



AFD (French Development Agency) and Transport

**22nd GMS Subregional Transport Forum (STF) Mandalay,
Myanmar, 21st-22nd June 2018**



1. AFD



WHO ARE WE?

AFD – France's international development bank, committed for the last 75 years to improve everyday life, both in developing and emerging countries and in the French overseas provinces.



2 400 staff members
of **80** nationalities



85 agencies



108 countries of intervention



77 years (1941)



€10,4 billion of commitment authorizations and

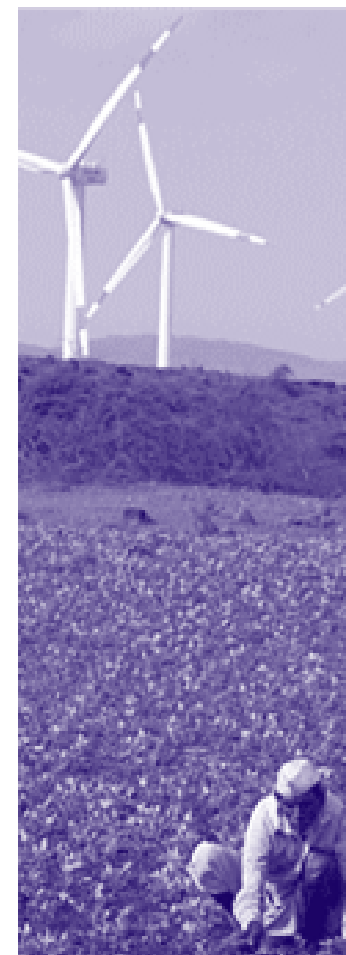
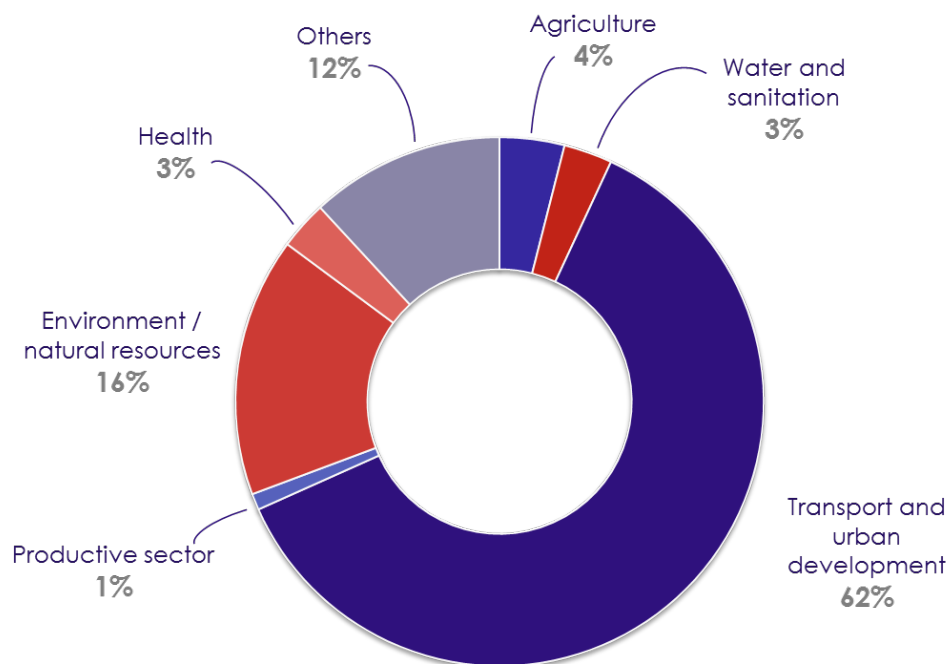
657 new projects (2016)

OUR INTERVENTIONS IN ASIA

Commitments in 2017 :

€1.2 billion in Asia, 16% of AFD's activities

57% of our projects have a positive impact on climate change





OUR FINANCIAL TOOLS (2017)

93,5%

▶ **LOANS**
€1.1 BILLION

INCLUDING **53%** GRANTED
AT MARKET CONDITIONS

6,5%

▶ **SUBSIDIES**
€75 MILLION

- UE subsidies : 64,9M€
- FEXTE : 5,7 M€
- FERC : 2 M€
- FICOL : 1,3 M€
- Other subsidies : 1 M€

**PROJECTS FINANCED WITH
OTHER DEVELOPMENT BANKS** ◀

EU, ADB, BIRD, JICA, KFW

48%



2. AFD strategy on transport sector

AFD strategy on transport: 3 main objectives

Economic growth



Efficient transport

Vehicle for trade and for territorial and regional integration in the global economy

Poverty reduction



Inclusive transport

Improve global mobility, open access to areas and support economic growth and poverty reduction

Global public goods protection



Sustainable transport

Safe, improving energy efficiency, reducing carbon footprint and contributing to food security

The challenges of the new 2018 Transport Strategy

- **5 priorities:**
 - Sustainable Development Goals (SDGs) and access to basic services and employment
 - Climate and support to Energy Transition
 - Digital economy and innovation
 - Gender
 - Involvements of the private sector
- **An operational approach along three territorial axes**
 - Urban mobility (urban transport)
 - National connectivity (interurban rail and roads)
 - Inclusion in international trades (ports and airports)



AFD Transport portfolio

- **1.24 bn€ in 2017**
 - (12 % of AFD total commitments)
 - 40% on urban mobility (MRT, BRT, cable-car, etc.)
 - 17 % on interurban connectivity (mainly railways, aiming at economic development and modal shift for specific transport markets)
 - 43 % infrastructures and TA for international trades (ports, airports)
 - Geographic breakdown : **Asia 16%** (all modes)
- **65 % sovereign loans, 30 % non-sovereign loan; 5 % grant.**

The background of the slide is a collage of four vertical panels. From left to right: 1. An aerial view of a city street with buildings and a road. 2. A tropical beach scene with a woman in a white dress walking on the sand, a palm tree, and a large rock formation in the background. 3. A train on tracks with a person standing on the platform. 4. A tall, lattice-structured power line tower in an urban setting.

3. AFD past and on going experiences in the GMS in the transport sector

Past AFD projects financing in the GMS

Past projects financing:

- Vietnam:
 - Rail network rehabilitation in Northern Vietnam from Hanoi to Lao-Cai
 - Duration: 7 years
 - Completed in: 2015
 - Amount of financing: 160 MUSD cofinanced with ADB (AFD 32 MUSD)
- China:
 - Railway:
 - Luoyang – Zhangzaijie Railway electrification – 925 km (80 M€ loan) Achieved (started in 2005)
 - Hengyang-Liuzhou new railway (80 M€ loan) – Achieved (started in 2008)
 - Dali – Lijiang (Yunnan province) railway (167 km) (33.5 M€ loan, cofinanced with ADB)
 - Roads:
 - Highway new construction (77 km) and secondary roads rehabilitation in Yunnan (294 km) – Achieved (started in 2003) – 33 M€ loan cofinanced with ADB



On-going and under appraisal project financing in the GMS

- Vietnam:
 - Hanoi metro line 3 (12.5 km)
Amount of financing: 1176 MUSD (AFD 179 MUSD)
 - Technical cooperation with the local authorities in Hanoi for Air quality.
- Thailand:
 - Technical cooperation with the Ministry of Finance on how to finance transport projects. (2016-2017)
 - Tentative 2nd Phase for Technical Assistance to accompany the preliminary phases of the envisaged LRT in Phuket (complementary FS, E&S, TA on urban mobility)
 - Time period: 2019 – 2020
- Myanmar (Yangon):
 - Urban development in Yangon including fluvial transport, construction of a bus terminal, interconnectivity between transport modes and soft measures on urban inclusion.
 - Amount of financing: up to 70 M€
- Beyond GMS: large transport projects in India (Bangalore, Kochi MRTs), Bangladesh (BRT), the Philippines (Cebu and Manila urban transport projects)



Mobilize Your City (MYC): an initiative for sustainable planning of urban transport

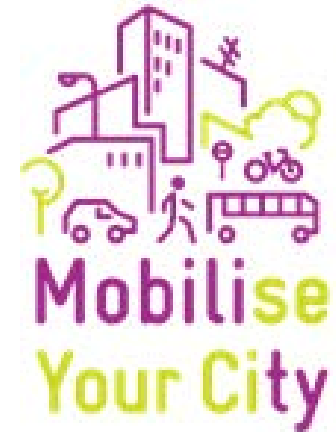
Implementation partner: Asian Development Bank

Objective: To accompany cities (and countries) in developing Sustainable Urban Mobility Plan (SUMP)

Main targets: Cities involved commit to 50 to 75% reduction in urban transport-related GHG emissions in 2050

Activities: To finance preliminary studies for SUMP at the municipality (SUMP) level and national level (NUMP)

Available funds: 9 M€ (subject to final approval) for Asia.

