

## SECTOR ASSESSMENT (SUMMARY): TRANSPORT<sup>1</sup>

### Sector Road Map

#### 1. Sector Performance, Problems, and Opportunities

1. **Transport system.** Indonesia, as an archipelago with more than 17,000 islands, relies heavily on transport connections to link the islands and regions. While the larger islands have extensive road-dominated internal transport systems, with rail a secondary mode in Java and Sumatra, many of the smaller, less developed islands rely on (i) incomplete, fragmented, and poorly maintained road networks for internal travel; and (ii) interisland shipping to access the main population centers on Java and Sumatra.

2. In Java and selected parts of Sumatra, particularly the larger urban areas, roads are highly congested, leading to high social and environmental costs and a drag on economic growth. Insufficient maintenance and overloaded trucks are causing roads to deteriorate in many parts of the country. Problems with land acquisition and resettlement have been a major deterrent to investment in roads, particularly new toll roads.

3. Rail services have the potential to transport large volumes of goods and reduce road traffic on larger islands. However, existing networks are single track, use outdated technologies, and are often far from commodity distribution points. Many parts of the system are also no longer in service. Rail services are provided by a state-owned enterprise (SOE), P.T. Kereta Api (PTKA), and are unprofitable on Java due to a focus on passengers and limited freight service. In Sumatra, where coal traffic is dominant, rail services are more profitable, allowing PTKA to break even. New regulations to introduce competition into the system should bring some improvements.

4. Interisland shipping is costly because of small vessel sizes, inefficient operations, and underinvestment in port capacity. Most of the ferry services and many of the freight services to the eastern Indonesian islands rely on public service obligations (PSOs). Until 2008, ports were exclusively managed by SOEs (called *pelindos*, covering separate regions of Indonesia), which exercised monopoly control over operations and development. This has changed to a port authority structure, with the *pelindos* becoming port operators in competition with private operators. However, the fact that all port land is registered to the *pelindos* and is carried as an asset on their financial statements complicates the full transition to port authorities.

5. The bulk of Indonesia's international trade flows through five main ports. The largest is Tanjung Priok, the main international gateway in Jakarta, which serves approximately 70% of international trade and 29% of container traffic between Java and other islands. While Tanjung Priok is Indonesia's most efficient port, its productivity is lower than that of other major ports in Asia. Congestion in Tanjung Priok leads to long dwelling times for vessels and high costs that are detrimental to Indonesia's competitiveness.

6. **Transport costs and logistics.** Increasingly, countries are concerned not only with the port-to-port delivery and domestic transportation of goods by separate systems, but with the integrated door-to-door delivery of goods in a comprehensive supply chain. Internationally, Indonesia ranks 59th of 150 countries on the World Bank's 2012 Logistics Performance Index, compared with 43rd in 2007. Indonesia does most poorly on infrastructure and customs clearance procedures. Reflecting this, Indonesia was ranked 61<sup>st</sup> on the World Economic

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<sup>1</sup> This summary is based on ADB. 2012. *Indonesia: Transport Sector Assessment, Strategy, and Roadmap*. Manila. (<http://serd-ino.adb.org/>)

Forum's 2013 Global Competitiveness Index for infrastructure. According to the World Bank's Doing Business indicator for trading across borders, the total time to import in Indonesia was 27 days—higher than in all other countries of the Association of Southeast Asian Nations (ASEAN) except Cambodia and the Lao People's Democratic Republic.

7. Indonesia's poor logistics are also reflected in domestic surveys. In a comprehensive survey of local businesses, Indonesia's Committee on Regional Autonomy Watch found that infrastructure is the biggest constraint facing the business sector. The main problems are the poor quality of roads and frequent power outages. Complaints about infrastructure exceeded those on land access, security of tenor, the cost of permits, and local levies.

8. Because of weak transport systems and poorly developed logistics services, some areas of the country like Papua can expect to pay two or three times the cost in Jakarta for critical commodities like cement. In provinces such as Papua and West Papua, towns and villages, while served with local roads, are not connected to a provincial road network. This results in low economic potential, high operating costs, and high incidence of poverty.

9. **Chronic underinvestment.** Chronic underinvestment in transport infrastructure has resulted in high transportation costs and an erosion of Indonesia's competitiveness, thus becoming one of Indonesia's critical development constraints.<sup>2</sup> Sustained long-term funding of transport infrastructure at 5% of gross domestic product will be needed to close the infrastructure supply gap. The People's Republic of China, Thailand, and Vietnam have achieved even higher rates of 7%. In the past, infrastructure investment has come exclusively from public funds. Around 2005, the Government of Indonesia called for increased private infrastructure investment through private sector participation and public-private partnership projects. However, these attempts have so far been largely unsuccessful.

