Setting the Scene:
Myanmar Infrastructure Challenges

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1. Infrastructure needs
2. Financing options
3. Public-Private Partnerships
The quality of infrastructure

Current perception is very low for Myanmar

How would you assess general infrastructure (e.g., transport, telephony, and energy) in your country?

Despite improvements, ranking remains low

Around the world average

Among top performers

World Ranking (2014):

<table>
<thead>
<tr>
<th>Country</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myanmar</td>
<td>138</td>
</tr>
<tr>
<td>Vietnam</td>
<td>112</td>
</tr>
<tr>
<td>Cambodia</td>
<td>109</td>
</tr>
<tr>
<td>Philippines</td>
<td>95</td>
</tr>
<tr>
<td>Thailand</td>
<td>95</td>
</tr>
<tr>
<td>Indonesia</td>
<td>95</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>95</td>
</tr>
<tr>
<td>Malaysia</td>
<td>20</td>
</tr>
<tr>
<td>Singapore</td>
<td>5</td>
</tr>
</tbody>
</table>


Road Infrastructure under pressure

Booming demand for infrastructure services

- **Number of vehicles** is expected to grow exponentially in the future

  If Myanmar reaches Thailand’s level of motorization

  ➔ > 20 million vehicles more ➔ current fleet x 8.5

- Only **38.9%** of the road network is paved in Myanmar and road density is among the lowest in the region

  Source: ADB – Myanmar Unlocking the Potential

- Regional integration requires more land connectivity with neighboring countries

  ➔ Huge investment required to improve quality and capacity

Source: ADB – Myanmar Unlocking the Potential

Source: ASEAN Statistic Leaflet 2013
Similar patterns in other transport sub-sectors

- **Railways**: Need to be upgraded (currently low operating speeds) and key links with other countries need to be built.

- **Ports**: Myanmar could become a regional hub thanks to its strategic location. Port capacity will need to be developed and handling facilities upgraded (volume of export almost tripled since 2000).

- **Airport**: Number of passengers has almost tripled in Myanmar since 2000.

Rapid urbanization creating investment needs

- **10 million** more people are expected in Myanmar’s large cities by 2030, which is the equivalent of 2 new cities the size of Yangon or 10 new cities the size of Mandalay.

- Large cities would likely need to invest **$146 billion** from 2010 to 2030 to upgrade infrastructure for existing population and new arrivals.

Energy and Power potentials

*Booming demand for infrastructure services*

- Electricity consumption doubled between 2007 and 2012
- Current capacity of electricity generation is insufficient to meet growing demand
- Growth likely to continue → consumption is still low in international comparison
- Only 52% of the population has access to electricity
- There are abundant sources of energy, including renewables (e.g. hydro)

Electric power consumption (kWh per capita) - 2012

<table>
<thead>
<tr>
<th>Country</th>
<th>2012 Consumption (kWh per capita)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myanmar</td>
<td>153</td>
</tr>
<tr>
<td>Thailand</td>
<td>2465</td>
</tr>
</tbody>
</table>

Social sectors

*Schools and hospitals*

- Low Government investment levels in social infrastructure and services, compared to other ASEAN countries; gradual signs of social budgets increasing
- Education is a key priority for national development; ratio of expenditure to GDP is low in comparison with other ASEAN countries

Source: PwC Presentation at ESCAP Workshop on PPP’s for Infrastructure Development in Myanmar (2014)
Funding requirements

*Difference btw the current & projected infrastructure stock*

- Lack of modern infrastructure is a major challenge to economic development and impediment to the country’s competitiveness.
- Investment gaps could total as much as **$80 billion** by 2030 or **$4.7 billion** per year (i.e. 7% of current GDP).

Source: ADB – Myanmar Unlocking the Potential

1. Infrastructure needs
2. Role of Public-Private Partnerships
**Financing Options**

- **Public Finance**
  - Majority of the needs will be financed through the public budget, for example:
    - Public Borrowing (Loans, Govt Bonds, ...)
    - Revenue collection (tax to GDP ratio low ~5%)
    - Reprioritizing sector expenditures

- **Private Finance**
  - The public budget is unlikely to cover all the needs
  - The government should try to tap private sector resources
    - Public-Private Partnership is the mechanism

**Public-Private Partnerships**

**Key differences**

- **Financial consideration**
  - No upfront disbursement from the public... but the private sector is not providing services for free.

- **Duration**
  - The private sector is not only building the infrastructure but also operating it

- **Output Specification**
  - The project is defined in terms of "what we want to achieve" and not "how to achieve it"

- **Risks**
  - Some project risks are transferred to the private sector (cost overruns in the construction/operation)
Public-Private Partnerships

Possible advantages

- More resources mobilized for infrastructure development
- Improved service delivery (quality, service coverage,...)
- Efficiency gains (resulting hopefully in cheaper costs for the end-users)
- Protection against some project risks
- Optimized use of assets (alternative source of revenues identified)

Public-Private Partnerships

Not a panacea...

- PPP Projects are complex to prepare, structure and transact
- Risks might be difficult to allocate and quantify
- Private sector financing costs are relatively high
- Contingent liabilities linked to public guarantees can heavily impact the fiscal stability

- Clear understanding of the benefits and limitations of PPP
- Well-defined strategy on how to use PPP
- Sufficient capacity to implement PPP Projects successfully
Thank you

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