01	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0
C. Primary Balance	**3.00**	**4.0**	**8.43**	**8.6**	**0.52**	**0.6**	**4.15**	**4.0**	**0.89**	**0.7**	**-7.23**	**-4.7**	**-4.01**	**-2.4**
D. Surplus/Deficit (A-B)	**-4.98**	**6.6**	**-0.41**	**0.4**	**-8.86**	**9.5**	**-4.68**	**4.5**	**-8.44**	**6.5**	**-19.01**	**12.3**	**-15.33**	**9.1**
E. Financing	**4.25**	**5.6**	**8.41**	**8.5**	**11.26**	**12.0**	**9.16**	**8.8**	**13.09**	**10.1**	**19.01**	**12.3**	**15.33**	**9.1**
I. Domestic Financing	6.90	9.1	10.25	10.4	12.81	13.7	9.61	9.2	14.87	11.5	19.45	12.6	17.28	10.3
II. Foreign Financing	-2.66	3.5	-1.84	1.9	-1.55	1.7	-0.46	0.4	-1.78	1.4	-0.44	0.3	-1.95	1.2
Surplus/Deficit Financing	-0.74	1.0	8.00	8.1	2.40	2.6	4.47	4.3	4.65	3.6	0.00	0.0	0.00	0.0

Note: Data of 2013 is budget data (not realised budget), values converted to US$ billion using exchange rate of US$1 = IDR10,000
Source: Calculated from Budget Directorate Data (MOF 2013*)*

Table 3.A.2: General Composition of Government Expenditures in 2013 Budget: By Level of Government

Type of Spending	Central Government		Provinces		Local Governments	
	US$ billion	%	US$ billion	%	US$ billion	%
General Administration	73.38	64.4	10.86	50.9	12.98	24.6
Defence	7.77	6.8	0.00	0.0	0.00	0.0
Safety and Order	3.40	3.0	0.13	0.6	0.62	1.2
Economy	11.49	10.1	2.27	10.6	4.59	8.7
Environment	1.22	1.1	0.45	2.1	1.27	2.4
Housing and Public Facilities	2.72	2.4	3.21	15.1	8.94	16.9
Health	1.67	1.5	1.76	8.2	5.32	10.1
Tourism	0.25	0.2	0.22	1.0	0.31	0.6
Religion	0.40	0.4	0.00	0.0	0.00	0.0
Education	10.87	9.5	2.15	10.1	17.94	34.0
Social Protection	0.74	0.6	0.27	1.3	0.81	1.5
Total	113.91	100.0	21.32	100.0	52.8	100.0

Source: Calculated from Budget Directorate and DJPK data (MOF 2013).

Table 3.A.3: Financing Infrastructure of Local Governments: Grants and Loans 2011-2014

No	Province/ Local Government	Sector	Amount (US$ thousand	Loan (L) / Grant (G)	Counterpart Fund (US$ thousand)
1	Kab. Aceh Besar	Roads	6,277	G	
2	Kota Bekasi	Railways	3,500	G	1,024
3	Kota Makassar	ICT	12,510	L	3,132
		Water	20,000	L	3,000
4	Kep. Riau Province	Seaport	87,142	L	13,000
5	Kab. Agam	Energy	72,800 (L) 9,100 (G)	L, G	76,500
6	Kota Pekanbaru	Water	20,000	L	5,500
7	Kab.Bandung	Roads	150,000	L	15,000
8	Kota Kendari	Roads	60,000	L	6,000
9	Kota Padang	Roads	58,000	L	6,800
10	Kota Cirebon	Railways	136,000	L	20,400
11	Kota Banda Aceh	Sanitation	18,000	G	

Source: Blue Book Bappenas (2012).

Table 3.A.4: Financing Infrastructure of Provincial Governments: Grants and Loans 2011-2014

No	Province/ Local Government	Sector	Amount (Thousand US$)	Loan (L) / Grant (G)	Counterpart Fund (Thousand US$)
1	DKI Jakarta	Railways	500,000	L	75,000
		Seaport	120,000	L	
		Flood Mgt	150,000 (L) 6,000 (G)	L, G	6,600
2	Gorontalo	Air Transport	17,900	L	1,790
3	South Sulawesi	Roads	50,000	L	5,000
4	Banten	Water	40,000	L	6,000
5	NTT	Water	125,900	L	12,900
6	West Java	Water	40,000	L	25,000
7	DI Yogyakarta	Water	53,160	L	7,900
		Railways	226,000	L	40,000

Table 3.A.5: Grants and Loans: SOEs 2010-2014 (US$ thousand)

State-Owned Companies (SOEs)	Loan	Grants	Counterpart Fund
1. PT Penjaminan Infrastruktur Indonesia	30,000		
2. PT Pertamina	1,446,605		478,426
3. PT PLN	4,616,800	38,500	568,600
4. PT Semen Baturaja	100,000		80,000

Table 3.A.6: Development Partner's Financing for Infrastructure Development

Development Partners	Available Funds	Financing Scheme	Priority Sectors / Projects	Priority Regions
World Bank	2009: US$0.25b 2010: US$0.2b 2013: US$0.1m		- Roads & highways - Water resource - Power - Indonesia Infrastructure Guarantee Fund	Urban areas SOE
ADB	2009: US$0.1m 2011: US$0.05m 2012: US$0.18m	Loan	- Roads & connectivity - Water supply - Financing facility	Central gov't Local level
AIF (ASEAN Infrastructure Fund)	2013-2015: US$1b			
AUSAid	2010-11: AU$3.8m	Subnational incentive	- Water and sanitation - Roads	Local level

	2011-12: AU$3.8m	grant financing		
JICA	2009: JPY48.2b		- MRT - Geothermal power plan - Roads - Railways	Central gov't

[1] Ministry of Finance (2012).
[2] There is also the perception that the bad road infrastructure in Kalimantan is due to the heavy mining trucks that pass by these roads. Thus, the quality of the roads can be maintained for a short period only (www.sindonews.com).