Infrastructure funding in LLDCs and transit countries in South America

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ECLAC | United Nations
ECLAC and Infrastructure Development of LLDCs

- Monitoring infrastructure performance
- Measuring infrastructure investment
- Estimating investment needs
- Policy recommendations

Case studies and technical assistance
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Estimating investment needs

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Perception of infrastructure performance in South America

Logistic Performance by regions, 2016

- Customs: 1.542
- International shipments: 1.8468
- Tracking and Tracing: 1.0098

Best performance (Germany): 1.2243
Average Latin America: 1.4288
Gap: 1.53

Infrastructure Quality, 2007-2016

Best performance: 1.77
Average Latin America: 1.68
Gap: 1.87

Quality of Infrastructure in LLDCs and Transit countries in South America, 2016

- Chile: 2.40
- Uruguay: 2.40
- Peru: 2.40
- Bolivia (Plur. State of): 1.60

Source: ISU/NRID, ECLAC, based on data from World Bank, Connecting to Compete
Measuring infrastructure provision in LLDCs and transit countries: Current Situation

LLDCs and Transit countries in South America and selected regions: Road density, 2015 (per 100 km²)

Source: ISU/NRID, ECLAC, based on official data, for 2015 or latest year available
Contribution of international freight to the total costs of imports of LLDCs and Transit countries

<table>
<thead>
<tr>
<th>Country</th>
<th>2000</th>
<th>2010</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>4.9</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>Brasil</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Uruguay</td>
<td>5</td>
<td>5.2</td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>7.1</td>
<td>6.3</td>
<td></td>
</tr>
<tr>
<td>Perú</td>
<td>7.3</td>
<td>6.3</td>
<td></td>
</tr>
<tr>
<td>Bolivia</td>
<td>7.8</td>
<td>7</td>
<td>6.7</td>
</tr>
<tr>
<td>Paraguay</td>
<td>8.4</td>
<td>9.8</td>
<td>7.1</td>
</tr>
</tbody>
</table>

Source: Base de Datos de Transporte Internacional, ECLAC, 2016
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Latin America: Infrastructure Investment by Source, 1980-2015
(Percentage of GDP)

Source: ISU/CEPAL based on
b 2007 - 2015: INFRALATAM.
Note:
a Includes: Argentina, Brasil, Chile, Colombia, México y Perú. Year 2015 does not include Chile.
b Includes: transport, energy, telecommunications, water and sanitation.
**Infrastructure Financing in South America**

**Domestic sources**
- Public Budget
- National Banks
- PPPs

**External sources**
- Multilateral Development Banks
- Regional infrastructure funds
- Subregional and bilateral Banks
- ODA
- FDI

**Innovative mechanisms and other forms of financing**
- Investment Facility for Latin America (LAIF)
- Project Finance (PF) - Special Purpose Vehicle (SPV)
- Bonds of social impact

Source: Cipoletta Tomassian, C., Financiamiento de la infraestructura para la integración regional Alternativas para América del Sur, 2015
LLDCs in South America: Infrastructure Investment, 2008 - 2015
(Percentage of GDP)

Graphs showing infrastructure investment in Bolivia (Plur. State of) and Paraguay from 2008 to 2015. The investment is categorized into infrastructure, transport, and energy. The graphs indicate a trend of increasing investment in these sectors over the years.

Source: ISU/ECLAC based on INFRALATAM
Infrastructure Investment and Infrastructure Development

Source: ISU/ECLAC based on INFRALATAM, 2017
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Case studies and technical assistance
### New Infrastructure and Maintenance Needs for the period 2016-2030

#### Scenario 1: GDP growth of 1.4%

<table>
<thead>
<tr>
<th>Sector</th>
<th>New investment</th>
<th>Maintenance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport (Roads and rail)</td>
<td>0.3</td>
<td>0.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Electricity</td>
<td>0.4</td>
<td>0.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Telecommunicacions</td>
<td>0.4</td>
<td>0.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Water and sanitation</td>
<td>0.8</td>
<td>0.3</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1.9</strong></td>
<td><strong>1.9</strong></td>
<td><strong>3.7</strong></td>
</tr>
</tbody>
</table>

