Lao PDR as a Land-Locked to be Land-Linked: Infrastructure Connectivity Development under MPAC 2015
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Presentation Outline

I. Country Background
II. Transport Policies and Strategies
III. Transport Connectivity Infrastructure Development and Regional Integration
IV. Laos – Korea Cooperation Projects
V. Challenges on Infrastructure Development
VI. Ways Forward
I. Country Background

• Lao PDR is a least developed and landlocked country, sharing Borders with 5 countries as show in the map.
• Land Area: 236,800 km²
• Population: 6.7 millions or about 27 persons/km²
• Economy: The Lao PDR economy is grown at around 7%, a slight decline from the previous year, and is expected to maintain this growth rate from 2017-2019.
II. Transport Policies and Strategies

Overall Guiding Connectivity Policy Lao PDR

Lao PDR has a policy
• To transform from a land-locked to a land-linked country in Greater Mekong Sub-region (GMS) and in the mainland of ASEAN

• Providing efficient and reliable transport infrastructure and facilities, particularly transit transport routes;
• Facilitating cross border transport of goods and people mobility between and among neighbors and countries in the region.

Transport sector connectivity policy focuses intensively on:
• Develop and improve multi-modal transport system, mainly: road, rail, inland water and air transports.

• Improvement of transport infrastructure system to support industrialization and modernization.
• Inclusive development by narrowing the gap btw. urban & rural areas.
• Moving toward regional economic integration.
II. Transport Policies and Strategies

- Land-locked
- Land-linked
- Land bridge

Master Plan of ASEAN Connectivity 2016-2025 (MPAC 2025)

Public Works and Transport Sector and Sub-sector Strategies and Investment plans
e.g. Transport Connectivity Strategy and Land Transport Master Plan
II. Transport Policies and Strategies

Relations between Sector, National and Global Level Plans

Global Level
- Sustainable Development Goals (SDGs)

National Level
- National Vision toward 2030
  - PWT related areas among others
  - Strong basic infrastructure system to support industrialization and modernization
  - Improving development of disparities btw. urban & rural areas
  - Moving toward regional and international integration

5 Yr NSEDP: 3 Outcomes & 20 Outputs
10 Yr NSEDS: 7 Strategies

Sector Level
- 5 Yr PWTDP: 5 work plans, 44 Outputs
- 10 Yr PWTDS: 11 Strategies
- PWT Sector Vision 2030
PWT Sector Development Strategy (2016-2025)  
And NSED Strategy (2016-2025) :

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>2. Strategy on LDC graduation by 2020 and progress on the SDGs</td>
<td>2. Strategy on National Road and Bridge Development.</td>
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<td>4. Strategy on sustainable and green environment with effective and efficient use of the natural resources;</td>
<td>4. Strategy on Waterway Development</td>
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<td>5. Strategy to enhance government’s role in social management under the effective rule of law;</td>
<td>5. Strategy on Railway Development</td>
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<td>10. Strategy on PWT Sector Research Development</td>
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## II. Transport Policies and Strategies

### Public Works and Transport Sector Development Plan (2016-2020)

<table>
<thead>
<tr>
<th>Work plan</th>
<th>Description</th>
<th>Outputs</th>
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<tbody>
<tr>
<td>1st</td>
<td>Maintaining Existing Infrastructures to be in a Fair Condition</td>
<td>02</td>
</tr>
<tr>
<td>2nd</td>
<td>Constructing and Improving PWT Infrastructures</td>
<td>20</td>
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<tr>
<td>3rd</td>
<td>Developing Transport System and Transport Services</td>
<td>07</td>
</tr>
<tr>
<td>4th</td>
<td>Improving PWT Sector Research Development</td>
<td>05</td>
</tr>
<tr>
<td>5th</td>
<td>Strengthening PWT Sector Capacity Building</td>
<td>10</td>
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</tbody>
</table>
II. Transport Policies and Strategies

2016-2020 Infrastructure Projects Support the 5 Work Plans

- 1st WP - Maintaining Existing Infrastructures: 16%
- 2nd WP - Constructing and Improving PWT Infrastructures: 14%
- 3rd WP - Devt. Transport System & Services: 8%
- 4th WP - Improving PWT Sector Research Development: 10%
- 5th WP - Strengthening PWT Sector Capacity Building: 52%
II. Transport Policies and Strategies

