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Development Planning 2015–2019

■ Cross-Cutting Issues ■ The Transport Sector ■ Water and Sanitation

Contents

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Editor's Message

The New Year is often a time when people stop and reflect on their goals for the future. It is therefore appropriate that the theme of the first ***Prakarsa*** issue of 2014 looks at Indonesia's infrastructure development planning in the context of the *Rencana Pembangunan Jangka Menengah Nasional* (national medium term development plan) for the five-year period 2015–2019.

Within a much shorter timeframe, IndII's communications team is also looking at our goals for the future. 2014 is the last full year of IndII's current operations, as Phase 2 is slated to conclude in June of 2015. Among other implications, this means we are scheduled to produce only four more editions of this journal. With such limited time remaining, it will be especially important to make the most of every opportunity to share IndII messages and stimulate dialogue about infrastructure policy issues.

As the IndII project matures and changes, the nature of its core messages changes as well. The focus moves from a preparatory approach of asking: *What is the context? What can we do to address this challenge?* to questions such as: *What have we learned from our efforts so far? What successes should we share? What still remains to be done?* Explorations of these latter questions will inform all of IndII's communications activities for the remainder of the project.

As part of that, we will put an increased emphasis on one of IndII's newer initiatives, Briefing Notes. These are concise documents prepared for IndII's high-level counterparts. They are designed to give decision-makers in the Indonesian government a quick-to-read but technically sound message, based on IndII activities and findings, that explore policy options and the ramifications of pursuing them. Some focus on providing information to aid in the understanding of a complex issue, while others offer specific recommendations.

Some Briefing Notes are suitable for distribution to a broader audience, and when that is the case we will share them via ***Prakarsa*** and other communications channels. In this issue, you will find Notes that address three topics: Disability and Transport (page 36), Modernising Roads (page 39), and Presidential Regulation no. 29/2009 (page 41). They make interesting reading for anyone concerned with pressing matters of infrastructure development in Indonesia, and we hope that ***Prakarsa*** readers find them enlightening. • CSW

Infrastructure by the Numbers

USD 3000

Indonesia's income per capita in 2010. The nation aspires to achieve a per capita income of USD 14,250 by 2025, when the twenty-year period encompassed by Long Term National Development Plan ends.

61

Rank of Indonesia among 148 countries in terms of its infrastructure quality, as measured by the World Economic Forum's Global Competitiveness Index 2013–2014. This is up from a rank of 78 out of 144 countries the previous year.

6

Number of economic corridors that Indonesia is developing as part of its strategy for economic growth. Successful development of these corridors (Sumatera, Java, Kalimantan, Sulawesi, Bali-Nusa Tenggara, and Papua-Kepulauan Maluku) entails proper infrastructure such as sea ports and airports, as well as connectivity between economic centers.

2015

Year in which the Ministry of Finance plans to inaugurate the Public Private Partnership Center, which will be charged with assisting in the preparation and evaluation of projects and determining support to be provided through the Indonesia Infrastructure Guarantee Fund or viability gap funding.

1415km

Length of national road construction targeted in the 2010–2014 RPJMN. Actual construction substantially exceeded this, with total construction of 2834 km.

28,000m^3

Volume of waste generated every day in Jakarta.

55%

Average level of service coverage by local water companies (PDAMs) throughout Indonesia. The Millennium Development Goal for 2015 sets a target of 68% coverage.

Cross-Sectoral Themes and Priorities for the 2015–2019 Development Plan

Infrastructure planning for the five-year development plan typically takes a sector-by-sector approach. But there is value in considering cross-cutting issues as well, such as improving asset management, effectively implementing decentralisation, encouraging private sector participation, and utilising performance based incentives. • By David Ray

The collapse of the Kutai Kartanegara bridge in 2011, just ten years after it was constructed, highlighted problems with the rapid decay of existing infrastructure assets. *Courtesy of Arief Rahman Saan (Ezagren)*

Indonesia's five-year development plan (RPJMN) for the 2015–19 period is now being prepared and will provide the central policy framework for the next national administration, to be installed following the presidential election in October 2014.

This upcoming RPJMN represents the third five-year segment of the 20-year long term development plan (RPJPN). By 2025, the RPJPN articulates ambitious plans for a well established and mature infrastructure sector, able to fully support the country's economic and social needs. Given the 10 year time frame to achieve these objectives there is now a growing sense that a "business as usual" approach is no longer an option. Indonesia's infrastructure deficit is growing and important changes are required in the policy, planning and delivery framework. The RPJMN can provide a vision and rationale for those changes.

This paper is not intended to comprehensively assess the previous RPJMN documents, nor to identify every gap and what associated remedial actions are required. It will, however, highlight one area where the Infrastructure chapter of the RPJMN document can be strengthened: by emphasising a number of key cross-sectoral themes and priorities.

There are a broad range of problems and issues that impact all sectors of Indonesian infrastructure, from land access to regulatory uncertainty to continuing State-Owned Enterprise (SOE) dominance to institutional capacity constraints. These and many other cross-sectoral issues tend to be dealt with at the sector level by the relevant sections within the line ministries and/or the sector-focused divisions within the coordinating ministries such as the Coordinating Ministry for Economic Affairs and Bappenas. This is not to suggest that there is no desire to consider these issues in a more cross-sectoral manner. However,

the current institutional structure tends toward vertical rather than horizontal treatment of infrastructure problems.

This is also true of the RPJMN process. The infrastructure chapters of the RPJMN documents tend to have a strong sectoral focus with less discussion of problems and issues from a cross-sectoral perspective. In each of the main sections of the document the bulk of the discussion is at the sectoral level, covering water resources, transport, housing and settlements, telecommunications and energy.

Drawing upon key lessons learned through the IndII experience, this paper proposes four key cross-sectoral themes to potentially frame much of the discussion with the RPJMN infrastructure chapter:

- Asset management
- Decentralisation
- Private sector participation
- Performance based incentives

This covers a broad range of policy issues and challenges for the next national government. While it is not an exhaustive list, these four themes should be prioritised because they link to actionable, achievable measures that can significantly enhance the effectiveness of the RPJMN. Moreover as will be seen in the discussion below these themes are somewhat inter-related and mutually reinforcing. For example, use of

Key Points:
If Indonesia is to meet its goal of a mature infrastructure sector by 2025, its 2015–2019 development plan (RPJMN) must go beyond "business as usual". The current institutional structure lends itself to a sector focused approach to addressing problems. But addressing four cross-cutting themes – asset management, decentralisation, private sector participation, and performance-based incentives – can significantly enhance the effectiveness of the RPJMN.

Asset management guides the planning, acquisition, operation and maintenance, renewal and disposal of assets, with the objective of maximising service delivery while managing risks and minimising costs over the asset's economic life. Current budgeting, planning and investment decisions generally do not include proper asset management strategies, particularly with regard to maintenance and renewal. As a result, efforts to increase the stock of productive infrastructure are undermined by the rapid depreciation and premature failure of existing assets. The cost to government and in particular to users is high. Across sectors, poor asset management can be largely attributed to two causes: the lack of incentive structures that reward good management, and the lack of accountability that punishes poor management.

Decentralisation is commonly seen as challenge to overcome rather than an as an opportunity – an understandable view given the declining state of road networks, lack of improvement in water services, and subnational focus on administrative expenditures. But the model of central provision has not always been effective either, particularly when assets are centrally provided but neglected or unused by Local Governments that have no ownership of them. Australian Aid-funded infrastructure grants for infrastructure implemented by IndII can help change perceptions about the effectiveness of decentralised funding instruments. These grants align incentives across all levels of government and have demonstrated that LGs are keen to take ownership of investments rather than having them imposed from above.

Private sector participation through Public-Private Partnerships (PPP) has been encouraged in recent years but progress in engaging the private sector has been slow. Many reasons for this are recognised. This paper draws attention to two important issues that are often neglected: the dynamics of risk transfer and the need to emphasise value for money. Ideally, risks should be transferred to those best placed to handle them. But a common problem in Indonesia is that contracting agencies place so many restrictions, conditions and expectations of risk transfer on the private sector that it becomes difficult to structure financially feasible deals. This relates to the second issue, which is the government's focus on the private sector merely as a source of funding rather than as a means to incentivise better service delivery and performance.

Performance-based incentives have enormous potential. Current planning and delivery systems are input-based, and often characterised by inefficiency and waste. The requirement that outputs are achieved before payment is made is a powerful tool that minimises risk and promotes transparency. Therefore performance incentives should be mainstreamed into other inter-government transfers for infrastructure.

performance-based delivery systems through the engagement of the private sector could be an important policy tool for improved asset management by Local Government (LG) agencies.

Asset Management

Asset management is a systematic process to guide the planning, acquisition, operation and maintenance, renewal and disposal of assets. Its primary objective is to maximise service delivery potential and manage related risks and costs over the economic life of an asset.[1]

Asset management, in particular its maintenance and renewal dimensions, is arguably the crucial missing ingredient in much of the policy and public discourse on Indonesia's infrastructure. There is little awareness and understanding of the economic benefits of whole-of-life management of assets. As a result, budgeting, planning and investment decisions are typically taken with little regard for ongoing maintenance of the assets being procured. A basic regulatory framework for asset management is in place.[2] Beyond compliance with this framework, this is little real commitment. Few if any agencies, at any government level, have well articulated and/or functioning asset management policies, plans and strategies. In addition, a major central policy statement with guiding principles for asset management does not exist. For many officials, at both the national and local level, asset management extends only as far as developing a registry of assets; and many agencies (perhaps most) have difficulty identifying their list of assets.

Much of the general narrative on Indonesia's infrastructure problems centres on the need for new investment. However, major efforts to increase the stock of productive infrastructure are being undermined by the rapid depreciation and premature failure of installed assets. To borrow a local term, Indonesian infrastructure is to a large extent *jalan di tempat* (showing no progress): just as fast as new infrastructure comes online, existing capacity is lost elsewhere. As noted in the following watsan paper, over the past decade and a half, despite substantial increases in investment – particularly at the national level – there has been little change in installed productive capacity in the water sector (measured in litres of water per second).

Public frustration with the poor standard of infrastructure provision is often more associated with the rapid decay of existing infrastructure, rather than the need for new investment. Key examples include the annual outcry over the poor standard of local and national roads to accommodate the large movement of people of to/from the cities during Idul Fitri, as well as catastrophic events such as the collapse of the Kutai Kartanegara bridge in 2011, just 10 years after initial construction.

Poor asset management translates into high costs for government and users. Lack of effective main-tenance on assets (typically coupled with poor initial con-struction work and often inappropriate design stan-dards) shortens economic lives, resulting in inefficient and wasteful spending on new construction and re-habilitation. In the case of local roads, for example, pave-ments often start failing within two to three years, in-stead of the 10 or more usually assumed when roads are better managed. Moreover, underinvestment in ongoing maintenance makes eventual road con-struction three to five times more expensive. But such costs are dwarfed by the costs to users, particularly if a road is left in disrepair for an extended period. IndII analysis has shown that if the response time to repair a road stretches to 12 months rather than two, then

overall additional costs to road users could be 10 times that of the additional road agency costs.

Such findings are applicable to most other infrastructure sectors. A 2008 study on asset management by PDAMs (water utilities) in 15 locations found there to be a clear lack of institutional commitment and organisational capacity with regard to asset management. The study concludes that on average every USD 100 invested in asset management improvement would generate future savings of approximately USD 900 (dependent on the level of asset management implementation and acceptance by the management of the PDAMs and their government colleagues).

A broad range of factors contribute to Indonesia's infrastructure asset management problem, many of which are sector-specific, e.g. in roads: overloading and inappropriate design standards. Discussed below are two common themes, drawn from different technical contexts, relating to incentives and accountability.

First, current incentive structures play a key role in explaining why infrastructure assets tend to be poorly managed. Initial construction is often done by one party, and maintenance and other downstream renewal work performed by another. This incentivises shortcuts during construction, as downstream risks will be borne by others, generating what is known as a "moral hazard" problem. Moreover, often key assets such as roads are maintained by publicly employed swakelola (force account) managers and labourers who lack overall productivity and performance incentives to ensure effective maintenance practices.

One strategy to realise better life-cycle economies of infrastructure investment is to consider performance-based delivery modalities, including making one party responsible for designing, building, operating and maintaining an asset, and periodically remunerating them based on the performance of that asset. For existing assets, performance-based contracting arrangements can be explored for operations and maintenance tasks. Likewise, performance incentives could be utilised to enhance delivery through

Performance-Based Hibah Grants for Subnational Roads Maintenance?

Since decentralisation, local roads have deteriorated. Part of the problem is that current governance arrangements do not hold subnational agencies accountable for their performance in maintaining their network of roads. Outputs often tend to be judged in terms of the visibility of discrete projects, rather than the overall road network performance. In the post-decentralisation era, planning and budgeting decisions tend to be subject to few objective criteria but considerable political pressure and manipulation. As a result, relatively simple, but crucially important, routine and periodic maintenance activities are neglected. Local agencies lack not only the guiding framework, but also the ability to objectively identify road maintenance needs, plan, and program the necessary works. Pre-decentralisation, the guiding framework for budgeting and planning, including considerable peer review, was provided through the central government's so-called SK77 process. However, there is no longer compliance with this process. The Directorate General of Highways (DGH) continues to list improved facilitation and support for local roads as one of its key strategic objectives, but lacks the authority to carry out this objective. Further, DGH articulates plans for a road preservation unit and fund to incentivise LGs to pursue effective maintenance practices. Such a program could be implemented through a performance-based Hibah that requires grantees to meet budgeting and planning standards.

more traditional public sector procurements; e.g. remunerating swakelola road units per unit of output, such as length of drains cleaned or number of potholes repaired.

Also, incentives for improved asset management policies and practices could be mainstreamed into inter-government grant conditionality. Notably, the DAK (*Dana Alokasi Khusus*, or special allocations fund, which is the current main source of locally implemented infrastructure grant funding from the centre) does not cover investment in routine and periodic maintenance.

Second, lack of accountability and responsibility for asset condition, use and performance is another crucial problem undermining asset management. Infrastructure agencies are typically not held accountable for their performance in asset management. Various regulatory and incentive-based options could be used to increase accountability, including penalties for infrastructure managers that neglect to take reasonable action to preserve the productive capacity of assets under their direct control. Transparency-based measures involving community and user groups may also be helpful initiatives to promote accountability.

Confusion or uncertainty as to which agency is responsible for an asset further diminishes accountability. This applies both horizontally across agencies within the same government and vertically across different levels of government. As an example of the former, there is uncertainty over which agency has ownership of, and hence responsibility for, much of Transjakarta's corridor infrastructure, such as shelters, pedestrian bridges and walkways. This in turn diminishes the incentive for preservation of those assets.

Vertically, a common problem occurs when an infrastructure asset is provided by the central government, but with little engagement or ownership by the receiving LG. Moreover, the transfer status is often sufficiently vague that the asset remains essentially ownerless. LGs often complain of having unwanted or inappropriate infrastructure assets imposed on them from above, and tend not to provide ongoing budget support for their maintenance and preservation. A common approach is to let the asset rapidly deteriorate, and then get a replacement provided from above, perhaps in just a few years. As will be discussed in sections below the on-granting of performance-based Hibah grants has been shown to be an effective tool for building LG ownership and engagement, and provides an alternative to the model of "top-down" provision.