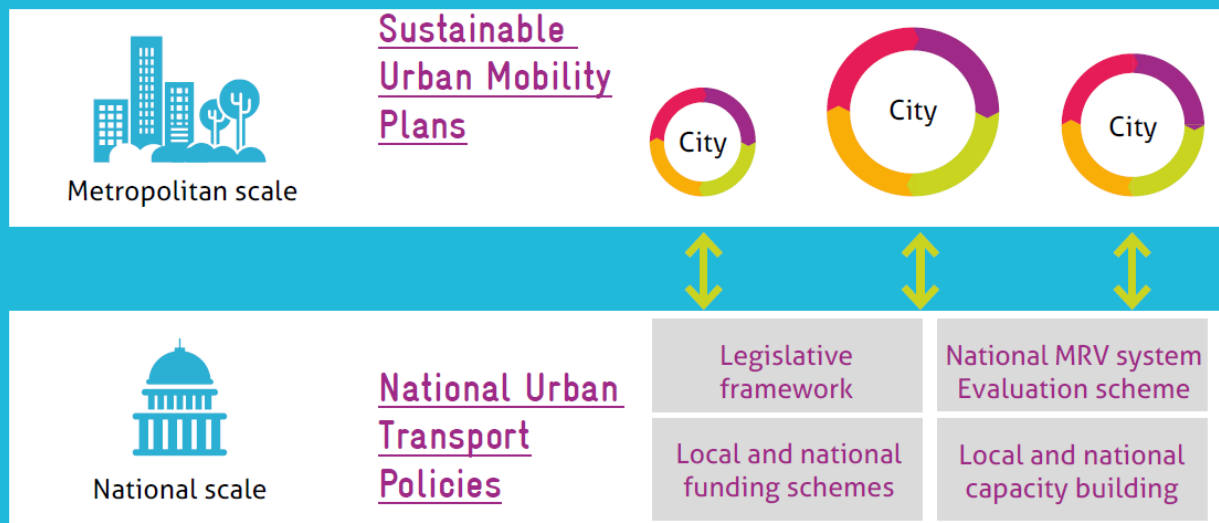


MYC: Combining local and national approaches on Urban Transport

- National actions through National Urban Transport Policies (on norms, fuel subsidies, etc.)
- Local actions through SUMP (Sustainable Urban Mobility Plans)

Mobilise Your City

- Financing SUMPs and NUTPs
- Methodological framework
- Technical assistance and capacity building
- Support to access financing
- International reference platform
- Foster city-to-city cooperation



Conclusion: Perspectives in GMS

- AFD Perspectives in GMS and broader Asia
 - AFD ready for considering:
 - railway projects, for freight and passengers
 - rural roads
 - “green ports” investments
 - river transport projects
 - urban transport projects and partnerships
 - sovereign and non sovereign loans
 - continuing cofinancing projects with development partners



Thank you for attention !

Information:

AFD

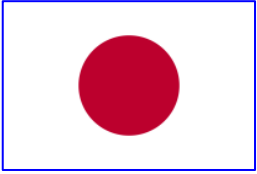
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AGENCE FRANÇAISE DE DÉVELOPPEMENT



JICA's Assistance in the GMS Corridor-related Projects in Transport Sector in Myanmar

**Presented at the 22nd Meeting of the GMS Subregional Transport Forum
Mandalay, Myanmar
21-22 June 2018**

**U Win Ko Ko, Senior Program Officer
Japan International Cooperation Agency (JICA)
Yangon, Myanmar**

JICA and GMS Corridors (Corridor Development Approach)

➤ Background

Greater Mekong Subregion Development

- The development of transport corridors as economic corridors has been at the center of the Greater Mekong Subregion (GMS) Economic Cooperation Program (GMS Program) since the economic corridor approach was adopted by the GMS countries at the 8th GMS Ministerial Conference in Manila in 1998.
- To help bridge the development gap between the members of the ASEAN and thereby contribute to its closer integration to maintain and strengthen momentum for the development of this Subregion

Japan's first initiative in the GMS Corridor Development

- In July 2001, Japan's consultation mission to jointly with the ADB
- High priority to the following two cooperation programs:

(1) East-West Economic Corridor

The Exchange of Notes (E/N) for the Second International Mekong Bridge in September 2001.

(2) Second East-West Corridor

The Development of a trunk road from Ho Chi Minh City to Bangkok via Phnom Penh

GREATER MEKONG SUBREGION
 NEW CONFIGURATION OF EAST-WEST ECONOMIC CORRIDOR,
 NORTH-SOUTH ECONOMIC CORRIDOR, AND
 SOUTHERN ECONOMIC CORRIDOR



- 1) East West Economic Corridor
- 2) North South Economic Corridor
- 3) Southern Economic Corridor

Major Pillars of JICA's Assistance for Infrastructure Development in Myanmar

❖ Japan's Projected Development Cooperation to the Republic of the Union of Myanmar

- To spread the dividends of democratization, national reconciliation and economic reforms to the people of Myanmar
 - a) Assistance for improvement of people's livelihoods
 - b) Assistance for capacity building and institution development to sustain economy and society
 - c) Assistance for development of infrastructure and related systems necessary for sustainable economic development

Urban Development

- The Project for Updating the Strategic Urban Development Master Plan of the Greater Yangon (SUDP)
- The Project for Updating the Comprehensive Urban Transport Plan of the Greater Yangon (YUTRA)
- Greater Yangon Water Supply Improvement Project

Transport

- National Transport Master Plan (MY-T)
- National Logistics Master Plan (MY-L)
- **East West Economic Corridor (EWEC) Improvement**
- Bago River Bridge
- **Yangon Mandalay Railway**
- Yangon Circular Railway

Power

- The Project for Formulation of the National Electricity Master Plan in the Republic of the Union of Myanmar
- Rehabilitation of Baluchaung No. 2 Hydropower Station
- National Power Transmission Network Development Project
- Yangon Power Distribution Improvement Project

Road Map for Assistance on Corridor-based Projects in Transport Sector

1. The National Transport Master Plan (The Survey Program for National Transport Development Plan in the Republic of the Union of Myanmar (MY-T Plan) (December 2012 – September 2014)

- To provide guidance for a long-term investment program that will help the Government achieve its economic growth targets by 2030.
- To provide guidelines that are adaptable to other industrial sectors and to private investment, to assist with investment planning and decision making for a variety of transport sector projects

National Transport Vision

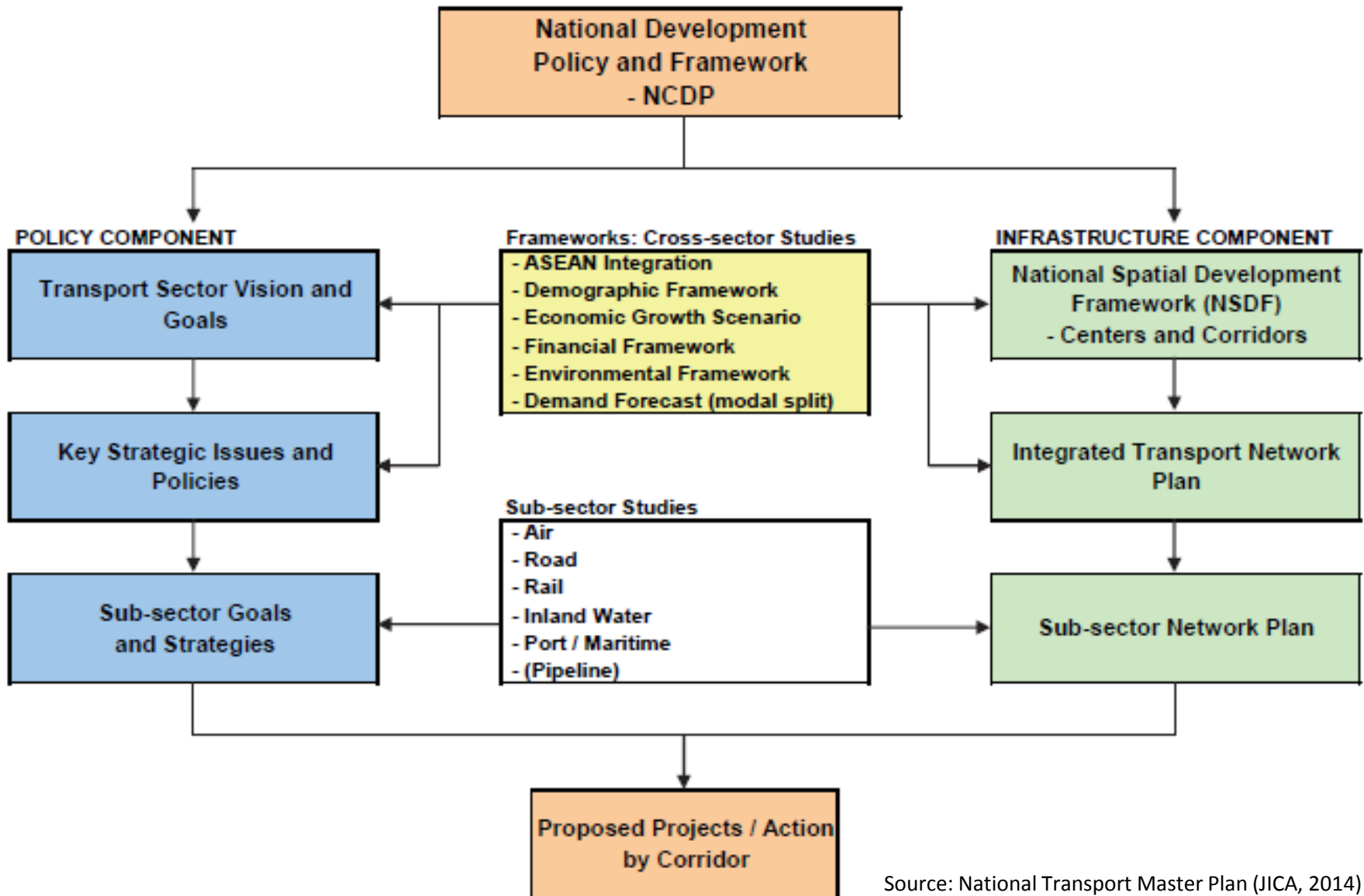
“To develop an efficient, modern, safe, and environmentally-friendly transportation system in a coordinated and sustainable manner that embraces all transport modes for the benefit of the country and people of Myanmar”