2018 Infrastructure Projects investment Plan (MPWT)

- The PIP 2018 of MPWT, there are 229 Projects and the allocate budget is 2.277.069.89 million LAK (24.64% of demand)
- The Budget demand for infrastructure development in year 2018 estimation around 10.375.511.32 million LAK
III. Transport Connectivity Infrastructure Development and Regional Integration

Current Status on Transport Connectivity and Logistic Development

- **Rear & Bridges**
  - Network: 59,120 km
  - 12 sub-regional & regional Rds
  - 8 AHs & only 2 met ASEAN Class III

- **Civil Aviation**
  - 12 Airports, incl. 3 international Airports

- **Railways**
  - 3.5 km (Thanaleng Vientiane, Laos – Nongkhai, Thailand)

- **Waterways**
  - 333 Km of navigation channel (linking south China with Northern Laos, Thailand & Myanmar)

- **Border-Crossing Facilities**
  - 20 points (mostly with Vietnam & Thailand)

- **Logistic Facilities**
  - 9 dry ports & 4 logistic parks under investment plan
Road linked to bordering countries.

ASEAN Highways:
- AH 3: Houyxay – Nateay (206km)
- AH11: Vientiane – Pakse-Veunkham (853km)
- AH12: Thalaleng – Boten (679km)
- AH13: Muang Ngeun – Oudomxay (340km)
- AH15: Ban Lao–Lak 20-Namphao (132km)
- AH16: Savannakhet – Dansavan (242km)
- AH131: Thakhek-Ngommalad-Naphao (146km)
- AH132: Phiahpay-Samakkhhexay- Phoukeua (Lao-Vietnam Border) (218km)

Total AH: 2,816 km

Border Crossing Points with neighboring countries:
- Laos – Cambodia: 1 Border
- Laos – China: 1 Border
- Laos – Thailand: 10 Borders
- Laos – Vietnam: 15 Borders
Infrastructure Connectivity Development: International Mekong Bridges

- 4 Laos-Thailand Friendship Bridges have been completed
- 1 Laos-Myanmar Friendship Bridge (Xiengkok - Khenglab) opened in May 2015
FS railway project from Vientiane–Thakhek-Mugia-Vung Ang (Vietnam border) Completed in 2017; and now is under propose KOICA to help for Detail Design

Savannakhet-Lao Bao Railway Project (220 km) FS already by Malaysia company (Seeking fund for construction)

Pakse-Ubon Railway Project (120 km) ( Seeking fund for construction)

FS railway project from Thakhek-Savannakhet-Pakse-Veunkham 445 km (Cambodia border): Under Propose government request to help from KOICA

Thanalaeng- Nongkhai Railway Extension Project (7.5 km) is ongoing (Ongoing)

Vientiane-Boten Railway Project (420 km) Under construction, total work progress 38%
RAILWAY STATION AT THANALENG, VIENTIANE

Existing 3.5 km cross border railway between Laos (Vientiane) and Thailand (Nongkhai)

Open in 2009 for only passenger transport
AIRPORTS DEVELOPMENT

Luangnamtha Airport

Houysai Airport

Luangprabang International Airport

Wattai International Airport (Vientiane Capital)

Seno Airport (Savannakhet Province) (Seeking fund for construction)

Phongsaly Airport

Oudomxay Airport

Nong Khang Airport (Houaphanh Province) (on going)

Upgrading Phonesavanh Airport (Xiengkhouang Province) (Seeking fund for Improvement)

Savannakhet Airport

Pakse International Airport

Attapeu Airport
DIRECT FLIGHT BETWEEN LAO PDR (VIENTIANE) – ROK (INCHEON): 5 FLIGHTS/DAY

1. Lao Airlines
2. Jin Air
3. T WAY Air
4. Jeju Air
5. Air Busan
7. DRY PORTS

1. Thanaleng, Vientiane
2. Nateuy, Luangnamtha
3. Savanakhet, Savanakhet (developed)
4. Houyxai, Bokeo
5. Laksao, Borikhamsai
6. Luangprabang, Luangprabang
7. Oudomsai, Muangxai
8. Pakse, Champasack
9. Thakhek, Khammouane
III. Transport Connectivity Infrastructure Development and Regional Integration