Decentralisation

In a large and diverse country such as Indonesia, the logic for decentralisation is compelling. Locally operated agencies should be more transparent and more responsive to the needs of the local community. This is particularly the case in infrastructure service delivery, where the responsibility for the delivery of water, sanitation, local roads and transport and other services has been devolved to the regions as part of Indonesia's "big bang" decentralisation effort of the early 2000s.

However in the narrative regarding Indonesia's many infrastructure problems, decentralisation is commonly seen as yet another "challenge" to overcome. Less often do we hear about the opportunities that decentralisation presents for improving infrastructure service delivery. This is quite understandable, given what has happened since decentralisation. Local road networks have degraded at an alarming rate, the proportion of households with water connections has declined sharply, and investments in local

sanitation have remained minimal or even non-existent. Also, whilst expenditure on LG services has actually increased, there has been little evidence of a commensurate increase in the quality of services delivered. Subnational spending appears to be dominated by expenditure on administration.

Armed with these observations, it's easy to conclude that decentralisation has failed infrastructure, and the argument, by extension, is that a greater degree of re-centralisation (i.e. "top-down" infrastructure provision) is required. Increasingly we are hearing that there is now diminishing appetite in central ministries for further increases in transfers to LGs. Even within areas of central government that have traditionally been more supportive of decentralisation, there are both pro and anti-decentralisation forces, with the latter being driven by a sense of disappointment that LGs, despite increases in funding, have failed to deliver.

The main infrastructure line agencies typically favour greater centralisation. There are clearly strong institutional incentives to retain control over the large national budget for local infrastructure, rather than devolving implementation responsibility to the regions. This is typically justified on the grounds that LGs lack the necessary capacity to deliver. However, the model of central provision has not always been effective. This is particularly the case when assets are centrally provided but with little or no ownership or engagement on the part of the recipient LGs, resulting in rapid depreciation of assets, or – worse – non-use.

The water and sanitation sector is an interesting case in this regard. Despite water and sanitation being defined as a local function, the budget for central government implementation has grown rapidly in recent years, and this has not been matched by growth in central transfers for locally implemented infrastructure (i.e. through the DAK). In sanitation, IndII estimates that in aggregate the central government spends approximately eight to nine times the amount that is transferred to LGs for local implementation. This and other cases where "local" functions appear to be funded in large part at the central level raises questions for policy makers about the future role of LGs in local infrastructure service delivery.

This is perhaps where the Australian-funded Hibah grants for infrastructure implemented by IndII can play a key role: these grants can change perceptions about the effectiveness of decentralised funding instruments, as well as change national attitudes towards LGs regarding infrastructure.

An important policy lesson from infrastructure grant programming funded by the Government of Australia and operated through IndII is that the Hibah can align incentives across all levels of government for improved investment in local infrastructure. The output-based Hibah grants have demonstrated that LGs are keen to take ownership of these investments rather than having them imposed from above. Moreover, preliminary impact analysis show that the grants have stimulated LG equity investments in their water utilities (PDAMs), and that such investments made by Hibah grantees are significantly more efficient than investments by non-grantees.

Overall, the grants have also shown to be a useful device for increasing LG commitments to local water service delivery, and also for pursuing national water policies and priorities at the local level. Such findings, however, need not be restricted to the water sector. Hibah styled performance grants could also be used

to pursue national objectives in local roads (see accompanying box). Key cross-sectoral policy themes such as improved LG commitment to asset management could also be pursued through performance-based grants.

Much has been written about the poorly structured incentives in Indonesian intergovernmental fiscal transfers. The dominance of administrative and staffing expenditure in subnational spending, as noted above, is due in large part to the current inter-governmental funding arrangements that favour recurrent over capital expenditure (i.e. salaries over investment in infrastructure). The Hibah shows that performance incentives in centre-to-regional transfers can be effective in improving outcomes at the local level, i.e. getting investment into productive infrastructure. The next step is to graduate the Hibah from being a useful delivery tool for donors, to becoming a new multi-sector transfer mechanism mainstreamed within the national budgetary process.

Private Sector Participation

Despite a number of important Public Private Partnership (PPP)-related policy and institutional development measures in recent years, progress in engaging the private sector in the delivery of infrastructure services in key sectors such as transport and water and sanitation has been slow. Much has been said about the factors continuing to constrain PPPs, which include institutional coordination and leadership issues, land clearance problems, poor project identification and preparation, and continuing regulatory uncertainty.

In the interest of extending the discussion further, our focus here is on is on two other important issues that are often neglected in Indonesia's continuing struggle to promote PPPs.

The first relates to risk transfer issues. An important advantage of PPPs is that they allow the transfer of a number of key risks to the private party. A key factor differentiating the various PPP models is the level and nature of risk shifted to the private sector. At one extreme are service and management contracts where only limited risk is transferred. At the other extreme are Build-Own-Operate concessions where the investor is remunerated entirely through the collection of tariffs or user fees. This situation transfers substantial risk, particularly demand/revenue risk, from the government to the private sector.

The golden rule in PPPs is that risks are transferred to those best placed to handle them. However, a common problem in Indonesia (and indeed many other emerging economies) is that contracting agencies tend to place so many restrictions, conditions and expectations of risk transfer on the private sector that it becomes difficult to structure financially feasible deals.

A key factor contributing to the problem of risk overload is the common perception within Indonesia that PPPs are simply financing instruments. Opportunities for private sector investment through PPPs are typically only conceived of within the context of the funding gap, i.e. the gap between infrastructure needs and the financing capacity of government. Hence, if the PPP modality is being considered, the default setting is to assume a full concession model, with most if not all demand and other risks being transferred to the private sector.

This brings us to the second key issue – this focus on funding the gap necessarily means less emphasis on the value for money (VfM) dimensions of PPPs. International experience has shown that well planned, designed and structured PPPs can incentivise more efficient delivery and performance than would otherwise be possible through more traditional procurement modalities. The potential for improved VfM through PPPs includes greater chances of on-time and on-budget delivery and of course improved standards of service. Moreover, by transferring design, construction, operation and maintenance risks (but not all other risks) to the private sector, PPPs can work to reduce overall life-cycle costs. And ultimately it is these life-cycle economies that outweigh the extra costs of private finance.

Key to the successful delivery of VfM through PPPs is the alignment of incentives across the various parties. The private sector delivers a service to agreed standards and is remunerated on a performance basis, usually through some kind of periodic unitary charge. Failure to meet key performance indicators can result in deductions. Thus, downstream pressures from equity holders and lenders also encourage optimum life-cycle performance. Upstream, competition in the procurement process adds additional incentives for improved VfM.

For the government, risks are reduced, as work is only paid for when specifications are met. Moreover, rates are known, which makes budgeting and planning easier. PPPs allow the public sector to spread the public's cost of infrastructure investment over the life-cycle of the asset, rather than requiring large upfront payments. Hence, projects can be undertaken more quickly, allowing users to benefit sooner. Most importantly, PPPs allow governments to harness the dynamism and innovative capacity of the private sector to promote efficiency and reduce waste.

However, due to pressures to fund the infrastructure gap, these key VfM messages have been largely lost in the discussion of PPPs in Indonesia. The prevailing view remains that the only role for the private sector is when the government has insufficient funds. And the partnership with the private sector is mainly about funding, and not improved delivery.

Moving forward, a more realistic, less ambitious approach to risk transfer coupled with a greater focus on VfM issues would open up a number of opportunities for increased private sector participation in Indonesian infrastructure. The default setting in recent years has been to focus on large, politically complex signature projects, which typically entail considerable risk transfer to the private sector. Whilst this is likely to continue[3], in the short to medium term the approach could also be diversified to focus on some "low hanging fruit" where risk transfer is minimised and there are important opportunities for the private sector to demonstrate VfM by delivering superior services. This could include the award of service and management contracts for small airports/seaports, the provision of routine and periodic road maintenance services through performance-based contracting arrangements, or possibly the delivery of major new infrastructure such as national roads or even expressways through availability or annuity schemes (more commonly referred to in Indonesia as PBAS: performance based annuity schemes).

Performance-Based Incentives

The most important lesson drawn from the IndII experience to date is the enormous potential for performance-based grants, such as the Water Hibah, to improve infrastructure service delivery at the local level. In schemes such as these, it is the conditionality of payment that serves as a powerful tool for ensuring required performance requirements/outputs are met. Risks are minimised and there is greater transparency in implementation. Hence the recommendation, as above, to mainstream performance incentives into other inter-government transfers for infrastructure.

Beyond fiscal transfers, performance incentives could play a much greater role in the improved delivery of Indonesian infrastructure. Current planning and delivery systems continue to be input-based, and often characterised by inefficiency and waste. The previous section emphasised the key role of performance incentives in private sector delivery of services. In these instances, remuneration is conditional upon specifications for service or standards being met, and risks are transferred to those best able to manage them. Given the urgent need to develop new infrastructure, there are important opportunities to bundle financing, design, construction, operations and maintenance under performance-based, multi-year contracts. Equally important, and perhaps more achievable in the short to medium term, is to focus on improved asset management and services delivered through performance-based contracts (PBC) to provide operations and maintenance.

PBC is a relatively new concept for Indonesia. It can provide key benefits, particularly for road agencies. These include the ability to secure longer term funding for a particular road network, with the understanding that it will be maintained at a pre-determined level of service. DGH recently undertook a trial of PBC as procurement modality for two segments of the main Java north coast arterial road (Pantura). Reviews of the trial to date suggest that PBC was not the optimal choice of procurement method, as the works more closely resemble major reconstruction efforts (with extended warranties). That said, one of the projects is considered a success due to the professionalism of the various parties (contractors, supervisors, and procurement officials). DGH is considering expanding the PBC concept in other locations. Ideally, to capture the longer term performance benefits that PBC enables, the road segments should satisfy minimum length requirements (preferably as a network, rather than as a long corridor); the segments should be largely stable (i.e. reconstruction requiring no more than 40 percent of the contract value); and the period of the contract should be no less than five years.

Beyond roads, competitively awarded PBCs could be used in a broad range of circumstances to improve both the efficiency and quality of infrastructure service delivery. For example, they could become a useful device for implementation of transport subsidies (e.g. for pioneer and Public Service Obligation routes, where market provision is not yet possible). This would enable a move away from the current input-based approach, which tends to favour incumbent and largely inefficient state-owned providers, to an output-based arrangement. For example, pioneer services could be remunerated based on the availability of seats and/or cargo space on a particular route, rather than on direct input subsidies such as the provision of a ferry.

Other opportunities for PBC could be explored for the management of transport assets, such as airports, seaports and bus terminals; provision of urban transport services; the upstream supply of water for PDAMs; and possibly even downstream distribution on behalf of the PDAMs, amongst many others. In short, PBC can be used in a broad range of circumstances. It is suitable when government would like to procure a service (as opposed to an asset); when there are opportunities to enhance delivery through performance-based incentives, and when the political will is present to enable greater front line infrastructure service delivery by the private sector.

Conclusion

The drafting of the RPJMN represents an important opportunity to articulate a number of key Government of Indonesia themes and priorities for the infrastructure sector as a whole. Drawing upon IndII experience, this paper proposes four key cross-sectoral messages:

- The use of appropriate incentive and accountability measures and a greater commitment to asset management at all levels of government will capture better life-cycle economies in infrastructure investment.
- Greater use of current decentralisation tools and systems will allow LGs a more engaged and incentivised role in local infrastructure service delivery.
- A more realistic approach to risk transfer, coupled with a focus on VfM, will enable greater opportunities for the private sector in infrastructure service delivery.
- Mainstreaming of performance-based incentives into planning and delivery systems, including inter-government fiscal transfers, will greatly improve the efficiency and accountability of public investment in infrastructure. ■

NOTES

1. *Sustaining Local Assets:* Local Government Asset Management Policy Statement Department for Victorian Communities, State Government of Victoria, December 2003.
2. For example: Government Regulation no. 6/2006 and 38/2008 regarding managing state assets, and Ministry of Home Affairs Regulation 17/2007 regarding management of Local Government assets.
3. Note the recent announcement that government will offer up to 30 large infrastructure projects totaling USD 33 billion, (Source: "Govt set to roll out Rp 380t infrastructure projects," Jakarta Post November 14, 2013 page 3.)

About the author:

As the Director of IndII, **David Ray** is responsible for overall technical and strategic leadership. He is an economist with over 10 years experience working in the development context, mainly in Indonesia and Vietnam. Prior to joining IndII in April 2009, David was the Deputy Director of the USAID-funded SENADA project, focussing on Indonesian manufacturing sector competitiveness. Over the 2003–06 period, he worked for The Asia Foundation in Vietnam managing a USAID economic governance program to improve the investment climate at the local level. Prior to this, he was a USAID-funded advisor at the Indonesian Ministry of Industry and Trade working mainly on trade, investment and regulatory reform issues.

David has technical skills and background covering a broad range of areas including regulatory and microeconomic reform, infrastructure policy (particularly transport and water/sanitation), international and domestic trade, decentralisation and local government service delivery, research methods and statistics, as well as project management.

David has a number of academic credentials, including a PhD focussing on Indonesia's economic and institutional development. He is the author of a number of refereed journal articles and book chapters on Indonesian development. He is a fluent reader, writer and speaker of Indonesian, and has written and published extensively in Indonesian.

Indonesia's Transport Sector: Challenges and Strategies

Gaps in Indonesia's transport infrastructure must be addressed if Indonesia is to meet its potential for economic growth. The 2015–2019 Strategic Plan can support this through a number of methods, including establishing a sound overall framework, encouraging private sector involvement, and using performance-based incentives. • By John Lee and Suyono Dikun

The cost to users of poorly maintained roads is very high. Travel times are longer, wear and tear on vehicles is greater, and safety is compromised.
Courtesy of IndII

There is a significant infrastructure delivery gap in Indonesia's transport sector: demand exceeds supply by a large margin, and this will likely worsen. Increasing road, port and airport congestion; service inefficiencies; and asset deterioration raise transport costs and reduce competitiveness (see Figure 1), probably knocking a percentage point off the economic growth rate. Indonesia is falling behind its regional competitors.

The private-sector-led infrastructure investment and competitive service provision set out in the national long term development plan (RPJPN 2005–2025) has yet to materialise – indeed, in the transport sector it has hardly begun. Some of the legal framework for railways and ports has been put in place, but implementation has been slow. Inadequate incentives, unmanageable risk allocation, restrictive regulations, mistrust and vested interests all limit investors' appetite and governmental willingness to reform. Government has yet to learn that private sector provision of infrastructure, properly incentivised, offers significant value-for-money (VfM) advantages: that is its main benefit, not simply providing additional funds.

In the absence of the private sector, government has not filled the infrastructure gap. Investment levels have been too low (evidenced in inadequate capacity in most sub-sectors) or misdirected (spent on incremental reconstruction or rehabilitation, for example, instead of new, higher-performing facilities that would offer better VfM). The impacts include low port productivity (see Figure 2), delays at airports, heavy road congestion, frequent and expensive rehabilitation cycles and higher prices for domestic and foreign end-users.