Corridor-Based Approach

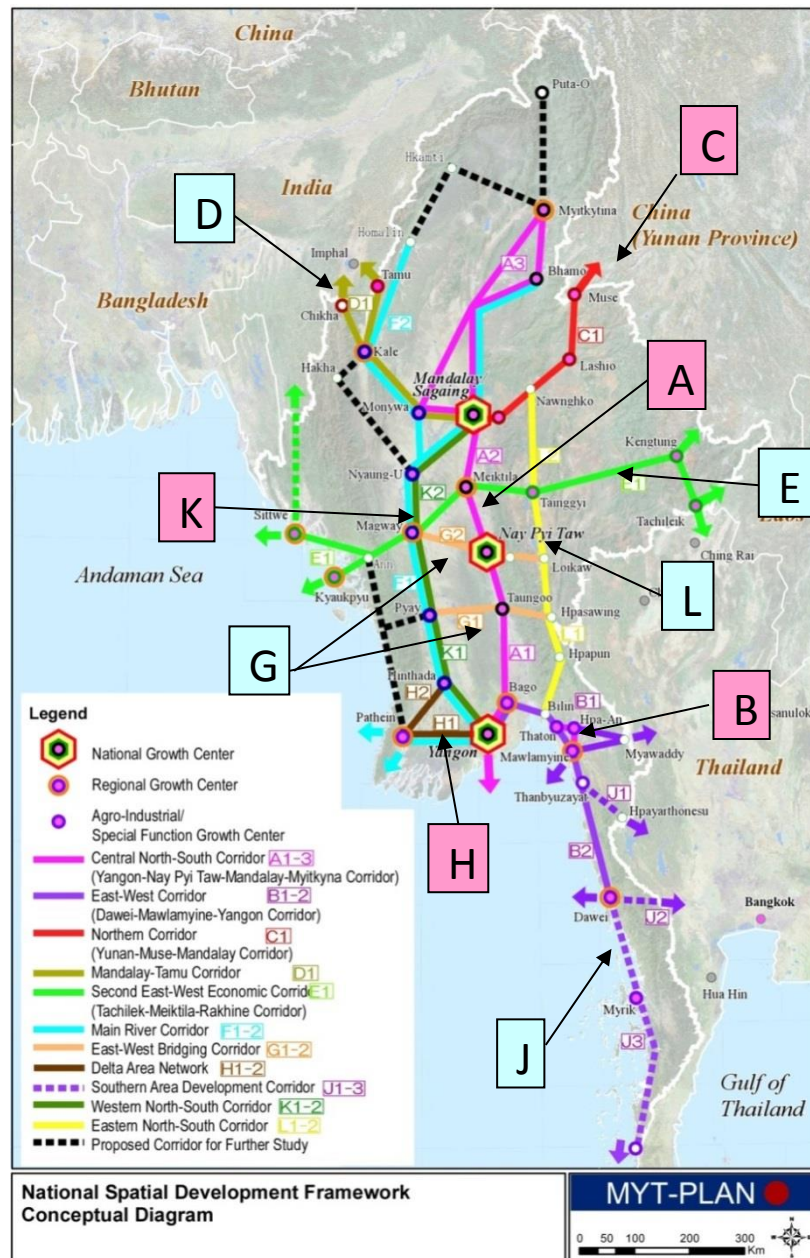
- National Spatial Development Framework, based on international, national, regional and city development policies and related transport networks and facilities

Road Map for Assistance on Corridor-based Projects in Transport Sector (Cont'd)

National Transport Master Plan (MY-T Plan)

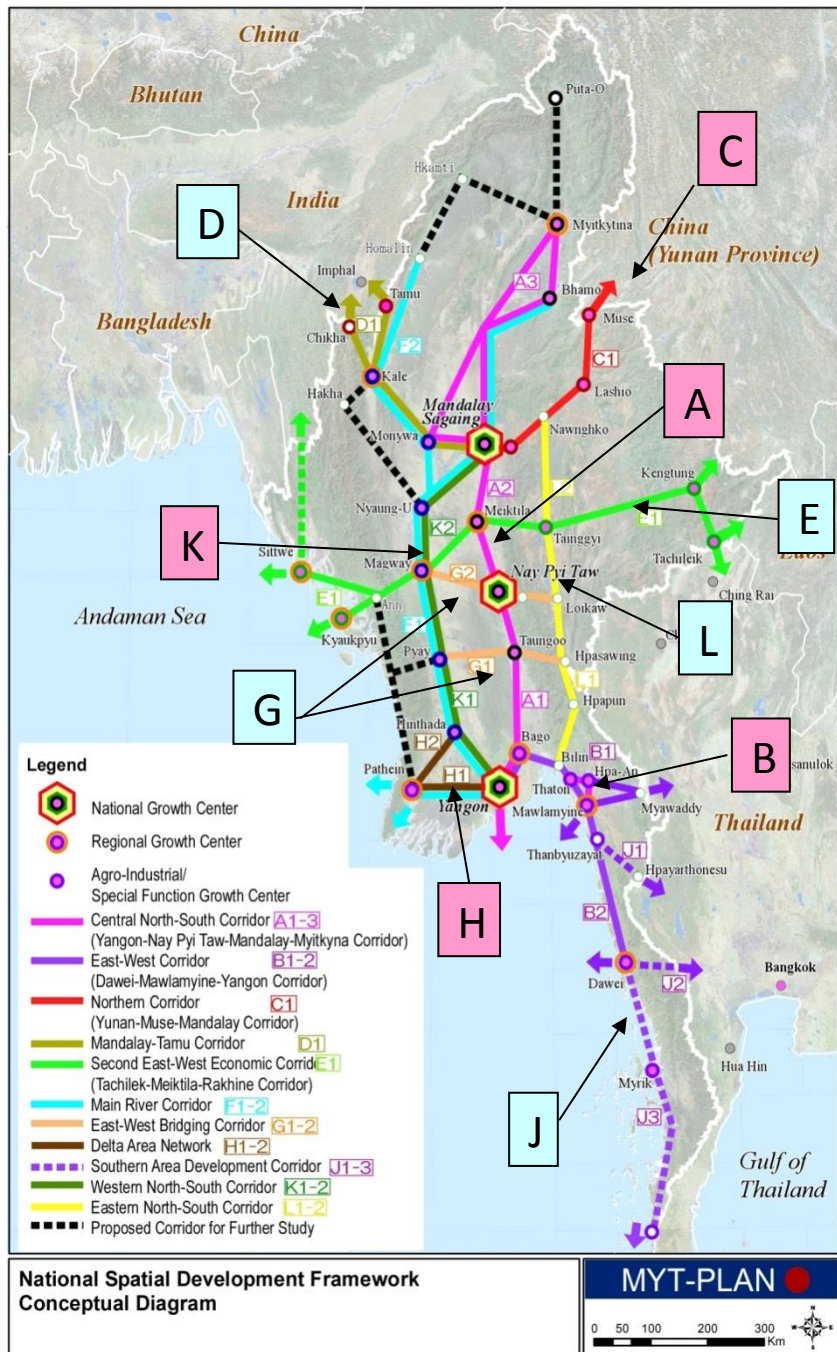


Road Map for Assistance on Corridor-based Projects in Transport Sector (Cont'd)



10 Major Corridors

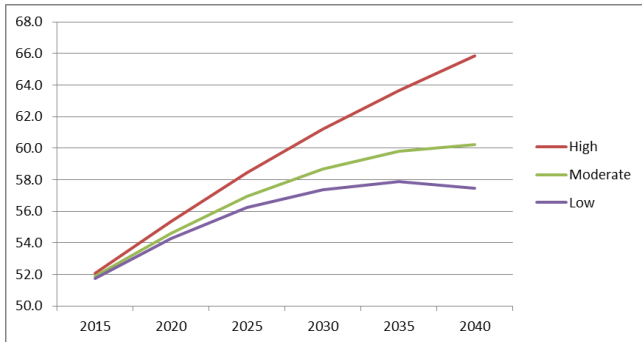
- A **Central North-South Corridor**
 - B **East - West Corridor**
 - C **Northern Corridor**
 - D Mandalay - Tamu Corridor
 - E Second East - West Corridor
 - G East - West Bridging Corridor
 - H **Delta Area Network**
 - J Southern Area Development Corridor
 - K **Western North-South Corridor**
 - L Eastern North - South Corridor
- Priority corridors for urgent investment