MPWT has been implementing 10 main multilateral cooperation frameworks

1. CLV (3 countries)
   - Cambodia
   - Laos
   - Vietnam

2. CLMV (4 countries)
   - Cambodia
   - Laos
   - Vietnam
   - Myanmar

3. ACMECS (5 countries)
   - Thailand

4. Mekong-Japan (6 countries)
   - Japan

5. Mekong-Lancang (6 countries)
   - China

6. GMS

7. Mekong-Kongka (6 countries)
   - India

8. ASEAN (10 countries)
   - Brunei, Indonesia, Malaysia, Philippine and Singapore

9. ASIA - Europe (53 countries)

10. ASEAN - Republic of Korea (ROK) (11 countries)

Xaisana Xaphakdy: pls Add Note about ASEAN-ROK?
Joint Ministerial Statement of The Eighth ASEAN and ROK Transport Ministers

Under the ASEAN-ROK Strategic Partnership for Peace and Prosperity (2016- 2020):
- environmentally friendly airports; as well as to strengthen transport networks and operations for air, maritime, road, rail, Inland Waterway Transport (IWT), and multi-modal transport for fast, efficient, safe, sustainable and secure movement of goods and people in the region.
- In further enhancing air transport connectivity between ASEAN and ROK and encouraged the relevant working groups to look into convening the 2nd Meeting of the ASEAN-ROK Working Group on Regional Air Services Arrangements for the conclusion of a more liberal and mutually beneficial air services agreement
III. Transport Connectivity Infrastructure Development and Regional Integration

ASEAN: Policy for Promoting Regional Connectivity – Institutional

Public Works and Transport Development Sectors 2016 - 2020

July 2015 Version

Revised version, Dec 2016

aligned with National Plan and Strategy

Public Works and Transport Development Strategy 2016-2025
III. Transport Connectivity Infrastructure Development and Regional Integration

Master Plan on ASEAN Connectivity 2025 (MPAC 2025)

Focusing on five strategic areas to achieve this vision

1. Sustainable infrastructure
   - Increase public and private infrastructure investment in each ASEAN Member State, as needed.
   - Significantly enhance the evaluation and sharing of best practices on infrastructure productivity in ASEAN.
   - Increase the deployment of smart urbanisation models across ASEAN.

2. Digital innovation

3. Seamless logistics
   - Lower supply chain costs in each ASEAN Member State.
   - Improve speed and reliability of supply chains in each ASEAN Member State.

4. Regulatory excellence

5. People mobility
III. Transport Connectivity Infrastructure Development and Regional Integration

ASEAN Transport Connectivity

- Land transport Network
- Railway Network
- Lao Air Transport Network
Project Priority Pipeline for LAO PDR under MPAC 2025

Proposed Projects into ASEAN Rolling Project Pipeline (15/06/2018)

AH15 Upgrade National Road No. 8, Banlao-Nam Phao (98 km of 132 km)

AH123 Upgrade National Road No. 18A (106 Km)

AH13 Upgrade National Road No. 2W (151 Km)

Railway Link from Vientiane in Lao PDR to Vung Ang in Vietnam (554.73 Km)

Savannakhet - Lao Bao Railway Project (220 Km)

Thakhek – Savannakhet – Pakse – Vang Tao 345 Km

AH12 Nateuy - Oudomxai - Luang Prabang - Vientiane (293 of 682 km)

AH11 four lane highway project Vientiane Ban Hay section (63 km)

AH12 four lane highway project from Vientiane - Phon Hong section (73 km)

AH131 Thakhek - Na Phao (96 km of 146 km) - (KL Transport Strategic Plan)

AH 132 Phia Fay - Phoukeua (109 of 221 km)

Complete the installation of common road signs and the route numbering system on all TTRs. AH11 and AH12)

ASEAN Single Aviation Market (ASAM) Implementation Framework)

Conduct a study and formulate a regional plan for developing IWT in ASEAN + Thailand and CLMV.
EXPRESSWAYS TO BE DEVELOPED AS PUBLIC PRIVATE PARTNERSHIP (PPP) MODEL

NR 3 Expressway
160 km (FS ongoing)

NR 13 N Expressway
420 km (FS Completed first phase from Vte-Vangvieng)
Plan to construction by end of 2018

NR 13 S Expressway
560 km (procurement process)

Vientiane-Hanoi Expressway
725 km (Pre FS already)
## IV. Lao-Korea Cooperation projects in 2017 & Plan 2018-2019 (1)