Key Points:

To meet Indonesia's need for transport infrastructure, the Government of Indonesia (GoI)'s next five-year plan needs to make more efficient use of private investment; rationalise incentives; and use performance-based mechanisms to obtain better value-for-money (VfM). There is a need for clear guidance on competition, the respective roles of the public and private sectors, and the organisation of public sector functions.

GoI must consider the rules it will impose for private investment and the criteria it will apply to public investment. It should acknowledge the value of foreign investment in encouraging better services to users, heightened domestic industry standards, and better value-for-money (VfM). Public investment should also be driven by VfM, including decisions regarding how best to implement non-economic investments essential for national security reasons.

Rather than trying to reclaim functions that have been decentralised, central agencies should find a way to incentivise better sub-national decision-making and performance.

Regulations should be designed to facilitate private investment, encourage fair competition, and protect safety and the environment.

Prices users pay for transport infrastructure and services should generally reflect the costs incurred. If subsidies are required they should be limited by competitively tendered performance-based contracts.

Results should be measured in terms of outcomes that lead to economic growth (for example, improved access and reduced travel time) rather than, as has been done in the past, inputs (for example, meters of wharf constructed).

Current incentives are perverse; neglecting maintenance, skimping on quality, and imposing delays on users can actually reward providers with a higher profit. Performance standards and performance-based contracting will offer incentives to improve infrastructure quality.

Greater competition, which can be promoted by dismantling monopolies, removing barriers to market entry, will support efficiency and hence economic growth. SOEs should be prepared to face private competition.

To address urban congestion, introduce disincentives to use private vehicles during peak periods, improve traffic efficiency, provide more attractive public transport options, and encourage strong leadership at the Local Government level.

Improving transport infrastructure and services in less-developed regions will usually involve subsidies, which should be founded on achieving desired outcomes at minimum cost through various alternatives that include contracting with the private sector.

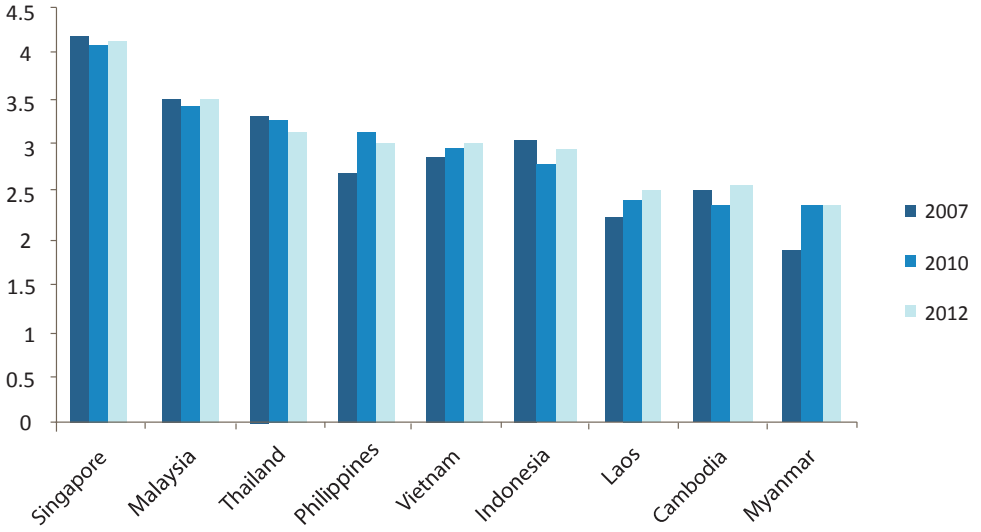
To attract investors to Public-Private Partnership (PPP) opportunities, Indonesia must offer opportunities that can compete with what other countries offer. This can be done through a delivery model that is transparent, predictable, and in line with international best practice.

The RPJMN must acknowledge Indonesia's serious transport safety issues and commit to improving Indonesia's record, particularly with respect to road safety. The five pillars of Indonesia's Road Safety Action Plan (more integrated road safety management; safer roads, safer vehicles, safer road users, and better post-crash response) are a good start. What is needed is heightened understanding of the urgency of the problem, strengthened commitment, and a higher profile for road safety activities.

As the agency responsible for national development and planning, Bappenas (with the support of a President with vision

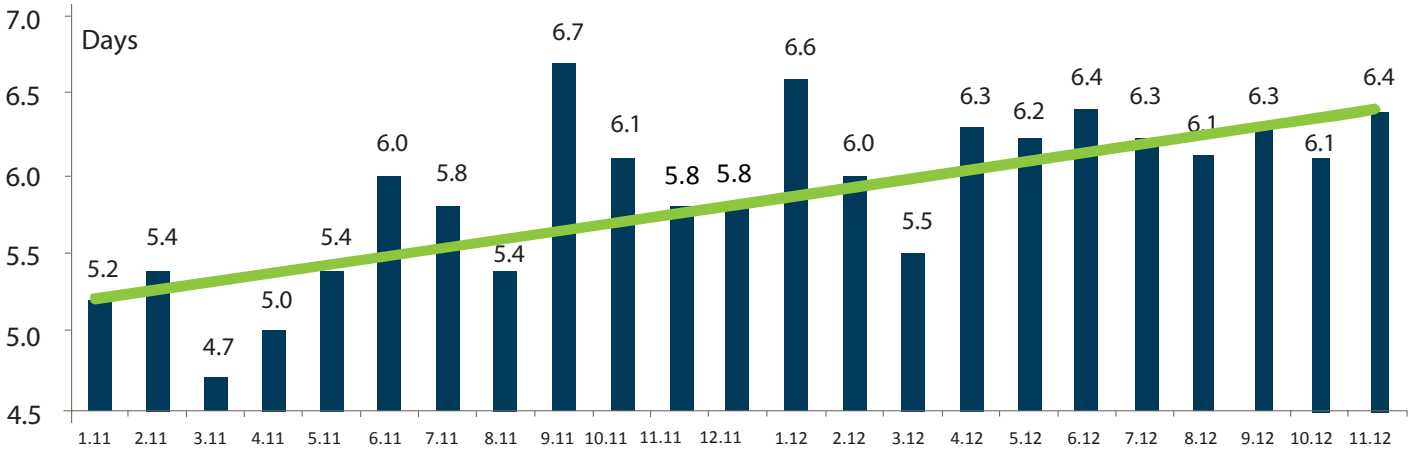
Especially for roads, total life-cycle costs (including user costs) are high, yet this has not yet spurred government to take a life-cycle approach to optimising infrastructure development and management. Construction supervision and maintenance planning are weak. A reliance on State-Owned Enterprises (SOEs), often directed by government (the "assignment" delivery model), shields important investment decisions from market signals, suppresses the development of competitive private sector alternatives, and usually results in lower-quality facilities and services. SOE operations (e.g., railways, ferries, and ports) tend to be inefficient, lacking the pressure of competitive markets.

Figure 1: Comparison of Logistics Performance Indices



Source: World Bank, Status of Logistics Indonesia, 2013

Figure 2: Dwell Time (days) at Tanjung Priok Port, January 2011 to November 2012



Source: Jakarta International Container Terminal, quoted in World Bank, Status of Logistics Indonesia, 2013

Rapid urbanisation, unchecked motorisation, weak land-use planning, ineffective development controls and inadequate public transport limit mobility and lower the quality of life in crowded cities. Urgent decisions about managing peak demand and improving public transport are postponed, making city life unpleasant and longer-term solutions harder to implement.

Inter-regional disparities in income and accessibility are inequitable and undermine unity. Prices for manufactured or imported necessities in remote provinces are up to ten times more than on Java. Road transport is heavily subsidised, favouring the higher-income central regions, while maritime transport, the lifeline for eastern Indonesia, is not. Other modes – railways in particular – also suffer from intermodal pricing inconsistencies. Without commercial management, they fail to offer an attractive alternative to road transport for passengers and freight.

Transport users have little say in determining responses to infrastructure shortcomings: while transparency and consultation are encouraged at a policy level, they are not yet effective in influencing planning decisions, nor in sanctioning poor delivery performance.

Last but by no means least: safety levels in most transport modes are low and in the roads sector are appallingly so, with 32,000 dying on the roads every year. Indonesia's participation in the UN Decade of Action on Road Safety has not yet resulted in significant changes.

Does all this paint an unreasonably black picture? Arguably there are a few bright spots, but it's better to address the needs of the coming 5, 10 or 50 years by recognising and fixing what's wrong than by hoping that more of the same will suffice.

Box 1: RPJMN I and RPJMN II Shortcomings

RPJMN I and RPJMN II were to see the acceleration of transport infra–structure development through pri–vate sector participation and public private partnerships (PPPs). The associated policy, legal, regulatory and institutional frameworks were to be reformed and restructured. Gov–ernment put in place some of the legal and regulatory reforms and es–tablished institutional arrangements for PPPs, but failed to deliver any sig–nificant PPP project transactions.

Source: IndII's Support to RPJMN III, Draft Interim Report, October 2013.

The Overarching Policy Framework

Indonesia's third mid-term development plan (RPJMN III) should not just be a strategy for fixing existing shortcomings over the next five years, however. It should also start addressing needs over the coming 30, 40 or even 50 years. RPJMN I and RPJMN II failed to do this adequately (See Box 1). RPJMN III, therefore, has an even greater and more urgent role to play. To be effective, its strategies should be guided by a single set of overarching policy principles. Unless these guide all decisions, damaging inconsistencies between institutions, modes and programs will remain.

Institutional Principles: A paramount need is for clear guidance on competition, the respective roles of the public and private sectors and the organisation of public sector functions. Most of the above problems can be traced to poor institutional structuring and decision-making, a lack of clarity about the role of the private sector, and mistrust about the benefits of competition. For RPJMN III, government decision-makers should answer two fundamental institutional questions:

- What are to be the respective roles of the public and private sectors in delivering and operating transport infrastructure and services?
- How best can those functions that remain with government be organised?

Successful comparable countries have found that most transport infrastructure and services are best delivered by a competitive, commercially focused private sector. With effective competition, the profit

motive incentivises quality, efficiency and performance much more strongly than any incentives that exist in the public sector. The lessons: facilitate private sector competition; avoid or eliminate regulations that unnecessarily inhibit private investment and operations; consider very carefully whether favouring the SOEs promotes efficiency, flexibility and demand-responsiveness; and don't always assume that government knows best.

What about non-commercial facilities and services? There is no reason why these should not also be delivered by a competitive private sector under performance-based delivery models (see Figure 3). Rather than supply such services itself, government should set performance standards and let private sector operators bid to supply them. This should ensure that service and quality targets are met at least cost, and make it possible to judge whether the perceived benefits exceed the explicit subsidies involved.

Figure 3: Advantages of Performance-Based Delivery Models

Conventional Procurement:

- Government pays for inputs, not outputs
- Separate D/C/O/M contracts – no life-cycle optimisation
- No performance standards over project life
- Contractors have incentive to expand their workload
- Risk of time/cost over-runs borne by Government
- Significant fluctuations in Government expenditure

Performance-based Procurement:

- Concessionaire provides a service over project's life
- Concessionaire manages D/C/O/M risk through sub-contracts – over-runs don't impact on Government
- Life-cycle optimisation
- Government pays only for what it gets
- Concessionaire incentivised by payment mechanism to maintain high performance standards
- Predictable Government expenditure pushed into the future

Lastly, central government should adopt a clearer position on its infrastructure role vis-à-vis the sub-national transport system. The Decentralisation Law gives responsibility for non-national infrastructure to lower-level administrations. This is a good thing – it brings decisions about local matters closer to the people – but for several reasons it has resulted in poor quality infrastructure (see Box 2).

These considerations highlight government's most important role: strategic planning, setting technical and performance standards, ensuring effective competition, and protecting public safety and the environment.

Where it is involved in providing services, it should establish arm's length separation between its policy/ planning/regulatory functions and service-supplier role: that way it is better able to hold providers accountable for quality and performance and eventually divest its commercial operations to the private sector when appropriate.

Box 2: Road Conditions at National and Sub-National Levels

- Roads carry 70 percent of all freight tonne-km and 82 percent of passenger-km
- Of the 477,000 km network in 2010, 49,000 km were provincial roads and 385,000 km district roads
- Provincial roads carry 19 percent of all vehicle-km and provide vital links between district and national networks
- 86 percent of national roads were in good/fair (stable) condition in 2010, but for provincial roads this proportion was only 63 percent. Their condition is not improving – indeed in many provinces it has worsened since decentralisation

Source: PRIM Program Design Document

Investment Principles: Regarding investment, the key policy questions are: (a) What rules should government impose on private sector investment? and (b) What criteria should apply to investments by the government?

Where competitive markets exist, private sector investment should be encouraged. Even encouraging foreign investment would be beneficial in the long term, as recent changes in law recognise: users would enjoy better services, and domestic industry standards would rise through competition and joint venture links. The primary reasons for encouraging private sector investment are quality and VfM. Private providers, acting in competition, are motivated to provide efficient, customer-focused delivery (see Box 3). Private investment should not be viewed as a way of bridging the funding gap.

Box 3: Competition and Demand-Responsiveness

Competition drives performance and innovation. Competing service providers strive to attract customers by raising quality and shaving costs. If they don't, they go out of business. These same pressures don't apply to the performance of state-owned operators or those with a monopoly in the market. Customers lose as a result.

Competition can drive performance and demand-responsiveness even where services are non-commercial. A good example is the supply of perintis services – competing providers could bid on the basis of price to supply services that meet KPIs set by Government.

If, for whatever reason, public sector investment is deemed necessary – say, in roads, rail network expansion, basic port infrastructure – it should also be driven by VfM. Public funds are wasted if benefits do not exceed costs and life-cycle costs – including user costs – are not minimised.

What about non-economic investments that are deemed essential for strategic, equity, political or other reasons? These too should be subject to benefit/cost appraisal so that the costs required to meet these non-economic objectives are clearly identified.

There is much talk recently about the "assignment" role of the SOEs (the big state-owned contractors like PT Hutama Karya, PT KAI, PT Pelindo I and II, and Angkasa Pura I and II). Proposals for delivering the Trans-Sumatera toll-road system, for example, involve an SOE contractor taking responsibility for managing PPP (Public-Private Partnership)-like structures with private sector inputs, just as Pelindo II is using private operators to develop Kalibaru port through competitive PPP arrangements.

Arguably, these SOEs are acting as an agent of government in securing private investment and efficient life-cycle management. But the private market will see this approach as adding risk to an already risky investment proposition. Better clarity is needed on governance and transparency arrangements, procurement procedures, anti-corruption measures, and levels of technical competence, before the market can feel confident about managing the associated risks.

In addition to their role in providing technical guidance, central agencies should find a way to incentivise better sub-national decision-making and performance, rather than try to reclaim decentralised responsibilities. One obvious way would be to make central government grant transfers conditional on performance outcomes and public scrutiny, as is being trialled under IndII's Provincial Road Improvement and Maintenance (PRIM) project (see Box 4).