#### Scenario 1: GDP growth of 2.5%

<table>
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<td>0.5</td>
<td>0.9</td>
<td>1.4</td>
</tr>
<tr>
<td>Water and sanitation</td>
<td>0.9</td>
<td>0.3</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.1</strong></td>
<td><strong>2.0</strong></td>
<td><strong>5.1</strong></td>
</tr>
</tbody>
</table>
## New Infrastructure and Maintenance Needs for the period 2016-2030

### Scenario 3: GDP growth of 3.2%

<table>
<thead>
<tr>
<th>Sector</th>
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<th>Maintenance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport (Roads and rail)</td>
<td>1,3</td>
<td>0,4</td>
<td>1,7</td>
</tr>
<tr>
<td>Electricity</td>
<td>1,3</td>
<td>0,4</td>
<td>1,7</td>
</tr>
<tr>
<td>Telecommunicacions</td>
<td>0,6</td>
<td>0,9</td>
<td>1,5</td>
</tr>
<tr>
<td>Water and sanitation</td>
<td>0,9</td>
<td>0,3</td>
<td>1,2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,1</strong></td>
<td><strong>2,0</strong></td>
<td><strong>6,1</strong></td>
</tr>
</tbody>
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<table>
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<tbody>
<tr>
<td>Transport (Roads and rail)</td>
<td>1,7</td>
<td>0,5</td>
<td>2,2</td>
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<td>1,8</td>
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<td>1,0</td>
<td>0,3</td>
<td>1,3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,2</strong></td>
<td><strong>2,1</strong></td>
<td><strong>7,4</strong></td>
</tr>
</tbody>
</table>
Infrastructure Investment Needs in the BAU scenarios

(En miles de millones de USD de 2010): 2016 - 2030

- Transport (road and rail)
- Energy (electricity)
- Water and sanitation
- Telecommunications
- Gap

Scenario 1,4%
- Transport (road and rail): 0
- Energy (electricity): 0
- Water and sanitation: 0
- Telecommunications: 0
- Gap: 1,451

Scenario 2,5%
- Transport (road and rail): 0
- Energy (electricity): 0
- Water and sanitation: 0
- Telecommunications: 0
- Gap: 2,978

Scenario 3,2%
- Transport (road and rail): 0
- Energy (electricity): 0
- Water and sanitation: 0
- Telecommunications: 0
- Gap: 4,290

Scenario 3,9%
- Transport (road and rail): 0
- Energy (electricity): 0
- Water and sanitation: 0
- Telecommunications: 0
- Gap: 5,942
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ECLAC and Infrastructure Development of LLDCs: Policy Recommendations

I. Specific recommendations on infrastructure development and maintenance
   ❑ Promoting increase in public investment intended for the creation of new infrastructure, and programmes for transport infrastructure maintenance
   ❑ Facilitating compliance with transit rules and improving infrastructure quality
   ❑ Improving and maintaining railway infrastructure (tracks and rolling stock)
   ❑ Improving the navigability of inland water routes, including signalling, maintenance and channel-widening projects

II. Recommendations on infrastructure Financing

   ❑ Increase the level and the efficiency of the public infrastructure investments:
     ❑ Integration of sectoral policies
     ❑ Contra cyclical investments
     ❑ Multi-criteria evaluation

   ❑ Build upon the region’s extensive and rich experience with the PPP in infrastructure

   ❑ Improve the overall quality of institutional processes on the selection, implementation and evaluations of infrastructure projects
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Infrastructure governance defined as a set of processes, relating both to the taking of decisions in the area of infrastructure and to implementation of those decisions, where there is interaction between the mechanisms, procedures and rules established formally and informally by institutions.

This refers both to the conduct of suppliers in their respective markets for infrastructure services and to the vertical and horizontal structure of those markets.

The capacity to **maximize the contribution of infrastructure to sustainable development** directly depends on the **quality of institutions and public and private dialogue** and stakeholders’ involvement.
Opportunities for enhancing infrastructure development

- Improving data and reliable indicators on infrastructure development and financing
- Monitor the use of various funding mechanisms
- Collaboration with the multilateral development banks at the regional and global levels
- Supporting a national dialogue on infrastructure development, financing and governance
  - National transport policy workshops
  - Infrastructure governance at various levels: sectoral, local, national or regional
- Supporting a regional dialogue and regional cooperation initiatives
- Coordinating the interventions of the various UN institutions and relevant actors.
Thank you!

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