Road Map for Assistance on Corridor-based Projects in Transport Sector (Cont'd)

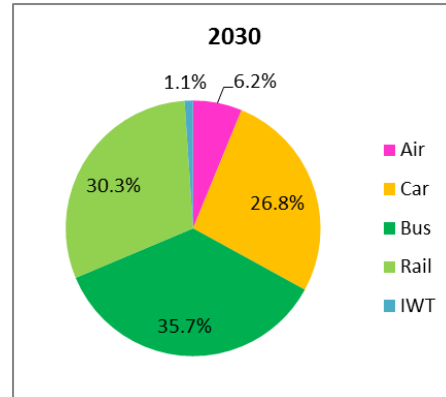
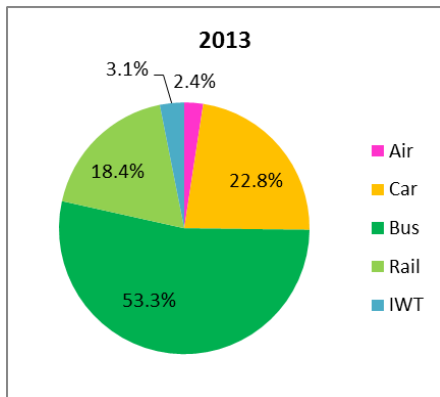
National Transport Master Plan (MY-T Plan)

Population Growth



Year	2015	2020	2025	2030	2035	2040
High	52.1	55.3	58.4	61.2	63.7	65.9
Moderate	51.9	54.6	57.0	58.7	59.8	60.2
Low	51.7	54.3	56.2	57.4	57.9	57.5

Transport Demand – Passenger Movement



**Total Inter Zonal Trips
= 300 thousand trips per day**

4.6 times



**Total Inter Zonal Trips
= 1.4 million trips per day**

- Aviation Sector - 32 Projects
- Road and Bridge Sector - 49 Projects
- Railway Sector - 14 Projects
- Maritime Sector - 17 Projects
- Inland Water Transport Sector - 35 Projects

Total - 147 Projects

Source: National Transport Master Plan

Road Map for Assistance on Corridor-based Projects in Transport Sector (Cont'd)

National Transport Master Plan (MY-T Plan)

Summary of the Proposed Investment by Sectors

Unit: Billion Kyat at 2013 constant prices

Sector	Investment				2014 - 2030 (Bil. MMK)	2014 - 2030 + over 2030 (Bil. MMK)
	- Y2015	Y2016 - Y2020	Y2021 - Y2030	Over Y2030		
Air	319	1,155	922	0	2,396	2,396
Road	588	2,788	8,285	2	11,660	11,662
Rail	327	1,994	4,204	413	6,525	6,938
Seaport	501	1,872	2,354	1,796	4,727	6,523
Inland water	39	562	779	372	1,380	1,752
Total	1,774	8,371	16,544	2,582	26,688	29,271

Source: JICA National Transport Master Plan 2014

The Central North-South Corridor (Yangon –Nay Pyi Taw – Mandalay)

Road/Railway/Port/Aviation - **Total 26 Projects**

- 1) Yangon – Mandalay Railway Improvement Project (ODA Loan) (MY-P4, 21, 26)

The East-West Corridor (Yangon – Hpa-An- Myawaddy)

Road/Railway/Port/Aviation - **Total 24 Projects**

- 1) Gyine (Kawkareik) Bridge
- 2) Gyine (Zarthapyin) Bridge
- 3) Atran Bridge

Combined under one project →

East West Economic Corridor
Improvement Project (MY-P15)
(ODA Loan)

Road Map for Assistance on Corridor-based Projects in Transport Sector (Cont'd)

2. The National Logistics Master Plan (The Data Collection Survey on National Logistics in the Republic of the Union of Myanmar (MY-L Plan) (July 2016 – December 2017)

- To formulate a comprehensive logistics master plan based on MYT-Plan with the target year of 2030 for enhancing sustainable industrial development

Logistics Development Vision

“To create an efficient, competitive and environmentally friendly logistics system in accordance with regional and international perspectives including the enhancement of multimodal transportation for the economic development and the poverty reduction of Myanmar”

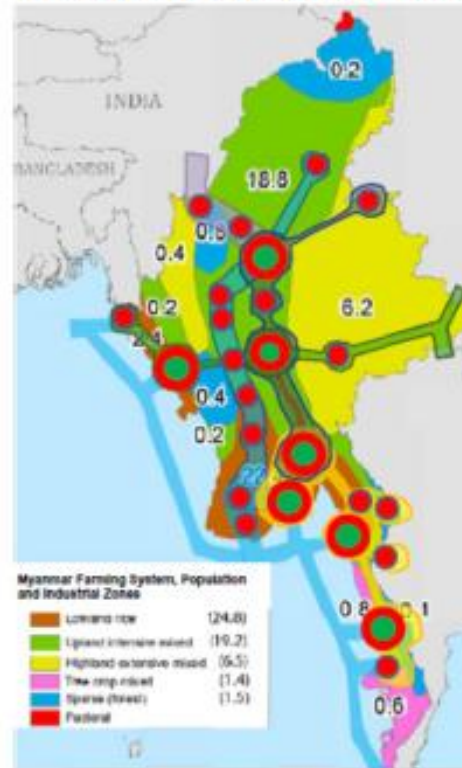
Corridor Development Strategy

The corridor development strategy is formulated to maximize investment impact, through the concentration of investments in selected, prioritized and coordinated projects along the targeted corridors, thereby covering the whole nation and contributing to the development of Myanmar.

Road Map for Assistance on Corridor-based Projects in Transport Sector (Cont'd)

National Logistics Master Plan (MY-L Plan)

Transport Corridors + Industrial Clusters = Logistics Corridors



Source: National Logistics Master Plan

Road Map for Assistance on Corridor-based Projects in Transport Sector (Cont'd)

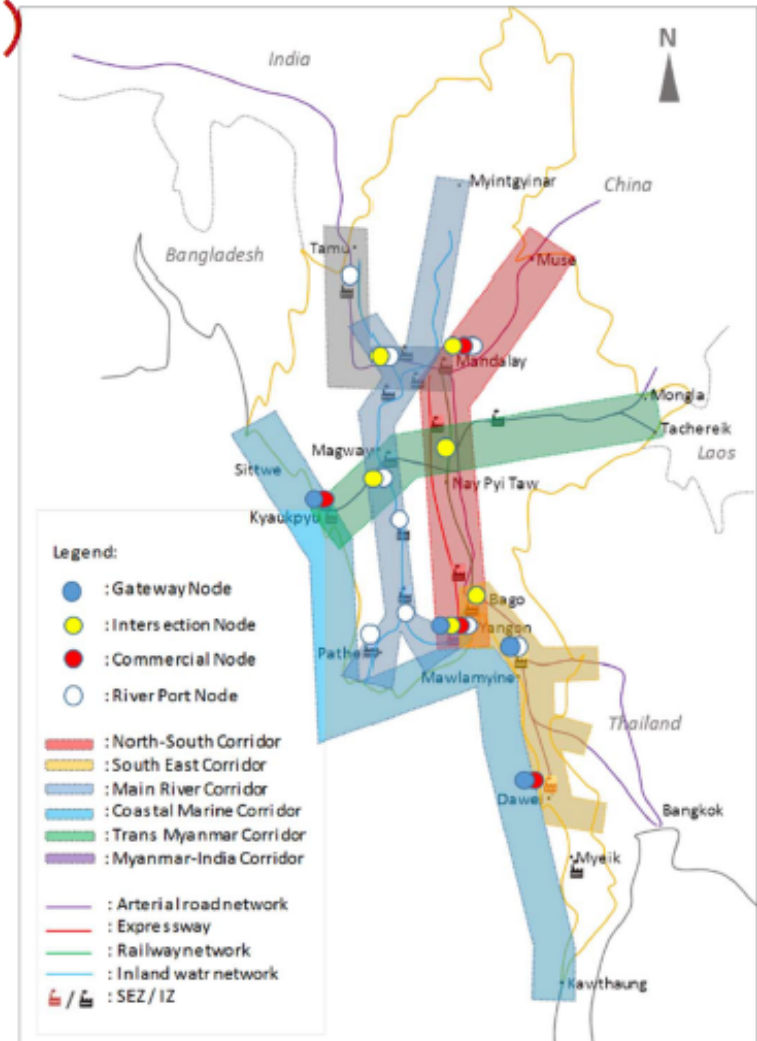
National Logistics Master Plan (MY-L Plan)

■ Logistics Corridors (6 corridors)