Box 4: PRIM's Incentive Structure

- Focus on maintenance
- Use AIIG grant contributions as an incentive to strengthen governance and delivery on a sustainable basis
  - Grant contributes up to 40 percent of maintenance expenditures if completed works meet agreed technical and PPB indicators
  - Up to 10 percent of additional grant to reward improved institutional performance
- Work through and strengthen existing government procedures
  - Local consultants for design/supervision, local contractors for implementation
- With assistance, RTTF can help hold the road agency accountable for its performance
- Strong anti-corruption incentives
- Grant contribution only on satisfactory performance
- Use of Reference Unit Costs (RUCs) to reduce price collusion

Regulatory Principles: RPJPN 2005–2025 sensibly took the view that expansion of private sector-led investment was the key to achieving high growth and living standards. So regulations ought to encourage, not inhibit, this expansion. Governments tend to over-regulate, and Indonesia is no exception. In the transport sector, the aim of regulation should be to facilitate private investment, encourage fair competition, and protect safety and the environment. There should therefore be a critical review of the existing regulatory framework to:

- Remove regulatory and practical restrictions on market entry that suppress private sector involvement and competition, including any aimed at protecting the SOEs.
- Enable private sector participation in non-commercial activities, such as providing essential services for which fares or tariffs do not cover costs, by facilitating performance-based approaches and procuring such services through competitive tender.

On the other side of the coin, the review should determine how to:

- Tighten and enforce controls over (a) private sector operations that impact negatively on the public; and (b) regulations designed to protect the environment and public safety, including technical standards.

The review of restrictions on private participation should not be confined to regulations governing market entry and competition. It should also encompass rules about multi-year contracts (which inhibit the adoption of long term, life-cycle service contracts, even when they offer VfM benefits) and practices like limiting the size of contracts to such an extent that larger, more competitive participants find them unattractive and potential economies of scale are foregone.

Pricing Principles: Road transport fuel subsidies cost the government USD 20 billion per year and rising, even after the recent price increase. Putting that subsidy aside, road users contribute, through taxes and user charges, only a small percentage of the annual cost of the non-toll network. Users of other modes aren't so lucky: with the exception of economy-class rail services, they usually pay full costs, including infrastructure costs. This distorts demand, making competing modes less attractive and causing unnecessary congestion on the roads. It also reduces the incentive to operate vehicles more efficiently.

As a general rule, in the interests of efficiency, the prices users pay for transport infrastructure and services should reflect the costs incurred. Ideally these should be set by competition rather than controlled by regulation. Where there is no market competition or demand is too low to make supply profitable subsidies may be necessary, but rather than making them open-ended (by underwriting the costs of providing the services through SOEs), they should be limited by competitively tendered performance-based contracts. Government can then set prices to reflect social goals in the knowledge that costs are contained by competition and the performance standards that are set.

Figure 4: Illustration of Transport Sector Strategies to Promote Economic Growth

Sub Sector	Strategy	Output Performance			
		Connectivity	Accessibility	Availability	Quality
Roads	Develop a high grade network of limited access expressways (See Figure 5)	•			•
	Modernise the arterial network, with pavements and bridges capable of carrying heavier loads	•			•
	Improve road connections to ports	•	•	•	
	Develop freight routes through/around urban areas	•	•	•	
	Introduce performance-based approach to life-cycle delivery and management	•		•	•
Railways	Encourage private development of Special Railways	•	•	•	•
	Improve rail connections to ports and airports	•	•	•	
	Restructure state-owned railway company PT KAI along business units	•			•
	Allow private sector to offer specialised railway services (freight and passengers) on public track	•	•	•	•
Ferries	Eliminate state-owned ferry company PT ASDP's monopoly on ferry routes; encourage private participation in ferry ports and services	•	•	•	•
Ports	Encourage private sector competition with the state-owned port companies (Pelindo 1 through 4), and within Pelindo operations; facilitate private ports under Directorate General of Sea Transport control	•	•	•	•
Airports	Encourage private sector management of selected airports	•			•
Intermodal	Facilitate involvement of multimodal transport operators	•	•	•	•
	Facilitate private sector development of multimodal terminals/ interchanges/logistics hubs	•	•	•	•

Achieving Economic Growth

These institutional, investment, regulatory and pricing principles should be applied in a consistent way to address the sector's development and operational challenges over the RPJMN III period. In doing this, it helps to think in terms of *outcomes* (impacts) rather than *inputs* (projects, or activities). Arguably the most important intended outcome is rapid (and equitable, but that is discussed separately below) economic growth.

To meet the challenge of rapid growth, transport sector agencies should frame, and measure the effectiveness of, their strategic plans (RENSTRA) for 2015–2019 using measures of performance against intended outcomes. In the past, they have listed their targets in terms of inputs only (metres of wharf constructed, numbers of wagons procured, length of road widened), but that hasn't helped in judging whether an efficient, safe, demand-responsive transport system has resulted.

Key measures of performance for the sector relate to connectivity (travel time and cost), accessibility (network linkages, proximity to origins and destinations), availability (service frequency, reliability), safety and quality (comfort, security, suitability for purpose). Most of these are critical ingredients for supporting rapid economic *growth*[1]. Figure 4 illustrates this, highlighting some of the key components that will be needed if RPJMN III's growth objectives are to be met. Note also that choices about infrastructure quality, efficiency, urban congestion and regional disparity – topics discussed separately below – also play a part in supporting growth; these should be addressed in the RENSTRA strategies too.

Raising Infrastructure Quality

Raising infrastructure quality is mainly a matter of incentive. If users are empowered to insist on better quality or are willing to pay for it, then better quality will likely result; it will be in the interests of the provider. But most current incentives are perverse: road agencies get more budget for reconstruction projects if they neglect maintenance; consultants and contractors make more profit if they skimp on quality; port operators find it easier to impose delays on shipping companies than to invest in new capacity; politicians prefer to announce visible new capital projects than allocate unseen funds to maintaining existing facilities. The strategy, therefore, should be to *incentivise* the provision and maintenance of better quality facilities and services (and in this context "incentivise" includes imposing *disincentives* on providers who let quality standards slip). Examples of such incentives include:

- Performance-based schemes for capital and O&M (operations and maintenance) projects under which the developer's revenues come from regular government payments (sometimes called "availability" or "annuity" payments) subject to deductions for failure to meet performance standards.
- Imposing quality and performance standards on toll road concessionaires, and enforcing these through penalties linked to toll increases or extension of concession terms.
- Specifying performance standards for other outsourced infrastructure/services (e.g., area- or network-wide maintenance contracts, or non-commercial but essential services to remote areas, including shipping services, minor ports and airstrips), and imposing penalties such as payment deductions for failure to meet standards.
- Strengthening the supervision of works, tightening the liability of consultants under contract and imposing sanctions for failure to impose standards or meet contract conditions.
- Revising procurement rules to give more weight to output quality rather than input costs.
- At the sub-national level, introducing conditional, performance-based grants from central to local administrations for selected infrastructure and services.
- Empowering users, the media and interested members of the public to scrutinise and influence planning decisions and delivery performance, as is being done under IndII's PRIM program (Box 5).

Box 5: Empowering the Public under PRIM: the Role of the Road Traffic & Transport Forum (RTTF)

- Improve governance and transparency
  - Address matters of public concern
  - Put pressure on road agency to plan and deliver an effective maintenance program
- Chaired by Governor
  - Membership includes heads of provincial public works, police and land transport agencies, representatives of transport operators, a university representative, experts in transport, a NGO representative with a focus on transport and a transport observer.
- PRIM would strengthen RTTF role in handling public complaints and scrutinising DPU's plans and programs
- PRIM's support to the RTTF:
  - Help raise public awareness of road maintenance issues and RTTF's role
    - SMS messaging, website development, community meetings on plans and projects
  - Help review overall works priorities and local project-related issues
  - Help dealing with cross-cutting issues
    - For example, access for the disabled
  - Train RTTF members based on a training needs study carried out under PRIM

Improving Service Efficiency

Efficiency – another key ingredient in supporting growth – is also a matter of incentive: the incentive to perform better under pressure from competition. Indeed, the main reason why the private sector is seen by RPJPN as the key engine driving growth is not because of any intrinsic difference between public and private enterprises but because private enterprise (unless it has a monopoly) strives to offer better, more efficient, more demand-responsive services than its competition. Thus, the key sector strategies focusing on raising efficiency should:

- Try to dismantle monopolies, public sector or private, and prepare SOEs for competition from the private sector, notably in railways, ports, ferries and the management of airports.
- Encourage competition wherever possible by removing unnecessary restrictions on market entry and operations (including where possible restrictions on foreign participation).
- Remove any regulatory or other constraints that inhibit competitors' efficient response to commercial opportunities, such as restrictive labour practices or unnecessary restrictions on innovation (e.g., in technical standards).
- Revise licensing arrangements to promote competition for the right to provide services (e.g., on bus routes) while giving greater flexibility to adjust services to meet the needs of users, subject to minimum performance standards.
- For those activities still managed by the public sector or SOEs, focus on their performance, productivity and profitability, setting progressively higher targets, giving managers more autonomy in organising how they should achieve them, and penalising them when they fail to do so. In some instances, allowing private sector equity would also help pressure management to perform better.

Addressing Urban Congestion

Urban traffic congestion cost the Jakarta economy alone some USD 500 million in 2002[2]. It also limits mobility, makes people sick, reduces their lifespan, limits access to basic services, facilities and opportunities, and worsens an already poor urban environment. The solutions are obvious; they include these complementary strategies:

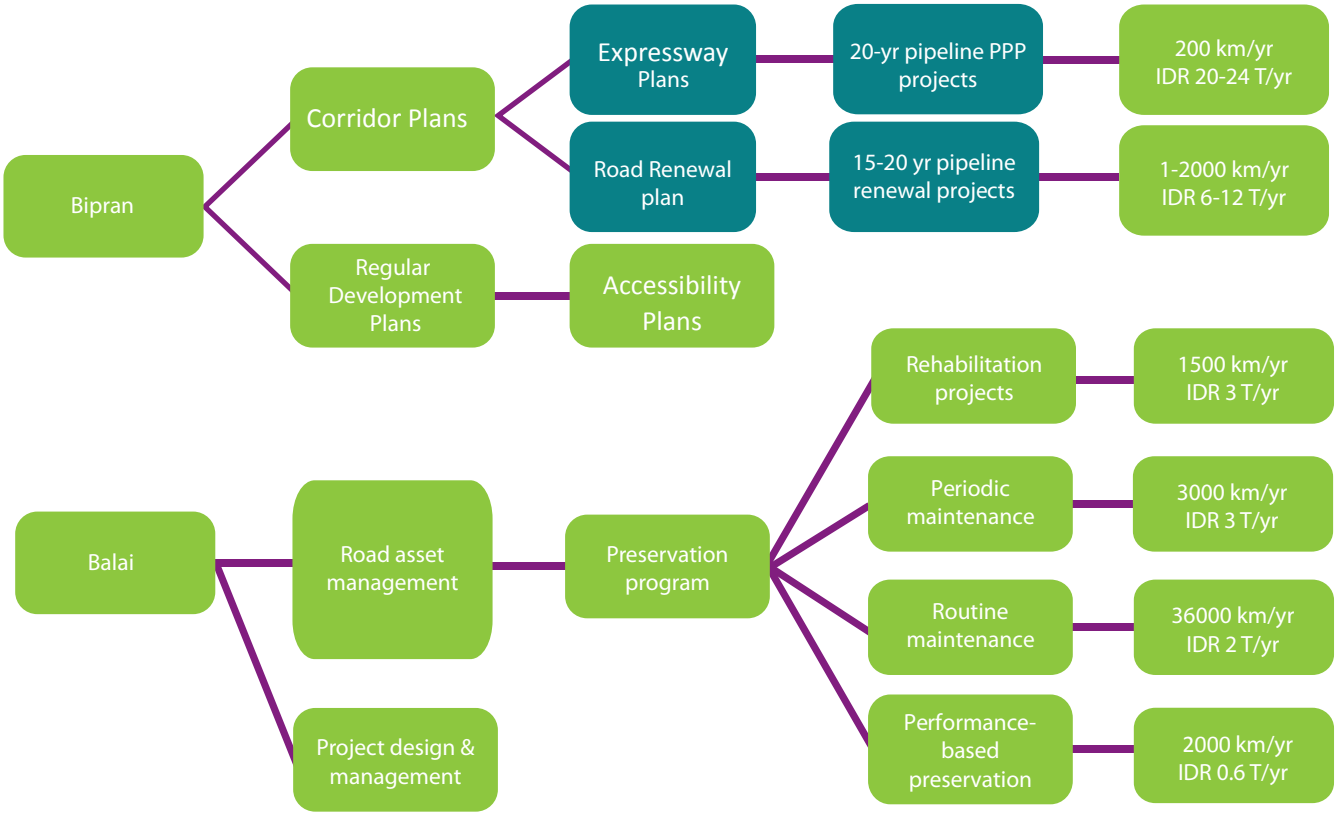
- Rather than subsidising it, make peak-period use of private cars and motorcycles on congested streets difficult and expensive through road pricing, limiting road space, reducing the availability and increasing the cost of parking, and physically restricting access (preferably together with measures to improve amenity and promote walking, cycling and public transport use).

- Improve traffic efficiency by developing routing alternatives, controlling roadside activities, optimising signal settings, upgrading the quality of road design and construction, removing bottlenecks (e.g., lane discontinuities), introducing route/congestion advisory information systems, educating the traffic police on how to manage traffic (and paying them better) and reducing the hugely excessive vehicle-kilometers of extra travel that are currently necessitated by inefficient indirect routing, turn bans and U-turns.
- Provide more attractive public transport alternatives by replacing the informal sector with formal bus services operating under performance-based contracts, upgrade stops and interchanges to improve capacity and the passenger's experience and, where demand density permits, develop high capacity Bus Rapid Transit (BRT), Light Rail Transit and heavy rail systems[3].

Most of these initiatives require strong leadership at the Local Government (LG) level. How can national agencies help? By:

- Enforcing the current requirement that LGs formally adopt urban transport plans (including plans for demand management, traffic management, road freight management and public transport development) and requiring these as a prerequisite for national budget (APBN) support, including potential new avenues of support through conditional grant transfers.
- Facilitating the earmarking of revenues from road user charges (e.g., congestion charges) for public transport[4].
- Developing model approaches to service licensing, including performance-based models, together with realistic minimum performance standards and technical specifications.
- Providing knowledge-sharing services that would enable LGs to exchange information on appropriate urban mobility solutions.

Figure 5: National Road Priorities and the Need for a High Grade Highway Network



Source: IndII advice to DGH JAKSTRA, August 2013

Less appropriate would be for central agencies to dictate solutions – e.g., by providing BRT buses to cities unprepared to operate and maintain them – when local answers to local needs ought to be developed by local people, preferably with public scrutiny and participation.