<table>
<thead>
<tr>
<th>No</th>
<th>Projects</th>
<th>Cooperation</th>
<th>Funding Sources</th>
<th>Progress</th>
<th>Plan</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FS railway project from Vientiane–Thakhek-Mugia-Vung Ang (Vietnam border)</td>
<td>bilateral</td>
<td>Grant</td>
<td>Completed FS (11/2017)</td>
<td>Propose KOICA to help for Detail Design</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>FS Upgrade NR 8 to AH 15</td>
<td>bilateral</td>
<td>Grant</td>
<td>FS completed (2017)</td>
<td>Propose Government of Korea to help Detail Design &amp; seeking financing</td>
<td></td>
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<tr>
<td>3</td>
<td>Pakse Mekong River Integrated Development Project</td>
<td>Soft loan</td>
<td></td>
<td>Under construction, progress is 13%</td>
<td></td>
<td>Ongoing project</td>
</tr>
<tr>
<td>4</td>
<td>Vientiane Capital Mekong River Integrated Development Phase 2</td>
<td>Soft loan</td>
<td></td>
<td>Under procured of Supervision Consultant</td>
<td></td>
<td>Ongoing project</td>
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## IV. Lao-Korea Cooperation projects in 2017 & Plan 2018-2019 (2)

<table>
<thead>
<tr>
<th>No</th>
<th>Projects</th>
<th>Cooperation</th>
<th>Funding Sources</th>
<th>Progress</th>
<th>Plan</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FS railway project from Thakhek-Savannakhet-Pakse-Veunkham (Cambodia border)</td>
<td>bilateral</td>
<td>Grant</td>
<td>Under KOICA consideration concept paper</td>
<td>Propose Government of Korea to support financing for FS</td>
<td></td>
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<tr>
<td>2</td>
<td>Detail Design railway project from Vientiane–Thakhek-Mugia-Vung Ang (Vietnam border)</td>
<td>bilateral</td>
<td>Grant</td>
<td>Under Propose Government of Korea to Detail Design</td>
<td>Propose Government of Korea to help seeking fund (PPP)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Continue Detail Design Upgrade NR 8 to AH 15</td>
<td>bilateral</td>
<td>Grant</td>
<td></td>
<td>Propose Government of Korea to help Detail Design &amp; seeking financing</td>
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</tr>
<tr>
<td>No</td>
<td>Projects</td>
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<tr>
<td>5</td>
<td>Solid waste management in Vientiane Capital and Wastewater management in Pakse project</td>
<td>bilateral</td>
<td>Grant</td>
<td>Waiting approval from MOF Korea</td>
<td>Project will start in 2019</td>
<td>This project is under Development of Green Cities project in Lao PDR</td>
</tr>
<tr>
<td>6</td>
<td>Pakse Transportation Master plan</td>
<td>bilateral</td>
<td>Grant</td>
<td>Pre FS Completed and now Under KOICA consideration to make Full FS</td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>Inland Waterway Transport Development project</td>
<td>Multilateral</td>
<td>Grant</td>
<td>Under preparing project proposal</td>
<td>Plan</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Solid waste management project in 3 south provinces of Lao</td>
<td>bilateral</td>
<td>Grant</td>
<td>Plan</td>
<td>Plan</td>
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V. Key Challenges on Infrastructure Connectivity Development

1. Budget gaps to investment in infrastructure projects, which is essentially important for neighbouring and regional links and integration, particularly for upgrading the national roads to meet ASEAN highway standard, railways network construction, transport facilities, airport improvement, road safety, and logistic parks and hubs;

2. The Lack of maintaining budget and effective mechanism for existing infrastructure and assets, like roads & bridges, border crossing facilities, logistical access to links between inter-model transports;

3. The increasing climate change and disasters impacts and incidents, including heavy rains, landslides, and flash flooding, which brings about more severe damages to transport infrastructure assets year by year;

4. The insufficient and limited financing sources, especially private sector participation in all modes of PPPs; and

5. The lack of necessary institutions, legal frameworks as well as competent human resources, especially at technical and specialized levels of the sector.
VI. Ways Forwards

1. Stick to the sector and national connectivity policy and plans with prioritization in place on infrastructure investment and developments of new projects; In this particular ASEAN-ROK Infrastructure Meeting, Lao PDR has identified two priority projects, including (1) Detail Design and Construction for AH No. 15 (National Road No.8), and (2) FS for Railway Thakhaek – Pakse – Veunkham/Lao – Cambodia Border.

2. Review and improve maintenance fund sources domestically, and find additional sources of funds, such as regional maintenance funds for regional transit routes;

3. Cooperate even more with development partners to investment in sustainable and climate resilient infrastructure pilot and pioneer projects;
VI. Ways Forwards

4. Promote and invite more participation of private sector in public infrastructure investments through PPP models; and

5. Strengthen and develop institutions, legal frameworks and human resources to cope and right to the sector professional needs.
Thank you for your attention.