- North-South Logistics Corridor
- South East Logistics Corridor
- Main River Logistics Corridor
- Coastal Marine Logistics Corridor
- Trans-Myanmar Logistics Corridor
- Myanmar-India Logistics Corridor

■ Major Nodes (14 nodes)

- Gateway Node
- Intersection Node
- Commercial Node
- River Port Node

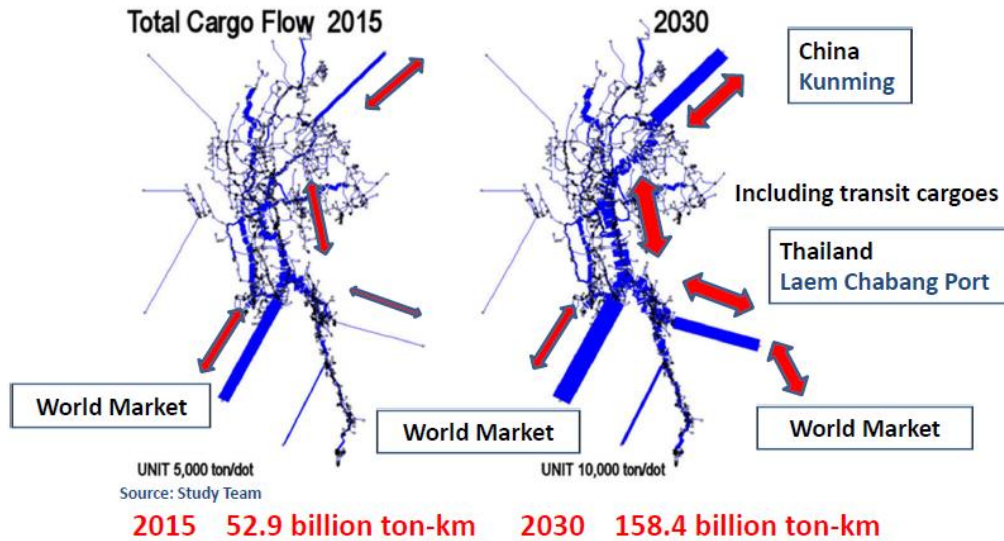


Source: National Logistics Master Plan

The Southeast Logistics Corridor: Linking with the GMS East-West Economic Corridor

Road Map for Assistance on Corridor-based Projects in Transport Sector (Cont'd)

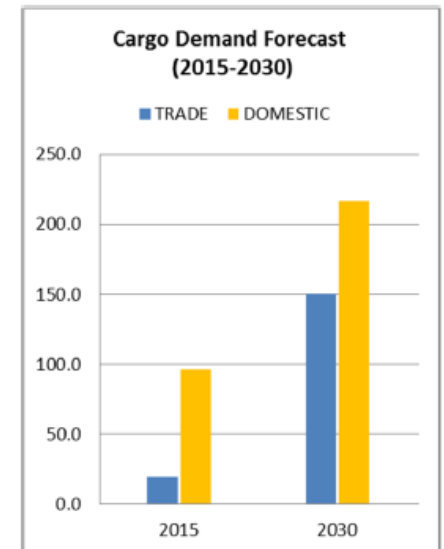
National Logistics Master Plan (MY-L Plan)



The average annual growth rate of cargo volume in ton-km is 7.6% or an expansion of 3 times over the coming 15 years

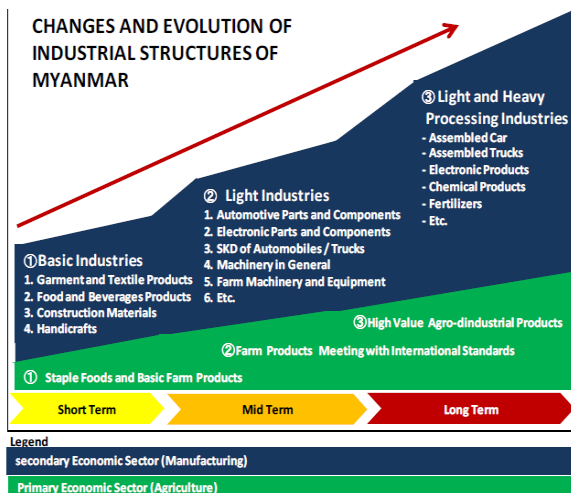
Cargo Demand Forecast

Total Volume
2030 ↑ 312 million tons
2015 ↑ 169 million tons



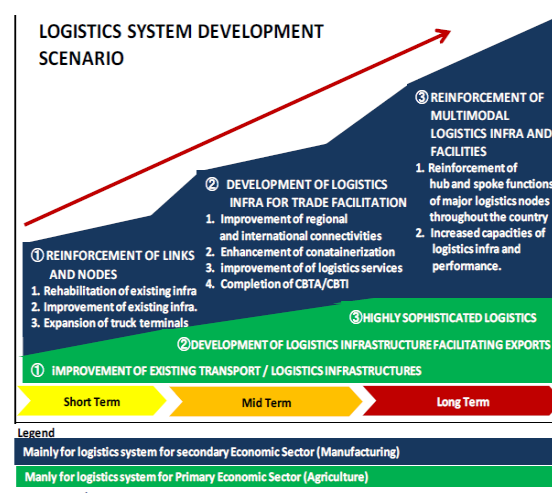
Source: Study Team

Industrial Development Scenario of Myanmar



Source: Study Team based on various development policies of Myanmar

Logistics System Development Scenario of Myanmar



Source: Study Team

Road Map for Assistance on Corridor-based Projects in Transport Sector (Cont'd)

National Logistics Master Plan (MY-L Plan)

❖ HARD COMPONENTS

Increased logistics performance, speedier seamless cargo transport at least cost to support inclusive economic growth of the country, including

1. Logistics Facilities
2. Road Infrastructure
3. Railway Infrastructure and Operation System
4. Waterborne Infrastructures and Channel Navigation Improvement
5. Inland Water Transport Infrastructure and Navigation Channel Improvement, Vessels, etc.
6. Aviation Infrastructure
7. Multimodal Hub Development (Combination of some of those projects identified at strategic hub having a hub and spoke function)

❖ SOFT COMPONENTS

To build foundation for creating strong and sound logistics system and its operating system by realization of following activities:

1. Institutional Development (regulation, organization)
2. Capacity Building of Administrative Organizations
3. Fostering Professional Logistics Providers
4. Various Studies and Programs

Road Map for Assistance on Corridor-based Projects in Transport Sector (Cont'd)

Consideration in priority ranking

- Regional Connectivity
- Domestic Connectivity
- Economic Benefit due to increased cargo transport efficiency
- Consistency with the National Economic Policy

Number of Proposed Projects up to 2030 and Approx. Costs

	All Projects	MYT-Plan	Logistics	Short-term Projects
Nos of Projects	167	108	59	84
US\$ Million	41,217	16,318	24,899	11,746
MMK Billion	56,381	22,323	34,058	16,061

Source: Study Team

The North South Logistics Corridor

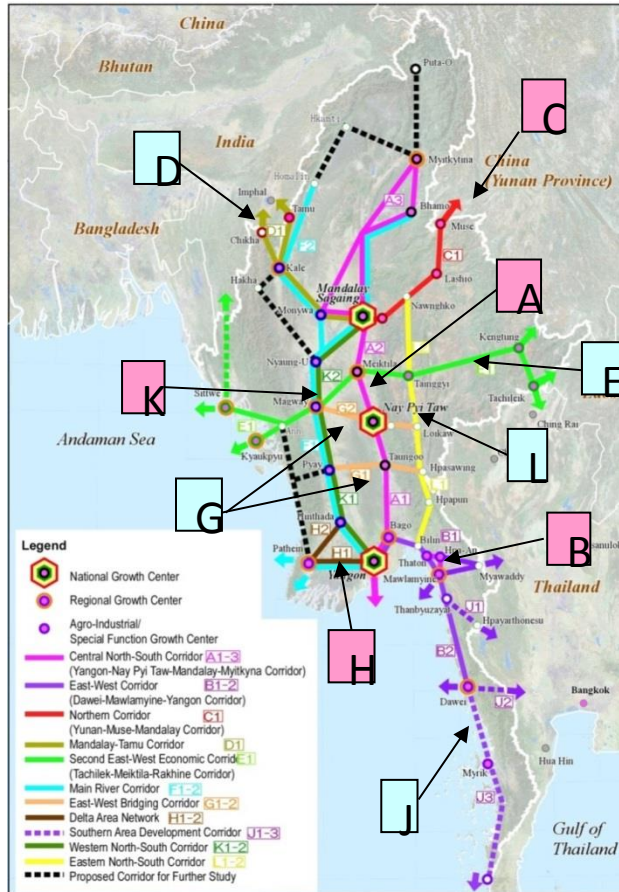
Logistics/Warterborne/Aviation/Road/Railway - **Total 47 Projects**