Reducing Regional Disparities

The main reason why transport infrastructure and services are poor in less developed regions is that demand is not sufficient to justify commercial operations. Shipments are smaller, less frequent and less predictable; ability to pay is lower. Yet there are strong reasons why government should try to reduce disparities with more developed regions. Usually this will involve subsidies: concessions to private investors, accepting lower rates of return on public investments, underwriting a portion of the costs of essential services. Rather than making these open-ended, government should be more explicit about what it wants to achieve and the costs of doing so.

Thus, just as for the economy as a whole, a strategy to reduce regional disparities should be founded on a set of target *outcomes*: a minimum level of service or accessibility, for example, or a target rate of regional growth. It should then specify the actions needed to achieve these targets at minimum cost, based on comparison of alternative ways of doing so. Such alternatives might include:

- Lifting the threshold of Indonesia Infrastructure Guarantee Fund/viability gap funding[5] support for private investments in such regions.
- Specifying a target Economic Internal Rate of Return for government investments that is lower than the threshold return expected on Java or Sumatera.
- Introducing competitively tendered, performance-based contracts for *perintis* (pioneer) and other non-commercial services under multi-year contracts.
- Providing targeted, conditional, performance-based grants to LGs in the region.

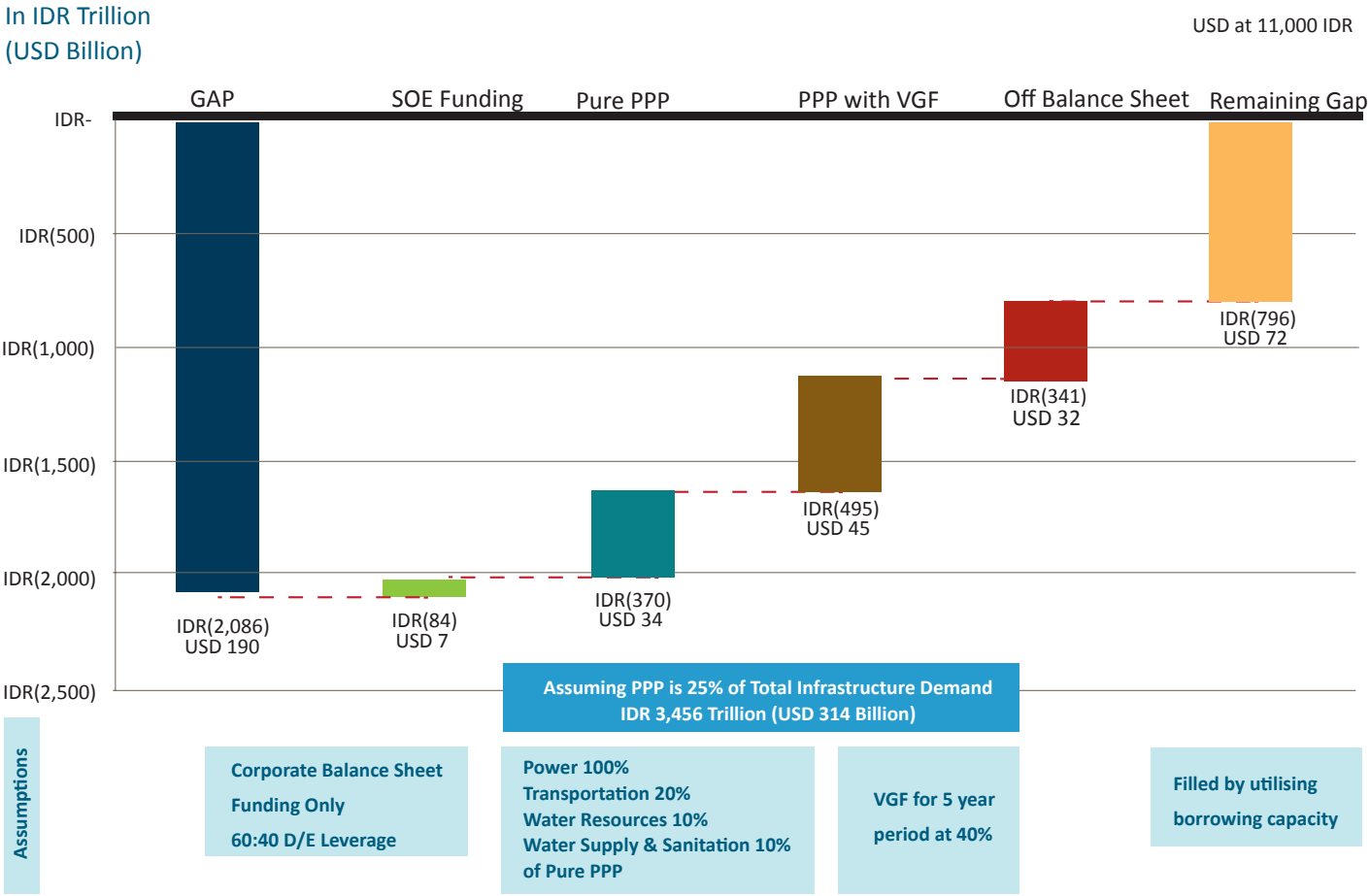
Note that each of these allows the subsidy costs to be monitored and compared with the perceived benefits of the strategy.

Before embarking on any of these, however, government should ask: why are the services not *a-lready* provided by the private sector? Often un-necessary regulations or other restrictions (e.g., a Pelindo preventing access to a port) inhibit appropriate solutions that would not otherwise need government support.

Funding Needed Investments

Recent analysis points to a funding gap of nearly USD 200 billion over the 2015–2019 period that will need to be filled with the assistance of the private sector (Figure 6). Where is this to come from? Why have PPP efforts in the past failed to attract it? To answer this, government should understand what motivates private sector investors. They want a reasonable reward for investing under manageable risk. They don't have to come to Indonesia to get this: there are many competing countries that have a transparent governance regime, acceptable risk management arrangements and a viable pipeline of projects for private sector participation. They will only invest in Indonesia's projects if the rewards are sufficient and reliable, and if they themselves can manage the risks. Indonesia can only win these investments – in competition with the other countries – if it offers either (i) a cast-iron deal secured in cahoots with powerful people through a non-competitive, probably corrupt procurement process; or (ii) a delivery model that is transparent, predictable, reliable and reasonable, and in line with international best practice. Indonesia is a long way yet from the latter, despite efforts over more than 20 years.

Figure 6: The Infrastructure Funding Gap



Source: JICA, RPJMN Presentation to Bappenas, September 2013
Note: This covers all infrastructure (power, transport, water resources, water supply & sanitation)

What are the most critical first steps?

- Narrow the pipeline of candidate projects to a limited number of simple, manageable, economically viable schemes that have been essentially de-risked. De-risking means removing all risks that the private sector partner cannot manage itself, or cannot insure against.
- For these projects, carry out a careful VfM analysis to demonstrate whether the life-cycle economies of private provision exceed the extra costs of private sector financing when compared with a realistic, risk-adjusted public sector comparator. These life-cycle economies come from bundling the design, construction/implementation and O&M tasks over the project life-cycle.
- Consider very carefully whether demand and revenue risk should be transferred to the private sector. Like all transferred risks, they will attract worst case contingency pricing. Until a better risk model is established, it would be better for government to retain revenue risk and to make availability/performance payments from revenues collected independently[6].
- Set clear *output* standards against which performance is to be judged and on which any payment deductions or other penalties will be based. Do not over-specify inputs; allow the bidders flexibility in meeting output performance standards. This allows innovative approaches to be put forward.

- Adopt a transparent, interactive procurement process designed to test bidders' risk appetite and to explore innovative design/delivery options. This could include a procedure for having bidders price risks incrementally, so that government can judge what level of risk it is prepared to retain.
- Maintain competitive tension right through to a best-and-final offer stage from a final shortlist of two. This is critically important to secure best VfM.

Most of these suggestions require changes in the way PPPs are currently prepared and procured[7]. The approach needs experienced legal, technical, financial, procurement, banking and insurance advisors. These are expensive, but their costs are far outweighed by the resulting benefits of best practice documentation, market-accepted risk management, procurement transparency and, most notably, investor confidence. This will be reflected in bid pricing. It needs a solid, confidence-building feasibility study and VfM comparison. It needs a market-sounding that is more than a road show: its aim should be to assess the market's appetite and expectations in terms of governance, financial return, risk transfer and security; unless these expectations are met, the project will not succeed. It needs a reliable, familiar regulatory framework that facilitates procurement of the chosen delivery model and gives confidence that there won't be any unexpected changes. And it needs counterpart participants from Indonesia's financial, construction, consulting and operating fraternity who understand the concepts involved and the mindset changes that are necessary under a more performance-based environment, including the need to welcome foreign participants and learn best practice from them[8].

Saving Lives

How can we stop the transport system killing and maiming people, especially on the roads? Some 3 percent of GDP is lost to road crashes. The social costs are enormous. Yet we are almost fatalistically inured to the risks. For the roads sector, the answers are in front of us already. The five pillars of the Road Safety Action Plan (*Rencana Umum Nasional Keselamatan*, or RUNK), prepared to meet the goals of the UN Decade of Action on Road Safety, are sensible and in line with good practice:

- Road Safety Management, to encourage coor-di-na--tion among stakeholders and establish sectoral partnership
- Safer Roads
- Safer Vehicles
- Safer Road Users
- Post-Crash Response

What is missing is a realisation of the seriousness and urgency of the situation and a commitment to fixing it: a willingness to put safety considerations above others. With Presidential Instruction no. 4/2013 on the Decade of Action for Road Safety, the President has sent the right signal: take all necessary measures to achieve the Decade of Action targets. The focus now should be on integrated actions by all the agencies involved in the RUNK to:

- Strengthen commitment to RUNK action plans.
- Significantly raise the institutional status of safety-related functions and hold agencies accountable for safety performance.
- Engage with the public and community groups to put pressure on safety performance and to assist in the education process.
- Upgrade safety-related technical standards, and mandate independent safety audit programs.
- Strengthen the capabilities of consultants and operators through safety certification.
- Address accident blackspots and other safety risks through appropriate treatment programs.
- Strengthen the quality of safety enforcement by the police and the penalties for safety-related offences, targeting also transport companies with the threat of loss of license.

- Introduce incentives for better sub-national safety management through conditional, outcome-based grants to LGs.

For non-roads sub-sectors, efforts should focus on technical standards, strengthening the role of independent safety regulators, and heavy penalties including loss of license or revenue.

Conclusion

If the RPJPM targets of 2025 stand any chance of being met, RPJMN 2015–2019 should introduce more radical reforms than previously. Business-as-usual will not suffice. Many of the suggestions in this article have been seen before – they're not rocket science – but they would change a status quo in which many have a strong interest. Little will happen without strong, committed leadership. Who should give this? IndII's lead partner, Bappenas (with the support of a President with vision and courage). Bappenas is responsible for national development planning. Bappenas should insist on the necessary reforming policies and strategies, starting with RPJMN 2015–2019. ■

NOTES

1. Even service quality supports economic growth. Some shippers in highly competitive, price-insensitive markets prefer quick, reliable, secure services even if they cost more.
2. Source: UKP4, quoting the Jabodetabek Urban Transport Policy Integration (JUTPI) study.
3. Such systems are much more efficient than alternatives for dense corri-dors, but they only serve trips along those corridors. A more ubiquitous, inter-connected public transport system is also needed, with a variety of services depending on road conditions and demand patterns.
4. Under existing regulations, such charges are considered a tax, and cannot be earmarked.
5. "Viability gap funding" provides financial support in the form of grants, one time or deferred, to infrastructure projects undertaken through PPPs, with a view to making them commercially viable.
6. An important advantage of this is that is allows government to retain control over tolls/tariffs/fares, and to use these if necessary as a way of addressing intermodal pricing issues or achieve socio-political goals.
7. Note that the availability/performance approach also does not need viability-gap financing.
8. This would also strengthen the ability of Indonesian partners to participate in international markets.

About the authors:

John Lee is IndII's Technical Director for Transport. He has over 40 years' experience as a transport sector specialist, including 15 years' working in Indonesia. He has managed a wide variety of transport policy and planning projects, dealing with all modes of transport, national and regional, throughout Asia, Africa, the Middle East and the Pacific. He is familiar with the requirements of all the major international aid agencies. Prior to joining IndII, John was Advisor to the new Department of Transport in Abu Dhabi, where he helped build the Highways and Public Transport Divisions from scratch. John has expertise in institutional development, investment feasibility studies, multimodal transport planning, performance-based project delivery (including PPPs) and asset management.

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New Directions for Indonesia's Water and Sanitation Sector

Indonesia is working to provide adequate water and sanitation services to all of its citizens. Success in this ambitious effort will require new approaches to incentivising Local Governments, developing local institutional capacity, and encouraging Local Government ownership of assets. • By Jim Coucouvinis and Joel Friedman

Meeting goals for improved water and sanitation will make scenes like this canal in Surabaya a thing of the past. *Photo by Andre Susanto*

The Government of Indonesia (GoI) is committed to meeting the Millennium Development Goals (MDGs) for water and sanitation. The current Long-Term Development Plan (RPJPN) sets the ambitious target of full access to basic services by 2019. However, there are indications that current and projected outputs in the development of water and sanitation infrastructure will not be able to keep up with population growth and the depreciation of assets. For example, the capacity of productive assets of local water companies (PDAMs) in 2004 was approximately 130,000 liters per second with assets valued at USD 6.3 billion. In 2009 the capacity had risen only to 145,000 liters per second, an increase of 11 percent, with assets valued at USD 7 billion, also an increase of 11 percent. This was not enough to keep up with urban population growth of 18 percent over that period, much less increase coverage at rates that would achieve the 2019 target. Exacerbating the problem of population pressure is the fact that much urban growth is occurring in suburban areas and smaller cities, especially off Java and Sumatera, which are less likely to already have in place expensive trunk infrastructure and processing facilities. The costs of expanding coverage in these areas will therefore be even more than in the traditional core cities.

It is clear that Indonesia must invest more in water and sanitation infrastructure at the central, provincial, and especially local (city and district) levels. This is particularly true in the sanitation sector, which has lagged behind the water sector in terms of investments and coverage. Local Governments (LGs) have had a record of very low com-mitment to sanitation investment. Although there are approximately 350 local water companies (PDAMs) throughout Indonesia, there are only 11 municipal sewerage schemes, and these were built by the central government.

More recently, the Government has announced a policy of more aggressively pursuing municipal sewer-age investment. This is a part of the program to accelerate sanitation development, PPSP (*Percepatan Pembangunan Sanitasi Permukiman*). As part of this, the Government increased the budget of the

Ministry of Public Works (MPW) by approximately 100 percent for the five year development period 2010–14. This budget is approximately USD 360 million per year. With overall estimates of sanitation investment requirements of USD 1.4 billion per year to meet PPSP targets, LGs must invest approximately one billion dollars. This is funding that will need to be secured through the mobilisation of funds at the local level and provision of additional funds from central government sources but passed on to LGs.

Even with increased investment, there are a number of challenges to be faced, and opportunities seized, so that these investments will translate into greater coverage rates:

- New approaches to incentivise LGs to invest in infrastructure should be broadly embraced.
- Problems related to weaknesses in institutional capacities at the local level to develop, operate and maintain water and sanitation infrastructure must be addressed.
- LGs need to do a better job of maintaining water and sanitation assets so they do not deteriorate as rapidly as they often do now, and this requires new approaches to asset management.