10. **Institutional overlap.** Transport infrastructure and services fall under national, provincial, district, or city control—depending on the level of infrastructure or service. This overlap makes funding and development difficult. For instance, the recently established road preservation fund is hampered by the inability to transfer funds from central to subnational governments in order to rehabilitate or maintain nonnational roads. Urban congestion remains a city issue, although the implications of the congestion are national in scope.

11. From 2004 to 2009, laws governing transport were changed to create a more efficient framework for transport network development, break the monopolies of SOEs, and open the door to greater competition from the private sector in the delivery of transport services.<sup>3</sup> As a result, air and road transport services are now highly competitive, offer better service, and are mainly constrained by inadequate infrastructure. Railway operations are still going through a transition as private operators are selectively encouraged to build special railways to carry key resources like coal or timber. Passenger services and rail infrastructure in Java are likely to remain under PTKA, making the PSOs<sup>4</sup> a main source of revenue. Recent studies have

<sup>2</sup> Asian Development Bank (ADB), International Labour Organization (ILO), and Islamic Development Bank (IDB). 2010. *Indonesia: Critical Development Constraints*. Manila.

<sup>3</sup>

	<u>Old Law with Public Monopoly</u>	<u>New Law with Open Market</u>
Road and Toll Road	Law No 13/1980	Law No 38/2004
Railway	Law No 13/1992	Law No 23/2007
Sea Transport and Port	Law No 21/1992	Law No 17/2008
Air Transport	Law No 15/1992	Law No 1/2009
Land Transport	Law No 14/1992	Law No 22/2009

<sup>4</sup> The PSO is effectively a government subsidy, as revenue does not cover the costs of providing the service.

recommended opening interisland shipping to more competition—including those routes with PSO payments.<sup>5</sup>

12. Institutional changes to reduce overlaps (roads), remove monopolies (ports and airports), and increase efficiency (railways and shipping) are often hampered by institutional inertia and reluctance of the parties to cede control. A key issue is the development of independent authorities to manage facilities controlled by SOE monopolies.

## 2. Government's Sector Strategy

13. Since the 1997 Asian crisis, government road spending has focused on asset preservation rather than asset renewal because of inadequate budgets. While there continue to be opportunities for rehabilitation and repair of national roads, the government proposes to close gaps in the transportation system and switch the target from asset preservation to asset creation. An acceleration of this trend across Indonesia can be expected by 2020. Progress has been made in rationalizing the delivery of toll roads thanks to better project planning and greater institutional authority for tolled expressways.<sup>6</sup>

14. In 2011, the government released its Master Plan for Acceleration and Expansion of Indonesia's Economic Development, 2011–2025 (MP3EI). The plan aims at growth rates of 7%–9% per annum and to make Indonesia one of the top 10 global economies by 2025. The connectivity pillar of MP3EI has four components that will be harmonized into a single integrated planning framework: (i) national logistics system (Sislognas); (ii) national transportation system (Sistranas); (iii) regional development—National Medium-Term Development Plan (RPJMN), 2010–2014; and (iv) information and communication technology (ICT). Infrastructure and human resource development cut across all four planning frameworks.

15. The government's national transport strategy is guided by Sistranas.<sup>7</sup> Similarly, the RPJMN<sup>8</sup> emphasizes greater domestic connectivity through major infrastructure development and transport sector reform. The reform objectives are to (i) improve the capacity of transport infrastructure and reduce bottlenecks in transport services; (ii) develop integrated, intermodal, and interisland transport as recommended in the blueprint of multimodal transport; (iii) improve accessibility to transport infrastructure and services; (iv) improve transport safety; (v) restructure institutions; and (vi) contribute to climate change adaptation and mitigation efforts.<sup>9</sup>

16. The connectivity action plan of the National Development Planning Agency (BAPPENAS)<sup>10</sup> lists measures such as (i) building a trans-Java expressway; (ii) reforming the railway sector and doubling rail tracks; (iii) establishing a Jabodetabek<sup>11</sup> transport authority to develop mass public transport; (iv) reforming interisland shipping by developing port authorities, rehabilitating key ports in eastern Indonesia, and developing public service arrangements for shipping in under-serviced areas; (v) stepping up productivity in Tanjung Priok by improving

<sup>5</sup> Government of Indonesia, Indonesian Infrastructure Initiative. 2010. *Public Service Obligation and Pioneer Service Policy in the Transport Sector*. Jakarta. [http://www.indii.co.id/publications-detail.php?id\\_news=128](http://www.indii.co.id/publications-detail.php?id_news=128)

<sup>6</sup> Government of Indonesia, Indonesian Infrastructure Initiative. 2010. *Technical Assistance to the Directorate General of Highways for Institutional Support to Create an Indonesian Highway Development Agency*. Jakarta.