The South East Logistics Corridor

Logistics/Warterborne/Aviation/Road/Railway - **Total 43 Projects**

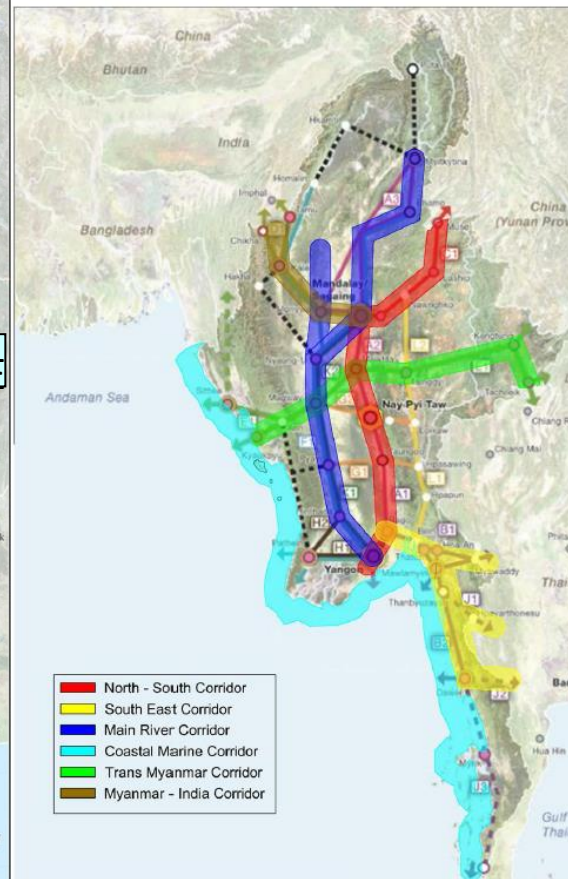
Road Map for Assistance on Corridor-based Projects in Transport Sector (Cont'd)

National Transport Master Plan



Source: NTMP

National Logistics Master Plan



Source: NLMP

GMS Corridor Network



Source: ADB

East-West Economic Corridor Improvement Project (MY-P15) (ODA Loan)

❖ Objectives

To satisfy increasing traffic demand and achieve efficient transportation domestically as well as between Myanmar and neighboring countries by constructing bypasses and bridges and improving the Thaton – Kawkareik sections and Mawlamyine – Kawkareik section regarded as bottlenecks on the **East West Economic Corridor**, thereby contributing to the promotion of trade and foreign direct investment and economic development of Myanmar.

❖ Loan amount

JPY 33,869 Million (L/A signed on 16 October 2015)

❖ Project Completion - 2024

❖ Project Component

Consulting Services, Construction of three bridges in Mon State and Kayin State

- 1) Gyaing (Kawkareik) Bridge
- 2) Gyaing (Zarthapyin) Bridge
- 3) Attayan Bridge

ADB = Eindu-Kawkareik Road Improvement Project



East-West Economic Corridor Map



East-West Economic Corridor Improvement Project (Phase II)

New Sittaung Bridge (Feasibility Study)

(Candidate for ODA Loan)

❖ Objectives

To ensure efficient transportation of people and logistics in Kyaikhto - Bago section of East-West Economic Corridor by construction of a new bypass, thereby contributing to activate the domestic and international trade of Myanmar.

❖ Scope of the Project

JICA Portion

- Construction of New Sittaung Bridge (4 lanes, total length ~ 2.3km)
- Consulting services (detailed design, tender assistance, construction supervision)

ADB

- Development of new trunk road (New Bago-Kyaikhto Highway)

❖ Feasibility Study (Ongoing)

April 2017 – May 2019



Yangon-Mandalay Railway Improvement Project Phase I (I) and Phase I (II) (ODA Loan)

❖ Objectives

To improve the capacity of railway transportation by rehabilitating and modernizing the existing railway and related facilities from Yangon to Taungoo (270km) in part of Yangon-Mandalay Railway (620km)

❖ Loan Agreement (L/A)

Time Sliced Loan

Signed in September 2014 for Phase I (I) (MY-P4)

Signed in March 2017 for Phase I (II) (MY-P21)

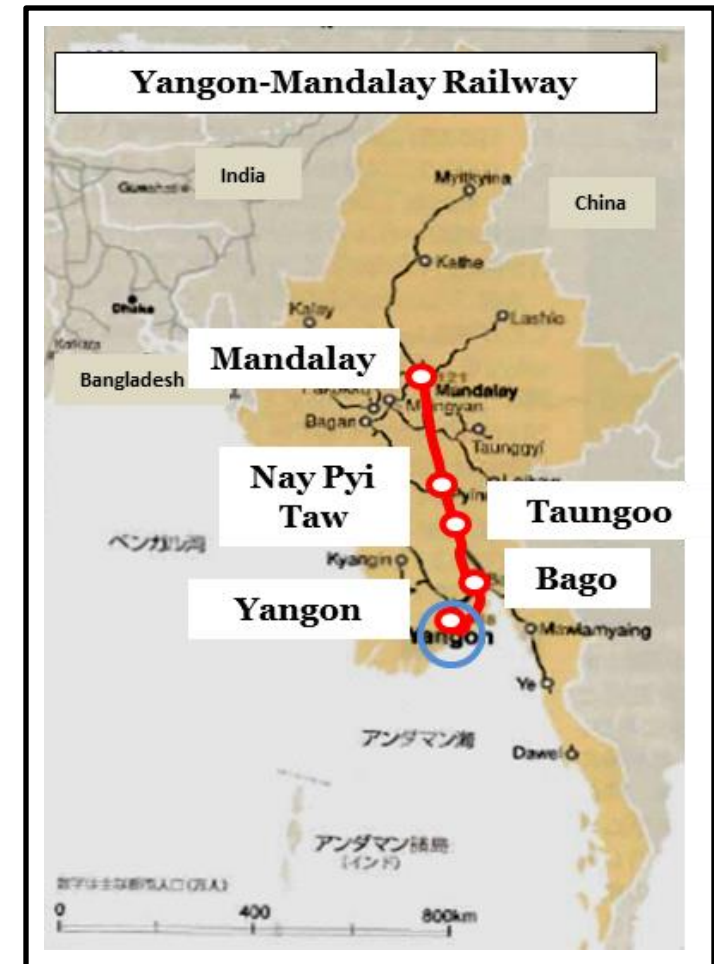
❖ Loan amount

- Phase I (I) - JPY 20 billion
- Phase I (II) - JPY 25 billion

❖ Project Completion - 2022

❖ Project Activities

- Consulting Services
- Civil Works
- Signal & Telecommunications
- Rolling Stocks



Yangon-Mandalay Railway Improvement Project Phase II (I) (ODA Loan)

❖ Objectives

To improve the capacity of railway transportation by rehabilitating and modernizing the existing railway and related facilities from Taungoo to Mandalay (350 km) in part of Yangon-Mandalay Railway (620km)

❖ Loan Agreement (L/A)

Time-Sliced Loan

Signed on 29 March 2018 (MY-P26)

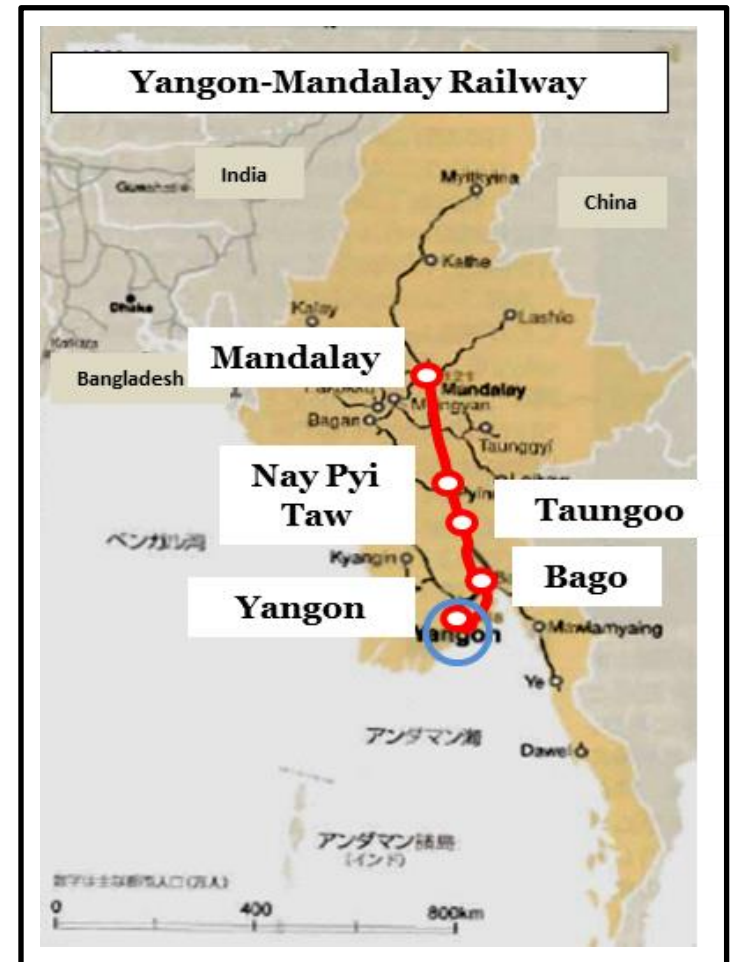
❖ Loan amount

- Phase II (I) - JPY 56.622 billion

❖ Project Completion - 2024

❖ Project Activities

- Consulting Services
- Civil Works
- Signal & Telecommunications
- Rolling Stocks