Key Points:

Indonesia's current Long-Term Development Plan (RPJPN) targets full access to basic services by 2019. Coverage will fall short of this goal, especially in the sanitation sector, unless approximately USD 1 billion in Local Government (LG) funding is mobilised to complement planned central government expenditures. To translate investments into greater coverage rates, new approaches to incentivising LGs need to be embraced, institutional capacity at the local level must be developed, and LGs should develop new approaches to asset management to retain the use of investments in assets.

Creating Investment Incentives for Local Governments: Effective approaches include utilising output based grants, which in Phase I of IndII proved their effectiveness at strengthening LG commitment and leveraging funding. In addition, D*ana Alokasi Khusus* (DAK, or Special Allocation Grants) have been shown to leverage more funding from LGs than does *Tugas Pembantuan* (TP, or co-assistance) from the central government.

On-granting mechanisms offer great potential for increased funding. The revised Ministry of Finance regulations allow grants, loans and APBN funds to be transferred to LGs as grants or loans. However, while the legal and procedural framework for mainstreaming on-granting is already in place, significant change (de-emphasising TP and emphasising DAK) will be needed in order for on-granting mechanisms to be mainstreamed.

LG commitment can be enhanced through linking on-granting to the achievement of minimum service standards and adequate budgeting for operation and maintenance of assets. Monitoring these achievements strengthens the role of the Technical Agencies and provides a rationale for grant financing.

Strengthening Local Government Institutional Capacities: Fragmentation in service delivery should be addressed. Delivering a complex set of services requires a properly functioning institutional framework within LGs and among levels of government, the community and the private sector. The key to better defining roles and responsibilities is ensuring that a single LG agency serves as the "lead" agency for the entire sanitation sector. To encourage coordination, strong inter-agency work groups (*Pokja AMPL*) at the local, provincial, and central levels can bring officials together from all concerned agencies in order to coordinate policies and programs.

As part of the central government's program to accelerate sanitation development, LGs are required to prepare and implement an integrated, multi-year City Sanitation Strategy (*Strategi Sanitasi Kota/Kabupaten* or SSK). Efforts should be made to ensure that the SSKs are relevant, realistic, and targeted so that they become effective tools for LG planning and budgeting.

LGs vary in their ability to deliver services but all would benefit from efforts to build institutional capacities and individual skills.

Improving Funding Mechanisms and Local Government Asset Management: When direct central government funding of local assets is replaced by grants to LGs, LGs own their assets and are liable for maintenance and replacement. This seems to increase the sustainability of assets.

In some cases, central government funding for local infrastructure is warranted. When this is necessary, LG commitment to proper operation and maintenance can be built when the central government promptly transfers assets to the local agencies that will use them.

This paper will present three cross-sectoral themes and recommendations for Indonesia's water and sanitation sector. It is based on the premise that increased funding will be provided for the sector but that this must be accompanied by the strengthening of development mechanisms, governance, and policy frameworks within which the increased funding will take place. The recommendations to be made here for inclusion within the water and sanitation sector section of the RPJMN for 2015–2019 will help ensure that the benefits from investments in the water and sanitation sector are maximised. The paper draws on the experiences of the Indonesia Infrastructure Initiative (IndII) in implementing water and sanitation programs in LGs.

Creating Local Incentives to Invest in Infrastructure

Expanding output-based grant (hibah) mechanisms, such as those pioneered in the IndII program, that have been shown to increase LG investments in infrastructure and build commitment: Three IndII programs – the Infrastructure Enhancement Grants, Water Hibah and Australia Indonesia Infrastructure Grants for Sanitation (sAIIG) – involve the use of output-based grants. These grants are provided directly to LGs through legally binding grant agreements between the heads of LGs and the Minster for Finance. The grant agreement specifies what the LG must do with the grant funds, how the work will be verified, and how the funds will be paid. This mechanism lends itself to output or performance-based modality which adds an extra layer of accountability over the process. LGs only get paid once they achieve certain performance standards (including governance reforms), and deliver agreed-upon outputs. During IndII's Phase 1, the grant programs leveraged an estimated 60 percent of the grant as contributions from LGs. LGs demonstrated their commitment to budget ongoing funding for operations and maintenance. These programs are therefore successful at mobilising much-needed funds at the local level.

The central government widely acknowledges this level of efficiency. The scaling up of the Hibah grant program during the current phase of IndII includes governance targets and performance linkages to other Government programs to increase the impact and penetration. Such a mechanism provides a vehicle through which donor funds can be channeled directly to LGs. The logical next steps are for Government to accommodate the grant mechanism into the financing mainstream and to link it to performance improvements by LGs.

Gradually shifting away from central government funding of local infrastructure through co-assistance funding (Tugas Pembantuan) toward Special Allocation Grants and finally toward on-granting because this will result in better leveraging of limited LG funds: As has been noted, Government has increased its funding in the national budget (APBN) to USD 360 million in 2013. For LG sanitation facilities, this is channeled through *Tugas Pembantuan (TP)* co-assistance. A limited amount of direct funding, USD 42 million, is budgeted from the special allocation fund (*Dana Alokasi Khusus*, or DAK). Recent analyses of spending on infrastructure show that despite its lack of transparency and accountability, the DAK leverages more funding from LG than the TP. In fact, the TP results in substitution effects: it has been shown that for every unit of TP funding, LG reduces its own funding through the local budget (APBD) by half a unit. Imperfect as it is, DAK at least leverages 10 percent from LG. Moreover, preliminary results from the IndII Water Hibah program suggest that this program is even more efficient in leveraging investments at the local level.

There is no reason to expect that the results would be any different for sanitation. It is clear that given the dire need to mobilise additional funds for infrastructure, especially sanitation, at the local level, on-granting mechanisms such as IndII's grant programs offer the greatest potential for increased funding.

Mainstreaming the on-granting mechanism within the overall fiscal framework for decentralisation: As just noted, direct funding to LGs through grants is widely acknowledged as a more effective program to transfer tied funding to LGs, but Government is divided on how best to scale this up. There is no question that external grants may be passed on as grants through the hibah. The question is more complex when it comes to transferring external loans for municipal infrastructure as grants. The most recent revision of Ministry of

Finance regulations have simplified the on-granting process to allow grants, loans and APBN funds to be transferred to LGs as grants or loans. There are advocates within the Government that see this as a crucial point of reform. To date, although some loans have occasionally been channeled as grants to LGs, not all in central Government support on-granting.

A more difficult prospect would be if the Government were to transfer some of the existing Ministry budgets used to provide municipal infrastructure into the grant channel. However, this is exactly the process of transformational change desired, and the process has to start somewhere. The IndII grant program has provided a starting point; it now a question of sustaining the momentum and the direction.

While the legal and procedural framework for main-streaming on-granting theoretically exists, it has yet to be applied at a meaningful scale. It would seem that a significant change will be needed for mainstreaming to occur. This will involve a gradual de-emphasis on use of the co-assistance funding channel and greater use of the DAK approach for water and sanitation. Eventually it might be possible to use on-granting not only as a mechanism to channel donor funds, but also to channel GoI funds into sanitation and water facilities at the local level.

It will take time for the central government to formalise and expand such an approach. This will likely engender opposition from some agencies which have long built local infrastructure through central government budgets. The evidence cited above suggests that this is the direction that infrastructure financing should be moving towards.

Making broader use of Minimum Service Standards (SPMs) and the Government's monitoring and evaluation program for LGs to encourage LG investments: Increasing the availability of funding clearly provides incentives for LG investments in water and sanitation infrastructure. LGs will be more committed to budgeting for ongoing operations and maintenance when they understand that additional funding will be available if they provide such budgets and, as noted below, if they own the assets. Further long term incentives can be created by linking on-granting to achievement of minimum service standards (SPM – standard pelayanan minimal). These standards for LGs are stipulated in Government Regulation PP 65/2005. The assessment criteria are laid out in Government Regulation 6/2008, which describes how to evaluate LG performance towards achieving the SPMs. These standards and criteria should be viewed as positive tools to encourage LG service delivery, rather than as punitive mechanisms to punish under-performance.

Strengthening Institutional Capacities of LGs

Rationalising the roles and responsibilities of LG agencies providing sanitation services and designating a single agency as a single entity that bears final responsibility for delivering services: Delivering a complex set of services in varying settings requires a properly functioning institutional framework within each LG and between the government, the community and the private sector. The experiences of IndII's sanitation programs in LG, and those of other sanitation programs, suggests that a significant amount of institutional fragmentation exists. Different services are often delivered by different agencies – centralised wastewater services by Cleanliness Units, management of final solid waste disposal sites by Public Works Units, community-based sanitation schemes through Community Empowerment Units. Within sub-sectors, responsibilities for different functions often lie with different agencies. In solid waste, for example, most household collection is done through community leaders (RT/RW) who report to the head of the sub-district (*Lurah*). However, responsibility for solid waste collection at city-owned markets, for example, is the responsibility of the Market Unit (*Dinas Pasar*). Responsibility for management of final disposal sites generally lies with other LG work units such as Cleanliness or Public Works.

Associated activities are often the responsibility of related agencies – spatial planning and permit issuance by the Planning Unit (*Dinas Tata Ruang*), environmental monitoring by the Environmental Board (*Badan Lingkungan Hidup*), or community education by the Health Unit (*Dinas Kesehatan*). Still other agencies

provide supporting services such as long-term planning and programming, budgeting and organisational development. Finally, some community-based schemes, using funding from the central government or from donor projects, are conducted with limited or no LG involvement at all.

Clearly, activities to increase access to sanitation services would benefit from efforts to rationalise the institutional frame-work for the sanitation sector at the local level, more clearly define roles and responsibilities and strengthen coordination between all agencies. The key to this is in ensuring that a single LG agency serves as the "lead" agency for the entire sanitation sector. The agency should be a service delivery-focused one that is involved in the sanitation sector. It might be the Cleanliness Unit, the Parks Unit or the Public Works Unit. It should bear direct responsibility for all three sub-sectors (or at least waste-water and solid waste) and this should be codified in its legally defined roles and functions (*Tupoksi*). These should specify that the unit is institutionally responsible for the delivery of all sanitation services – in all areas and using a variety of approaches and programs. It must have the power to raise a budget for long-term operations and maintenance and be able to own all sanitation-related assets. Performance indicators should be developed and efforts to move towards a more performance-oriented budgeting approach should be encouraged. The clear message that will be delivered is that sanitation is a government responsibility and therefore provision of all sanitation services will be done through the designated unit. Provision of greater autonomy to the agency will lead to increased accountability towards the community it serves and, over time, a greater orientation towards performance.

Designation of a lead sanitation agency does not mean that all sanitation programs will, or should, be delivered directly by the agency. Depending on conditions – topographic, population densities, income levels, skill levels, cultural – and each LG's choice of priorities, policies and approach, a variety of other institutions may deliver sanitation services. The management of Banjarmasin's centralised wastewater system is undertaken by a state-owned enterprise. The SANIMAS community sanitation program is carried out by community-based organisations. In many LGs, de-sludging of septic tanks is undertaken by the private sector. Jakarta's solid waste is deposited in a land fill located in an adjacent LG and paid for through a contractual agreement. These arrangements allow the governments to respond to community needs, deliver the services efficiently and effectively and best utilise scarce resources. What is important, again, is that the ultimate responsibility for structuring these arrangements, monitoring performance and responding to community demands and problems rests with the LG itself.

Encouraging efforts to develop coordination mechanisms within LGs: While a single agency should be responsible for the final delivery of all sanitation services, there are additional agencies that are responsible for supporting activities that contribute to the various sanitation programs. As discussed above, these include technical activities – managing market waste, monitoring hazardous waste, carrying out education campaigns, developing health and environmental standards, enforcing building codes etc. – and cross-cutting services (which involve more than the sanitation sector) such as the planning agency, the finance agency, legal department, environmental board etc. It is important that policies, approaches and budgets are coordinated and synchronised so that they complement each other rather than, as is often the case, conflict or overlap. Again, the lead sanitation agency should bear overall responsibility for this. However, given the nature of bureaucratic relations at the local level there needs to be a "supra" entity that can encourage coordination and make difficult decisions. The Government has developed an approach where inter-agency work groups (*Pokja*) at the local level, as well as at the provincial and central levels, bring officials together from all concerned agencies in order to coordinate policies and programs, synchronise budgets and ensure that overall citywide priorities are recognised. These work groups serve, at least partially, to permit LGs to avoid the "bureaucratic silo mentality" that one sees at local and central levels. Initially developed for the water section, "*Pokja AMPL*" now exist in many, but not all, LGs. It is important that these are created elsewhere, their operations strengthened and their powers enhanced.

Continuing and strengthening the use of city sanitation strategies: As noted above, Government's recent commitment to improving access to sanitation services is shown by its support for the PPSP program. As part of this program LGs are required to prepare and implement an integrated, multi-year City Sanitation Strategy (*Strategi Sanitasi Kota/Kabupaten or SSK*). Preparation of the SSK is coordinated by the *Pokja AMPL* within each LG. Each SSK examines the current sanitation situation and projected needs, presents key strategic approaches to be employed to address needs, discusses specific programs to be utilised, identifies funding needs and specifies timeframes and indicators. Approximately 70 percent of Local and Provincial Governments have SSKs and the remaining Governments are preparing them through PPSP. While the quality of the SSKs understandably varies, the SSKs are a valuable tool for guiding LGs in comprehensively implementing sanitation programs. As LGs develop and revise SSKs assistance should continue to ensure that the SSKs are relevant, realistic, implementable and address the varied needs of population groups and geographic areas within each locality. They should become a key reference by LG agencies, especially the "lead sanitation agency" as discussed above, as they develop long, medium and short term strategies, workplans and budgets. Importantly, progress towards achievement of key indicators should be monitoring and strategies adjusted if necessary.

Implementing a concerted, coordinated effort to build the capacities of the key institutions delivering water and sanitation services and their staff: LGs vary widely in their capacities to deliver services. Although many have relatively smoothly functioning agencies and skilled staff, it is fair to say that all LGs would benefit from efforts to build institutional capacities and individual skills. At the institutional level, efforts should focus on strengthening key management and operational systems and procedures, such as long-term strategic planning, annual planning and budgeting, financial management, technical operational systems and procedures (such as sludge treatment, water delivery systems, wastewater treatment etc.), and human resource management. Individual staff need support in strengthening technical skills and enhancing performance.

GoI has a number of capacity building programs for LGs. These are conducted by a number of different agencies such as the Ministry of Home Affairs, The State Ministry for Administrative Reforms (*Menpan*) and MPW. It is important that these programs be coordinated, funding provided and capacity building assistance delivered on a regular and recurring basis.