<sup>7</sup> Government of Indonesia, Ministry of Transportation. 2005. *Regulation Number KM. 49: National Transportation System (SISTRANAS)*. Jakarta.

<sup>8</sup> Government of Indonesia, BAPPENAS. 2011. *National Medium-Term Development Plan 2010–2014*. Volume 2, section 5.2.2. Jakarta.

<sup>9</sup> Dewa Broto Joko Putranto. 2010. *Priority Sectors: Asian Development Bank (ADB)–Indonesian Development Cooperation*. Presentation for the National Workshop for the Government of Indonesia–ADB, Country Partnership Strategy 2011–2015. Jakarta. 5 November.

<sup>10</sup> Badan Perencanaan dan Pembangunan Nasional (National Development Planning Agency, Republic of Indonesia).

<sup>11</sup> Jakarta, Bogor, Depok, Tangerang, and Bekasi.

trade logistics, streamlining cargo release, and bolstering road and rail connections; (vi) developing a new deepwater port in West Java; and (vii) establishing a performance-based system of contracting road maintenance.

17. In March 2012, the government issued its blueprint for the development of the national logistics system (Sislognas). The goals of Sislognas are to reduce logistics costs in Indonesia, thereby facilitating the movement of goods and improving Indonesia's competitiveness, ensuring that basic commodities are available throughout Indonesia at affordable prices, and preparing for ASEAN logistics integration by 2013 and ASEAN economic integration by 2015. Development of the logistics system is based on six drivers: determining key commodities, strengthening logistic services, strengthening infrastructure networks, building human resource capacity, improving ICT, and harmonizing regulations. Sislognas also mentions the possibility of establishing a national logistics board or other new institutional arrangements to govern the system.

18. Achievement of the government's objectives will require funding not only from the state budget, but also substantial private investment. Of the planned \$91.8 billion transport infrastructure funding for 2010–2014, \$40.7 billion or 44% is expected to be provided by the private sector. MP3EI estimates overall investment needs in industry, roads, ports, railways, power plants, and ICT of \$468 billion until 2025—with a 51% share from the private sector. To encourage private investment, the government will continue to make project investments less risky through policy and regulatory reforms, institutional strengthening, process streamlining, use of project development funds, land banks, and other risk-sharing support facilities. The government is also implementing regulatory and institutional changes to overcome previous impediments to expanding the use of public–private partnerships.

19. The Law on Land Acquisition for Development in the Public Interest was passed in 2011 and should help streamline land acquisition processes. Progress has been made under the Asian Development Bank (ADB)-assisted Infrastructure Reform Sector Development Program, in opening up transport subsectors to private participation. Since 2007, the Directorate General of Highways has included an anticorruption action plan for all loan projects, based largely on increased transparency in the use of loan funds. The establishment in 2007 of the National Public Procurement Agency and Anticorruption Commission supports increased transparency.

### **3. ADB Sector Experience and Assistance Program**

20. In the transport sector, ADB project assistance has been aimed at rehabilitating strategic national road links and improving the sustainable use of the national road system. Since 2002, ADB project assistance has rehabilitated strategic or national road links and bridges spread across multiple provinces, resulting in high economic returns (up to 65%) in some cases.<sup>12</sup> ADB has cofinanced projects with the Islamic Development Bank and program loans with the Japan International Cooperation Agency and World Bank. Close coordination and collaboration is maintained with other development partners, particularly the Australian Agency for International Development (AusAID), for tackling sector-wide issues. However, support for policy development and strengthened institutional capacity, vehicle overloading, and road safety have had little effect because of lack of effective implementation support from relevant agencies.