Thank you

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JICA's Future Cooperation in Road / Bridge Sector in Myanmar from the perspective of “Asset Management”

Joint Coordination Committee (JCC)

19 June, 2018

Contents

1. Ongoing Project
2. Necessity Analysis
3. Application of “Asset management”
4. Flow of possible overall future cooperation

1. Ongoing project

【The Project for Capacity Development of Road and Bridge Technology】

(1) Overall Goal	Quality of bridges and concrete structures constructed or managed by MOC improved
(2) Project Purpose	The capacity of MOC engineers on construction management for bridge and road construction enhanced
(3) Outputs	<ol style="list-style-type: none">1. Advises to a broad policy matters and technical documents on road and bridge sectors provided2. The work process for quality and safety of concrete and bridge construction projects developed and enhanced3. The technical documents on quality and safety control for concrete and bridge construction developed

⇒ Focusing mainly on supervision of construction works

2. Necessity Analysis

Event	Result	Analysis
Collapse of Myaungmya Bridge	<ul style="list-style-type: none"> ✓ Investigation / Inspection has been conducted ✓ Several Bridges are found to be vulnerable 	<ul style="list-style-type: none"> ✓ The urgency level in Bridge sector is relatively high in Myanmar, and it's timely



Main Cause	Points to be approached	Analysis
<ul style="list-style-type: none"> ✓ Insufficient geo-survey ✓ Inappropriate design ✓ Poor construction ✓ Insufficient Operation and Maintenance (O&M) 	<ul style="list-style-type: none"> ✓ Pre-survey ✓ Design ✓ Construction supervision ✓ O & M 	<ul style="list-style-type: none"> ✓ Although all points are important, O & M can be preferentially focused because; ✓ O & M is what Myanmar side has to do by itself ✓ Sustainability and cost-efficiency in long-term ✓ O & M can complement the flaw (partially) ✓ Timely to conduct pilot project for O & M

2. Necessity Analysis



O & M can be
preferentially
focused...

3. Application of “Asset management”

What is Asset Management ?

Asset management is a systematic process of deploying, operating, maintaining, upgrading, and disposing of assets, such as stocks, bonds, deposits and savings or the real estate, cost-efficiently.



What is Road Asset Management ?

To be adopted asset management method for the operation and maintenance of social infrastructure facilities. A way of thinking to place social infrastructure facilities for assets of the nations, and to carry out the operation and maintenance of the assets effectively, premeditatedly and steadily.

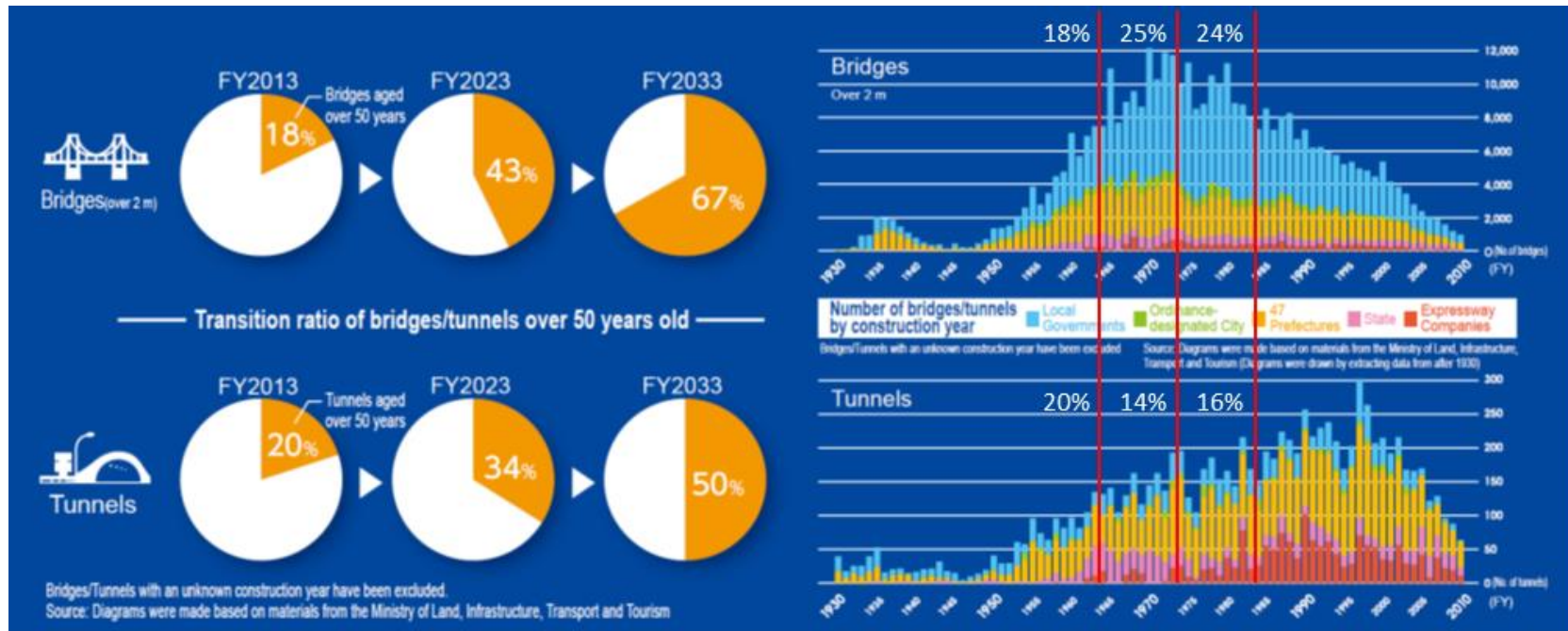


Expected effects for Road Asset Management

- Minimization of maintenance cost and Grasp of the necessary maintenance cost
- Optimization and Equalization of the future investment budget for road sector

3. Application of “Asset management”

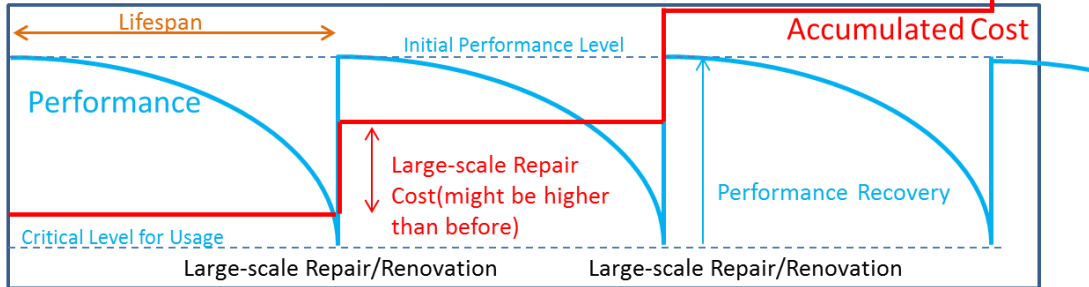
Current Condition of Road Infrastructure in Japan



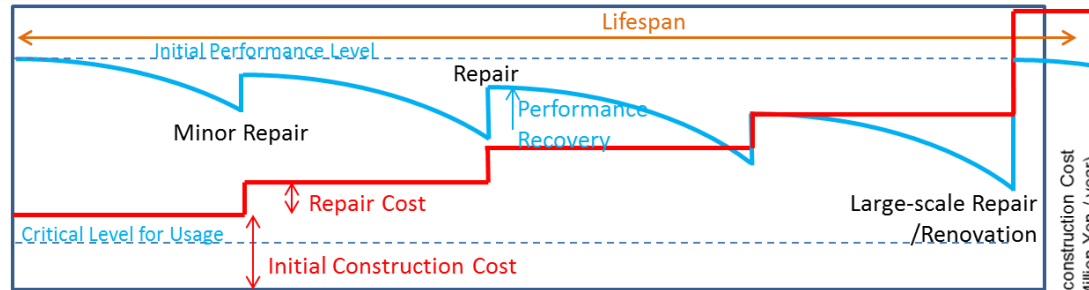
3. Application of “Asset management”

Action for Road Infrastructure in Japan
“Reduction of Life Cycle Cost through Preventive Maintenance”

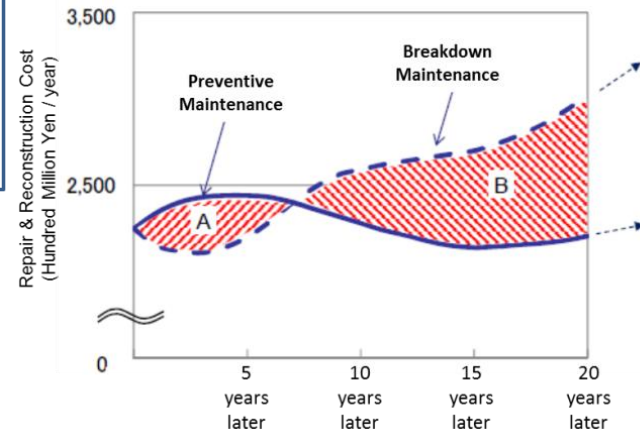
Breakdown Maintenance



Preventive Maintenance



Amount of Reduction Cost:
5,000 Hundred Million Yen in the next 20 Years
 Estimated by Ministry of Land, Infrastructure and Transport