Improving Funding Mechanisms and Asset Management

Gradually reducing the common practice of central government funding of local assets, which often acts as a disincentive to LGs to budget for long-term operations and maintenance (and therefore leads to rapid asset depreciation): Because grants go directly to LGs and are recorded in their budgets (APBD) the assets created belong to the LGs. This is far better than other current forms of local infrastructure financing in which the Government builds (using APBN funds) and owns the assets and allows the LG to use them. Under this second approach (currently the preferred one), the LG has no incentive to maintain assets. Indeed, the assets degrade rapidly and need early replacement, usually by the same method of central government transfers. It is precisely this long history of asset creation by central government on behalf of LGs without the need for replacement that resulted in unsustainable low tariffs. Under the on-granting programs, the LG owns the assets and at least is legally liable for their maintenance and replacement. While it is too early to tell how this will affect sustainability, the evidence from direct investment initiatives taken by progressive LGs points to increased sustainability of assets.

Regulations require governments that own assets to maintain and protect those assets. In practice, this only means acceptable asset registration and reporting. Neglect of maintenance is not faulted. Audits give reprimands for inadequate registration and reporting, but not for inadequate maintenance and protection of productive value.

For more insights into the topic of asset management, see the article "Cross-Sectoral Themes and Priorities" on page 3 of this issue.

Taking steps to ensure that when assets are developed with central government funding, they are formally transferred to LGs: In some cases central government funding for local infrastructure is warranted and, in any event, such funding is likely to continue for some time even if a decision is made to mainstream on-granting. As noted above, it is important that LG agencies own the infrastructure necessary to deliver sanitation services. This builds their commitment to properly operate and maintain them. Importantly, LG agencies can only raise budgets for operations and maintenance if they own the asset. Therefore, in cases where infrastructure is centrally funded, the central government must take steps to ensure that the assets are promptly transferred to the agency within LG that will be using the asset. Such transfer procedures exist, but experience has shown that the transfers do not always take place.

Instituting better inventories and proper valuation of LG assets to complement the required transition to accrual accounting: Experiences suggest that many LGs do not have properly functioning asset management systems. Such systems are important so that LGs know which assets they own, who is responsible for maintaining them, and what their value is. Without such systems, LGs often fail to properly maintain assets and do not take into account depreciation in their budgets. Importantly, Indonesia is moving towards use of accrual accounting and LGs will soon be required to do so. Accrual accounting is supportive of a broader shift in public sector budgets from an input basis to one focusing on outputs and outcomes. For such systems to operate, LGs must have an accurate and realistic knowledge of the value of their assets. Experiences in many developed countries, such as the United States, suggest that movement to accrual accounting is difficult and that extended periods of re-valuation are necessary.

Conclusion

This paper makes recommendations in three areas where increased policy attention in the upcoming planning period is warranted. These recommendations address the provision of more incentives for LGs to invest in infrastructure, the strengthening of the LG institutional framework and the ownership of infrastructure by LGs. Implementation of these recommendations will lead to better delivery of water and sanitation services and progress towards achieving MDGs. It is recognised that implementation of the recommendations will be incremental and will require close coordination between concerned agencies, both at the central level and between the central government and the regions. At their core, the recommendations here focus on the need to more fully empower LGs to deliver services. The process will certainly not be problem-free, but the rewards, in terms of greater progress toward providing access for all citizens to basic water and sanitation services, will render the efforts worthwhile. ■

About the authors:

Jim Coucouvinis is IndII's Technical Director for Water and Sanitation. Prior to his affiliation with IndII, Jim Coucouvinis was an independent consultant working with the World Bank and AusAID on water and wastewater sector programs. Previously, he was Vice President, Louis Berger Group for water and environmental services in SE Asia and the People's Republic of China. Before that he was Resident Manager of Montgomery Watson, Indonesia. In Australia he worked for the Canberra Water and Power Authority on the design and construction of major sewerage works; and with the Australian Murray-Darling Basin Authority on the management of water quality in the Murray-Darling system and reservoirs. Jim holds a Master's of Engineering degree from the University of New South Wales, and Bachelor's degrees in Science and Civil Engineering from the University of Queensland.

Joel Friedman is IndII's Institutional Development Adviser – Water and Sanitation. He has more than 20 years of development experience in Indonesia working with a range of government institutions. His work at the central level has primarily been with the Ministry of Home Affairs but also with Bappenas, the Ministry of Finance, and the Ministry of Public Works, among others. He has also worked with a range of local governments including a period of time spent living and working in Palembang. Key sectors he has worked on include urban development, the environment, decentralisation and institutional strengthening. He has worked with a range of bi- and multi-lateral aid agencies. Prior to moving to Indonesia he worked in the Philippines and Bangladesh as well as the Department of Housing and Urban Development in the United States. He has an undergraduate degree in Government and a Master's degree in Urban Planning.

UPCOMING EVENTS & ACTIVITIES OF NOTE

What	When and Where*
Strategic Plan, Ministry of Transport Focus Group Discussion	March 2014
Multi Modal Transport Focus Group Discussion	February 2014
Capacity Building for Port Pilot PPP Project workshop	12–13 February 2014
Review Master Plan Makassar Port meeting	February or March 2014
PPH sAIIG Signing Ceremony	TBD

* Note that dates and places are tentative and subject to change. Please contact IndII at enquiries@indii.co.id or call us at +62 (21) 7278-0538 to confirm scheduling and venues.

Briefing Note

A Call for Accessible Transport

Why Access to Transport Matters

From personal experience, we know how essential transport is for holding a job, enjoying the company of family and friends, shopping, and attending special events such as weddings or religious celebrations. But when the topic of making transport accessible to everyone arises, a common response is, "People with disability won't use transport services, so there is no reason to consider their needs." However, the fact is that people who are living with a disability are rarely consulted about their wishes and the transport difficulties they face. For people with physical, sensory (sight/hearing), mental or psychological impairments, being unable to access public transport means that they are dependent on others to take them wherever they want to go. This affects their quality of life and often means they rarely leave home. Their access to education, health, and other social services is limited. They have fewer opportunities to earn a living, and to participate fully in family, community and civic life.

When public transportation is not designed and operated to be accessible to people with disability, they are more dependent; restricted from education, health, other social services and opportunities to earn a living; and can't participate fully in family, community and political life.

When transport infrastructure and services are designed with accessibility in mind, not only can people with disability be more independent, but there are wider benefits. Everyone with assistance needs (such as pregnant women, children, the elderly and those experiencing a short-term disability) is helped.

Why Don't People with Disability Use Transport?

There are a number of reasons why people with disability don't use transport services. Many of these can be addressed through action by governments and civil society organisations.

Structural barriers are the most obvious problem. These include transport infrastructure that is inaccessible because of design and maintenance problems, and local development that neglects the needs of people with disability (for example, the street environment – it doesn't matter if people in wheelchairs can board a bus if they can't cross the street to the bus platform). It also includes the way transport services are operated (such as buses that don't stop close enough to platforms, or overcrowding) and poor information provision (inadequate signage, small writing, and visual but no audio information).

Structural barriers, such as inaccessible infrastructure, as well as social/cultural and psychological barriers, limit the use of transport services by people with disability.

Social and cultural barriers play a role as well. Some members of society have a negative view of people with disability, assuming that they have no capacity to develop and that they should stay quietly at home dependent on carers. Transport service personnel may be unaware of disability issues. There may be communication barriers between disabled people and others. The disabled themselves may not be aware of their rights, or of opportunities to make transport more accessible. Families may be reluctant to allow relatives with disability to travel in public out of embarrassment or concern for the person's safety.

Psychological barriers like lack of confidence and fear for personal safety can also keep people with disability from using transport services. Women with disability can be particularly concerned about safety.

Costs Versus Benefits

High cost is often cited as a reason not to make transport infrastructure and services accessible to people with disability. However, if access is considered in the planning and design phases and incorporated into the original construction costs, this is cheaper than retrofitting. Further, costs are often less than people assume. Many measures that improve accessibility (such as tactile marking, larger lettering on signs, and integrating disability awareness into standard training) are low-cost. Often, everyone benefits. For example, smart card technology, such as that used on the TransJakarta Busway, eliminates the need to queue for tickets. This greatly assists people who have difficulty standing, along with everyone.

Costs of improving access for people with disability are often assumed to be higher than they actually are. On the other hand, the cost to individuals, families and the wider community when people with disability are denied access to transport is overlooked.

Conversely, lack of accessible transport imposes high costs not just on individuals with disability but on wider society. When the economic, educational, health, social, and other opportunities of people with disability are restricted, they depend more on others. This limits the income-earning and other activities of carers, who are often women. Sometimes children are the carers, which can have an adverse impact on their education and opportunities. The entire family is subject to higher levels of poverty and disadvantage, which has an impact on society as a whole.

The Regulatory Environment

The Indonesian government has signed and ratified the UN Convention on the Rights of Persons with Disability and has agreed to the *Biwako Millennium Framework for Action: Towards an Inclusive, Barrier-free and Rights-based Society for Persons with Disabilities in Asia and the Pacific*. Laws and regulations, such as Law no. 4/1997 on Persons with Disabilities and Government Regulation no. 43/1998, affirm that every disabled person has equal rights and opportunities in all aspects of their life. Relevant transport laws include Law no. 23/2007 on Railways, Law no. 17/2008 on Ports and Shipping Operators, Law no. 1/2009 on Air Transport and Law no. 22/2009 on Traffic and Road Transport.

Indonesia has signed conventions on transport and disability and has a number of laws in place, but these have yet to result in the enforcement of accessibility standards.

Nevertheless, studies by the Research Centre for Disability at the University of Indonesia and others indicate a lack of understanding of these laws and regulations. Local-level regulations, guidelines and standards are not in place. National and local planning documents do not adequately consider accessibility, and monitoring and enforcement of the laws is lacking.

Recommendations

Consult and communicate: At national and local levels, consult people with disability and their advocacy groups, such as the Indonesian Disabled People's Organisation (PPCI), about their transport needs. Publicise accessible transport services and encourage people with disability to use them. At local levels, ensure that people with disability are represented on committees, such as the Road Traffic and Transport Forums, and put procedures in place so that people with disability can provide input. Increase public responsiveness to people with disability.

Increase awareness and the capacity to operationalise regulations: Ensure that accessibility features to meet the needs of people with disability are clearly addressed in major planning documents such as RENSTRA. Develop guidelines and detailed specifications for improved accessibility and develop programs to socialise these to local governments and relevant private sector operators/contractors involved in transport infrastructure and services provision. Increase awareness of the needs of people with disability and the reasons why specifications should be met. Integrate disability awareness and specific ways to support people with disability into training for personnel who operate transport services. Require private transport providers, such as taxi services, to incorporate these topics in their human resource training.

Three key areas to target are: improving consultation and communication; increasing awareness and improving the operationalisation of legislation; and monitoring and enforcing the implementation of regulations and specifications.

Monitor and enforce: Ensure, through national and local government monitoring, that local authorities are aware of, and are properly implementing, laws, regulations and specifications for improved accessibility; and ensure that payments are not made to contractors until specifications are properly fulfilled. Also ensure that accessibility design features are well maintained by the responsible authority and that the street environment enables easy access to transport services. Directly consult people with disability and their representative organisations as part of the monitoring process, to assess how well their accessibility needs are being met.

—Gaynor Dawson, Gender Specialist

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Briefing Note

Modernising National Roads: A Strategic Focus for Renstra 2015–2019

The Issues

Indonesia's trade competitiveness and future growth prospects depend on strong action to address the low connectivity among economic centres and low mobility on road networks. Inter-urban road travel is slow, with trip times of 2–4 hr/100 km (nearly double those of ASEAN neighbours) and high urban congestion. Low connectivity raises transport and logistics costs, discourages redistribution of economic activity to less-developed regions, and inhibits social and economic development. Poor road safety is imposing high social costs.

Low connectivity is impeding trade competitiveness and redistribution of regional development. Previous priorities and low capacity have led to under-investment in expanding network capacity.

The current capacity and density of the national road network are already low for the population and economy of the country, yet traffic demand is growing rapidly and faster than economic growth. Investment in expanding and upgrading the network has been low for decades and recent spending priorities have focused on asset preservation. Despite an eight-fold rise in funding since 2005, expressway density remains very low, capacity improvements to the arterial road network have been fragmentary and 60–70 percent is below modern standards. Travel times and mobility are not monitored or included as strategic outcomes of road spending plans, and thus the plans link only indirectly to national development goals. There are also significant challenges in road program delivery and implementation.

Opportunities and Progress

The 2011 national Master Plan for economic development (MP3EI) is a driver for improving connectivity in six key corridors, and forms a critical framework for investing in road infrastructure in those corridors. Recent substantial increases in the Directorate General of Highways (DGH) budget provide ample funding for investing in road development over and above adequate provision for asset preservation. An IndII study on road network development, "Modernising the National Road Network", evaluates all these issues and develops a planning framework which could support the major shift that is needed from asset preservation to road development. Preparation of the 2015–2019 Renstra for the Ministry of Public Works provides a significant opportunity for shifting the strategic focus to investing in modernisation of the network.

Development goals are identified and resources are available; now the strategic focus needs to be on investment.

The Vision

A modern national road network to support Indonesia's economic growth, regional development and international trade would provide strong connectivity and capacity for efficient, reliable and safe road transport services between national economic centres, cities and other strategic nodes. The form and standard of the national network would have a clear hierarchy:

A modernised network would provide safe efficient travel in a hierarchy suited to purpose.

- Expressway network as the backbone – limited access, high capacity, dual carriageway, grade separation and 100 km/h design speed
- Arterial connections between economic centres and cities – capacity and standard linked to long-term traffic demand and development, alignment for long-term efficiency and spatial development, 80 km/h design speed, paved shoulders and controlled right-of-way
- Collector and strategic roads, providing access to the network for communities and producers – with 60 km/h design speed and road standards staged over time to satisfy local demand and growth

The Strategy

Achieving this vision would require a major shift in the procedures and responsibilities for planning and delivering development of the network. The IndII study recommends a planning framework with two key elements:

Changes would tie planning to development outcomes in a transparent framework – through long-term plans and a medium-term pipeline of projects.

- *Corridor development plans* – Based on forecasts and evaluation of regional development and transport demand, the plans would show the road configuration needed in each corridor over a long-term horizon of 25 years and more – including expressways and arterial roads – as well as the staging of investment, a multi-year pipeline of projects, the travel time outcomes and funding requirements.
- *Road renewal strategy* – A program for realigning and rebuilding arterial roads to modern standards of speed, safety and strength would be guided by a strategy that covers the preparation procedures, programming and prioritisation of implementation among corridors and regions (consistent with the corridor plans), the funding, and the management of land acquisition and land control.

Implementing the Strategy – Needs and Costs

The funding resources required for a full program of modernisation are substantial but feasible given the current DGH allocation of IDR 30–43 trillion/yr. A broad estimate of needs, based on DGH work costs, indicates:

The strategy enables clear medium-term forecasts of funding needs.

- A road development allocation of IDR 20 trillion/yr could deliver a program of 2,000 km of renewal annually, modernising half of the network in 10 years, as well as other general road development.
- Public spending of about IDR 30 trillion/yr to supplement private investment could deliver the backlog of 3,700 km of expressways in 15 years and stimulate greater private sector participation.
- An allocation of IDR 12–15 trillion/yr would be adequate for asset preservation with efficient program delivery.