21. The proposed ADB transport strategy keeps in mind the successful areas of prior ADB investment, the priorities of the government, the broad general and country-specific development strategies outlined by ADB, and the need to resolve key issues. Taking into account the government's transport priorities and ADB's Sustainable Transport Initiative, the strategic focus of support in the transport sector will include (i) improvement of transport infrastructure to provide

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<sup>12</sup> ADB. 2008. *Completion Report: Road Rehabilitation (Sector) Project in Indonesia*. Manila.

a safe, efficient, and resilient network; (ii) improvement in inter- and intrainland connectivity by improving logistics policies, regulations, and infrastructure; and (iii) institutional development, strengthening, and capacity building with particular attention to project management and better access for the private sector to infrastructure supply and operations. ADB, in partnership with AusAID, will prioritize (i) strengthening of project management capacity, (ii) road safety, (iii) road maintenance and axle load control, (iv) stronger safeguard implementation and community participation, and (v) climate-proofing of roads.

22. ADB's forward program of technical assistance and lending is aligned with the government's national transport strategy, which emphasizes greater domestic connectivity through infrastructure development and transport sector reform. To foster inclusive growth and promote better transport connections in under-served islands, ADB's ongoing Regional Roads Development Project focuses on (i) better intrainland road connectivity; (ii) greater efficiency of civil works contracting through international bidding; and (iii) stronger social and environmental outcomes through better road safety awareness, enforcement, and reporting. Another Regional Roads Development Project is planned for 2014, with project preparatory activities from 2012. Projects will directly benefit women through better opportunities for employment; targets for women government staff in training programs; and gender-sensitive community awareness programs on road safety, and prevention of HIV/AIDs and trafficking in girls and women. Road designs will incorporate gender aspects and directly benefit women.

23. To remove the policy and regulatory constraints to improving domestic connectivity, ADB is supporting the government through a diagnostic assessment of logistics. ADB's technical assistance will identify policy and regulatory barriers to promoting an integrated and multimodal transport system that provides efficient end-to-end transport services, both for individuals and businesses. It is expected that this advisory and capacity building support will lead to continued policy dialogue with the government and the second policy-based loan to further government's connectivity reform agenda beyond 2013.

## Problem Tree for the Transport Sector

Overall Impact	<b>Poor competitiveness and high direct user cost reduces economic growth and poverty reduction</b>			
Sector Impact	Underinvestment and poor condition of modal infrastructure and operations Higher cost for users is based on poor connectivity, low speed and high vehicle operating costs	Inefficient use of resources and increased user costs High input cost to smaller islands, lack of investments, and less competition	Delayed restructuring of transport sector restricts public and private investment and results in lower productivity and higher cost.	Poor infrastructure quality, poor service delivery, and lower effective life of facilities lead to higher costs and poor efficiency.
Core Sector Problem	<b>Lack of capacity, poor condition, and inefficient operation lead to higher cost and unsafe transport for users</b>			
Causes	Slow pace of concessioning and land acquisition Lack of intra and inter provincial connectivity Lack of funding for improved urban transit	Poor institutional capacity and poor governance Lack of investment and lack of competition Poor planning and little private sector input limits intermodality	Opposition from SOEs protecting entitlements Lack of good investment projects and poor project development Ineffective institutional coordination in road service delivery	Lack of monitoring and financial control Strong institutional entitlement and strong vested interests
Deficient Sector Output	Missing expressway capacity leads to congested arterials Poor quality of subnational roads Poor urban transport leads to high economic and social cost	Lack of efficient delivery mechanism Use of technologically outdated equipment Lack of intermodal connectivity leads to high interisland freight rate	Few PPP or PSP project signed Inefficient implementation delays infrastructure development Monopolistic SOE behavior delays the needed reforms	Quality of infrastructure is poor and slowed by corruption Average maintenance cost is very high and productivity is low Poor enforcement yields high accident rate and loss of life
Problem	<b>Financing the Infrastructure Deficit</b> Connectivity backlog- linking the regions and provinces of Indonesia together and completing internal connections in eastern provinces Capacity expansion to close gaps in the network and to provide for needed capacity in congested areas of west and east Java and major cities	<b>Enhancement of Transport Efficiency and Intermodal Connectivity</b> Inefficient use of available funds and need to improve operational efficiency in all modes Need to increase private sector involvement to increase competition and introduce innovation and new equipment	<b>Institutional Development, Strengthening and Capacity Building</b> Model reform agenda slow Limited private sector contribution to infrastructure development Institutional mandates confused and ineffective coordination	<b>Good Governance</b> Poor quality infrastructure Higher lifecycle costs Increased accidents and social costs