This road development program would substantially improve connectivity in the major corridors, reducing trip times by 40 percent and trip distances by 10–25 percent. It would stimulate and support regional development, and facilitate substantial growth in intermodal transport services. However, to succeed, such a program would require substantial changes to the planning and delivery procedures in DGH.

— William Paterson, IndII Consultant

Briefing Note

Perpres 29 Commercial Bank Financing: A Key to Sustainable Piped Water Services

A 50-Year-Old Problem

Despite investment of about two and a half billion dollars in piped water infrastructure, the quality of Indonesia's municipal water services ranks below that of neighbouring countries such as Thailand, Vietnam, Malaysia, Cambodia, and the Philippines. Indonesia's political systems and history of strong central control provide powerful disincentives for local water companies (PDAMs) to progress from dependency to self-sufficiency. This long-standing problem can be traced to four causes: (1) delayed tariff increases that require PDAMs to live off of their capital and rely on investment funds from local or central government sources; (2) Local Government (LG) neglect of their responsibilities to those who need piped water; (3) persistent reluctance to involve tariff-payers in tariff decisions; and (4) lack of available investment funds when PDAMs need them. The program authorised by Presidential Decree no. 29/2009 (Perpres 29) appears to be the only ongoing piped water sector program that can lead to exemplary, sustainable water services by addressing all four of these issues at once.

For the last fifty years, Indonesia has tried without success to solve the problem of poor quality water

The Perpres 29 Program

In response to the need for additional infrastructure based on more merit-based incentives, Perpres 29 and its implementing regulations were promulgated to bring together commercial banks and cost-recovering PDAMs through a guarantee mechanism that reduces risk to the lending bank and provides an interest rate subsidy of up to 5 percent.

The Perpres 29 program is the first government program to succeed in providing PDAMs with an ample source of affordable investment financing.

Under this straightforward incentive program, the PDAM's entire cash flow goes into an account in the lending commercial bank to ensure that the bank receives loan repayments. In the event of default, the bank will be responsible for only 30 percent of the unpaid balance, and the central government will repay 70 percent of any unpaid balance to the bank. But if the central government has to pay the 70 percent of unpaid balance to the bank, it will have the right to recover part of it from the LG that owns the PDAM. Thus, the LG has to commit to repayment of the 30 percent or have the amount deducted from its intergovernmental fiscal transfers for every period that the PDAM misses a repayment. This arrangement must be recorded in an umbrella agreement among the PDAM, LG (with concurrence of the local parliament [DPRD]) and central government, represented by the Ministry of Finance (MoF). For the first time in Indonesia, Perpres 29 makes it possible for PDAMs to become creditworthy, by opening up long term access to the resources of commercial banks under the watchful discipline of lenders.

Efforts to Improve Management

During the period 2010 to 2012, several Indonesia Infrastructure Initiative (IndII) activities addressed PDAM governance and management issues. The first phase of the Financial Reform of 20 PDAMs activity provided expertise to PDAMs to help them develop a good governance manual, prepare bankable loan plans, and seek MoF approval. In late 2011, when the first batch of three PDAMs received approvals, Perpres 29 became the first national program to successfully arrange sustainable and affordable long-term commercial bank financing for PDAMs. A second phase of IndII's activity is helping a subset of the original group of PDAMs while providing assistance for governance and bankable loan plans to five new and

comparatively stronger PDAMs. By the end of 2013, through assistance from all sources, five PDAMs had received MoF approval for Perpres 29-subsidised loans. Five others were awaiting approval from the technical committee.

A successful Perpres 29 program will address all of the factors responsible for low quality water services and lead to sustainable services.

This progress helped to illustrate how the requirements for accessing a Perpres 29 loan, and repaying it within 10 years, dovetail with addressing all four causes of substandard water services. For instance, banks scrutinise cash flow and whether tariffs achieve full cost recovery. In addition, the LG has a strong financial stake in seeing that the PDAM performs well enough to be able to repay the loan. With a virtually unlimited pool of funds available from commercial banks when PDAMs need it, they are able to work toward self-reliance and sustainability. Perpres 29 is a truly merit-based government incentive program.

IndII Findings to Date

While IndII consultants were preparing a governance framework and a toolkit for five more Perpres 29 loans, a September 2013, baseline survey found that the most persistent obstacle to long term provision of convenient and affordable water services was insufficient LG understanding and trust as exemplified by frequent delays of needed tariff increases. But at the same time, most PDAMs reported that tariff-payers were more concerned with quality of water services than level of tariffs. In most service areas, there was little or no feedback from tariff-payers regarding the benefits and tariffs associated with improvement programs, so LGs made tariff decisions in an environment of uncertainty, usually delaying their decision until the situation was critical.

Tariff-payers care more about the quality of water services than amount of the tariff, but when they decide on tariff increases, local governments rarely, if ever, solicit consumer feedback.

IndII developed insight into the need for tariff-payer involvement during the second phase of its NTT/NTB Water Governance activity. This activity, in 2010–2011, was designed to contribute to better governance of the water sector in five localities by applying social contract principles to local governments, PDAMs, and communities to achieve sustainable improvements in urban water services. When consultants stood shoulder-to-shoulder with PDAM officers during public business plan presentations, there was overwhelming sympathy and support among tariff-payers, who formed consumer groups to support the PDAM. The experience illustrated that tariff-payers respond positively to well prepared development plans, but most PDAMs and LGs still need a third party to help them approach and deal with tariff-payers.

In November 2013, IndII hosted an informal seminar of selected exemplary PDAMs that recalled their turnaround from annual losses to profitability and the path by which their stakeholders came to enthusiastically support on-time tariff increases. Their common characteristics were: dedicated and honest directors, internal solidarity, staff incentives, consumer orientation, and trust and understanding with tariff-payers leading to trust and understanding with their LG owners. Not by coincidence, three of these exemplary PDAMs already received approval for Perpres 29 loans, and one is preparing a Perpres 29 loan request with assistance from IndII, reinforcing the insight that successful participation in the Perpres 29 program can lead to exemplary and sustainable water services.

New Findings Needed

The preparation of a large commercial bank loan provides an unusual opportunity to address governance issues such as trust and understanding with consumers and LG owners. New ideas for behaviour changes and consultation between PDAMs and communities need to be tested. Sources for these ideas may include the Australian-funded Community-based Water and Sanitation National Strategy of 2003 and the lessons of the Government of Indonesia's SANIMAS and PAMSIMAS2 programs. Best practices of exemplary PDAMs and of other public services such as roads and electricity may be adapted for Perpres 29. Other possibilities that may be productive include cross-visits and allocating funds to recognise, praise, and reward responsive PDAMs and LGs. Such steps can bind LGs more closely to PDAM performance in the public eye.

New ideas must be tested to help local governments and PDAMs consult with tariff-payers, thereby allowing Perpres 29 to open the way to sustainable, better quality water services.

Once tested, these ideas should be incorporated into a strengthened Perpres 29 that will continue after the current national program expires at the end of 2014. The continuity of the Perpres 29 program may depend on the workability of new governance procedures to help overcome years of lack of trust and understanding by tariff-payers and LG owners. For the first time in 50 years, by addressing all facets of long-standing governance issues, a successful Perpres 29 program may provide the turnaround needed to hasten the emergence of an ever-growing number of LG owners that will nourish sustainable, transparent, and self-reliant PDAMs.

— Jim Woodcock, IndII Consultant

Life Before and After Water Hibah

The installation of piped water connections transforms life for Indonesian villagers.

The results of major development initiatives are usually described in quantitative terms. For example, in Phase 1 of the Indonesia Infrastructure Initiative (IndII), the Water Hibah program, which provides grants to Local Governments based on verified new water connections, reached 78,000 households. Another approximately 300,000 households are targeted for Phase 2.

Such figures are impressive but impersonal. They don't answer the question: What do these new connections mean in everyday terms to the people who live in those households? To investigate the answer, in October 2013 IndII's national and international gender specialists visited two locations where new connections were installed: the village of Satar Mese in the district of Manggarai, Nusa Tenggara Barat; and Wonokromo village in Malang, East Java.

When Water Hibah began, neither village had easy access to water. Villagers, both women and men, were predominantly low-income agricultural labourers or had very small land holdings.

Life Before Hibah

In both villages, women take primary responsibility for managing household water collection and usage. Without respite, women must ensure that water is always available at the house for drinking, cooking, and other family needs. Women expressed over and over to IndII's specialists that before the connections they felt *setengah mati* (half dead). In both Manggarai and Malang, women had to carry water up steep hillsides to their houses. They spent hours every day collecting water, in some cases lugging water containers for more than a kilometre over steep terrain. Men and children sometimes helped, but women were the ones with the most responsibility. In Manggarai, dry season worsened the situation. Women often had to queue at the well until water was sufficiently replenished, a stressful and time-consuming activity. In order to get water, they sometimes went to the water source with their husbands in the middle of the night.

Because of the effort involved in hauling water, villagers bathed themselves and their children in irrigation canals close to the houses, despite the unsanitary conditions. They often had itchy skin as a result. In Malang, the river was sometimes diverted for irrigation purposes for two or more weeks at a time, which meant that people could not bathe properly and they had to spend precious income on purchasing drinking and cooking water.

Life With Piped Water

The provision of piped water at the house has had an amazing impact on the lives of women, men and children. Able-bodied men have benefited, but the greatest positive impact is experienced by people for whom carrying heavy loads up steep inclines is especially difficult or risky – pregnant women and their unborn children, women carrying babies, the elderly, frail, people with disability, and children. Women have much more time and energy for income earning activities, domestic responsibilities, and relaxation. They are less tired and stressed.

In both Malang and Manggarai, people have built toilets and bathrooms using their new piped water, offering potential health benefits as well as convenience. In Manggarai, some villagers report that children are now bathed twice a day rather than once, and people do not suffer from itchy skin. Women have planted more vegetables in household gardens because they can use piped water for watering during dry season. The additional vegetables are consumed by the family, saving on food expenditures, or are sold at the market to increase family income, especially during dry season when produce is more costly. Some entrepreneurial women have started ice production with the clean water. Although families now must pay regular water bills, every woman interviewed affirmed that the cost is worthwhile.

— Gaynor Dawson, Gender Specialist

The Expert View

Question:

Do you think Indonesia is on track to meet its goals for 2025? How will the next National Medium Term Development Plan (RPJMN) contribute to these goals?

Suyono Dikun PhD
Professor of Transport and Infrastructure Policy and Planning, UI
Lead Advisor, LASU, Ministry of Transportation

"The 2015–2019 RPJMN envisions Indonesia becoming a more developed, independent and prosperous country in 2025. Several international institutions have also predicted Indonesia's advancement by that time. However, it seems to be difficult to achieve a better economy for Indonesia without building full scale infrastructure to cover the current deficit and gap. Therefore, infrastructure development is crucial for Indonesia to support mobility and economic growth by 2025. RPJMN 2015–2019 has to not only contribute to achieve these objectives, but far more importantly than that, it must have a non-linear, innovative, and "out of the box" development plan. Infrastructure has to be built in a more radical manner and "business as usual" will not solve this country's problems. The 2015–2019 period is critical to Indonesia; failure in infrastructure development will deal a mortal blow to Indonesia's global competitiveness and cause detriment to the nation's future economy."

Ir. Montty Girianna, M.Sc, MCP, Ph.D
Director, Energy Division
Directorate of Energy and Mineral and Mining Resources
Bappenas

"Yes, I think Indonesia is on track. Our goal is a strong nation. One indicator we want to achieve is a per capita income of around USD 14,000 by 2025. At present it is about USD 3500. Thus we have to leap ahead over the next ten years. We have a lot of homework to do. The question is: because we have a lot of sectors, such as industry, services, agriculture, and others, we need to focus on which sector that we want to develop in a maximal fashion to stimulate income growth most effectively. If you ask me, the industrial sector has the most potential, especially the processing industry.

At present, industry contributes about 20–25 percent to growth. So that this sector is able to contribute 30 to 40 percent of GDP, we need a sound industrial strategy, for exports as well as imports. We want our growth to be above 6–7 percent, if possible 8 percent.

An ongoing question that relates to achieving the desired level of growth is: what amount of energy do we have to be prepared to supply for electricity, including gas? It's a very large amount.

If we want per capita growth of 7–8 percent, it means our energy production has to grow by around 8–10 percent a year. That's not easy to do. It's difficult to allocate gas to domestic purposes, because the problem is the pricing policy, which needs to be balanced from the perspective of the economy but also with regard to political considerations. So the issue is the price of energy, fuel oil, gas, and LPG – these will be homework for the new government. The thing we are working on now is to prepare a platform for the new government, not just leaving them to clean things up without any foundation for decision-making.

The other situation that is very pressing for the new government is obtaining consensus from key government stakeholders. For example in the energy sector there are various concerns like investor partnerships, the government's regulatory role and so forth. Our efforts are of no use unless we can get buy-in from everyone. I think the trend is positive toward reaching national agreement. The RPJMN itself is a benchmark, regarding what direction we are going in and what have we accomplished over the past five years. It's a planning document at the same time it is a political document, because it serves as a reference to unify everyone so we can implement our work going forward."

Outcomes:
New MIS Tracks Water and Sanitation Programming

Thanks to the success of IndII's Water and Sanitation Hibah programs to date, additional programming that builds on initial successes is now being implemented. The activities, to be completed by 2015, are significant in scale: an anticipated A$ 90 million for Water Hibah grants in up to 120 Local Governments (LGs); A$ 5 million for the Sanitation Hibah for up to 9,000 household connections; and A$ 40 Million in Australia Indonesia Infrastructure Grants for Sanitation (sAIIG) to reach as many as 50 LGs. Expected outcomes are greater use of piped water and sewerage services, with the attendant benefits to target populations, and increased investment by LGs in their water and sanitation infrastructure. As the numbers suggest, keeping track of the activities and progress is a major task in and of itself. The Directorate General of Human Settlements (DGHS) is therefore developing a Management Information System (MIS) that will permit all stakeholders, including LG officials, to check on progress, obtain updated program information, and upload new information about their activities. A website is being dedicated to the MIS and will allow all stakeholders to monitor program progress and results in real time.

To read more about this and other IndII activities, view the Activity Updates on our website at: http://www.indii.co.id/publications.php?id_cat=57

In our Next Issue: Moving People in Jakarta

Urban mobility is a growing problem in many of Indonesia's cities, but nowhere is it a more pressing concern than in the nation's capital. Estimates vary regarding the carbon dioxide emissions, lost productivity, and decreased economic growth that can be attributed to Jakarta's ever-increasing gridlock, but the magnitude of the crisis is clear. The April 2014 edition of ***Prakarsa*** will examine this problem and its solutions, taking a look at how different modes of transport (various types of buses, rail, ojek, bajaj, taxi, angkot, motorcycles and automobiles) fit into the big picture. The articles will discuss roles of the public and private sectors, including industry structure, regulations, and enforcement. Finally, the edition will acknowledge the importance of non-vehicular mobility and the strategies that are needed to make walking and cycling routes safer and more convenient.