3. Application of “Asset management”

Breakdown of Road Asset Management “Issue in Developing Countries”

Issues for Road Maintenance and Management

Budget

Technology

Human Resources

Basic Knowledge and Technology for Road Asset Management acquired by JICA’s Technical Cooperation

1. Grasp and Minimization of Maintenance Cost by PDCA cycle for Road Maintenance and Preventive Maintenance
2. Road Administration based on the Road Asset Management

1. Technology and Guidance for Maintenance work and Repair work depending on the damage situation
2. Research and Development for Road Asset Management Technology and Infrastructures Lifetime-Extending Maintenance Technology depending on the Natural and Weather Condition
3. Introduction of Latest Technology

1. On the job training of Inspection and repair work for Road Maintenance in pilot site
1. Expansion of PDCA cycle for Road Maintenance to all of the country

3. Application of “Asset management”

Promotion of **Comprehensive** Activities for Road Asset Management

Priority Development Issues: Road & Bridge Maintenance



Promotion of Comprehensive Activities for Road Asset Management

What is Comprehensive Activities ?

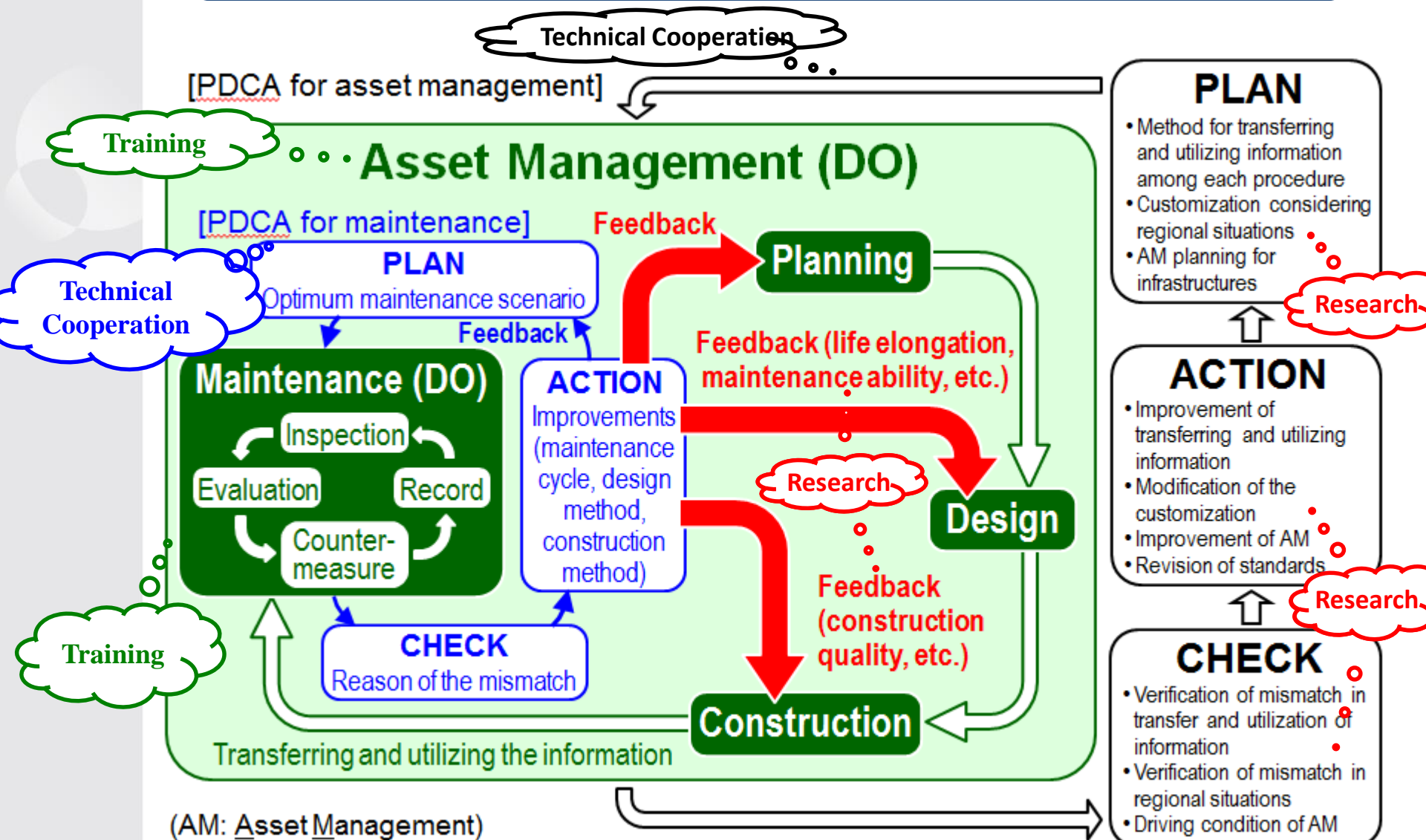
Reinforcement of knowledge management for each development issue, Promotion of concrete activities for achievement of SDGs, and **mutually Strengthening / enhancing the quality on each cooperation activities**

What is Reinforcement of Contents ?

- Utilization/Application of Japanese Systematic Experience and Japanese Superior Technology & Knowledge **in Technical Cooperation Project**
- Strategic Utilization of **Training Scheme** (Country focused/Group & Region focused/Long term(Scholarship))
- Deepening of Cooperation with **Japanese Resources** (Government, Expressway Company, University, Private Research Organization)

3. Application of “Asset management”

Conceptual Diagram of Road Asset Management



3. Application of “Asset management”

Outline of JICA Scholarship Program (Long Term Training)

JICA Scholarship Program

Purpose	To equip comprehensive and advanced knowledge and technics with participants in order to be Core human resource for Road Asset Management.
Period	More than 1 year, depend on each courses (Most of courses are more than 2 years)
Implementing Agencies	Universities in Japan (Master or Ph.D. courses) Ex. Univ. of Tokyo, Hokkaido Univ., Nagasaki Univ., Kyoto Univ., Osaka Univ., Kanazawa Univ. etc...
Target Countries	Countries in which implement/implemented JICA's Technical Cooperation Project regarding Road/Bridge Asset Management
Language	English or Japanese

3. Application of “Asset management”

Case Example No.1

Long Term Training (JICA Scholarship Program)

Country	Research Theme	University/ Instructor	Commencem ent	Status
Lao PDR	Overloading Policy and Technology on Weigh Control	Hokkaido Univ./ Associate Prof. Michael Ward Henry	Oct. 2017	Research Student for Half year and Master Course from Apr. 2018
Lao PDR	Application of Lifetime Extending Maintenance Model for Steel Bridges	Nagasaki Univ./ Associate Prof. Nishikawa	Oct. 2017	Research Student for Half year and Doctor Course from Apr. 2018
Lao PDR	Inspection and Assessment Method of Bridge Structures for Asset Management	Nagasaki Univ./ Prof. Nakamura	Oct. 2017	Research Student for Half year and Doctor Course from Apr. 2018
Cambodia	Analysis & Utilization Method of Bridge Inspection Data	Univ. of Tokyo/ Associate Prof. Nagai	Apr. 2018	Master Course
Cambodia	Planning Theory & Asset Value for Bridge Maintenance Management	Hokkaido Univ./ Prof. Yokota	Oct. 2018	Master Course

Next Batch: Entering in Apr. 2019

Target country: Philippines, Bangladesh, Pakistan, Mongolia and Egypt

3. Application of “Asset management”

Case Example No.2 Short Term Training

【Summary】 Implementation of Short Term Training on Road Asset Management for Human Resource Development of C/P of Technical Cooperation Project in collaboration with SIP researchers

- ◆ Project: Capacity Enhancement in Road Maintenance Phase II in Viet Nam
- ◆ Applicant: Middle class or younger practitioners dedicated to the inspection and maintenance of the national roads
- ◆ Period: 25th Feb. 2018 to 21st Mar. 2018
- ◆ Organizer: The University of Tokyo, International Center for Urban Safety Engineering, Institute of Industrial Science
- ◆ Contents :
 - Lecture(5 days): Characteristics of bridge facility damages, Key points of facility inspection, Case studies of bridge repair and reinforcement work, and Management of bridge structure
 - Visit(5 days): Public Research Institute, Private Company, Expressway Company, and University
 - Exercise(5 days): Analysis of road facility inspection data, and future forecast of bridge maintenance budget and bridge soundness assessment
 - Presentation(1 day): Action Plan made by Participants

4. Flow of possible overall future cooperation

Key word: Asset Management

Step 1

- 【Utilization of “Training Scheme”】
- ★Human Resource Development

Step 2

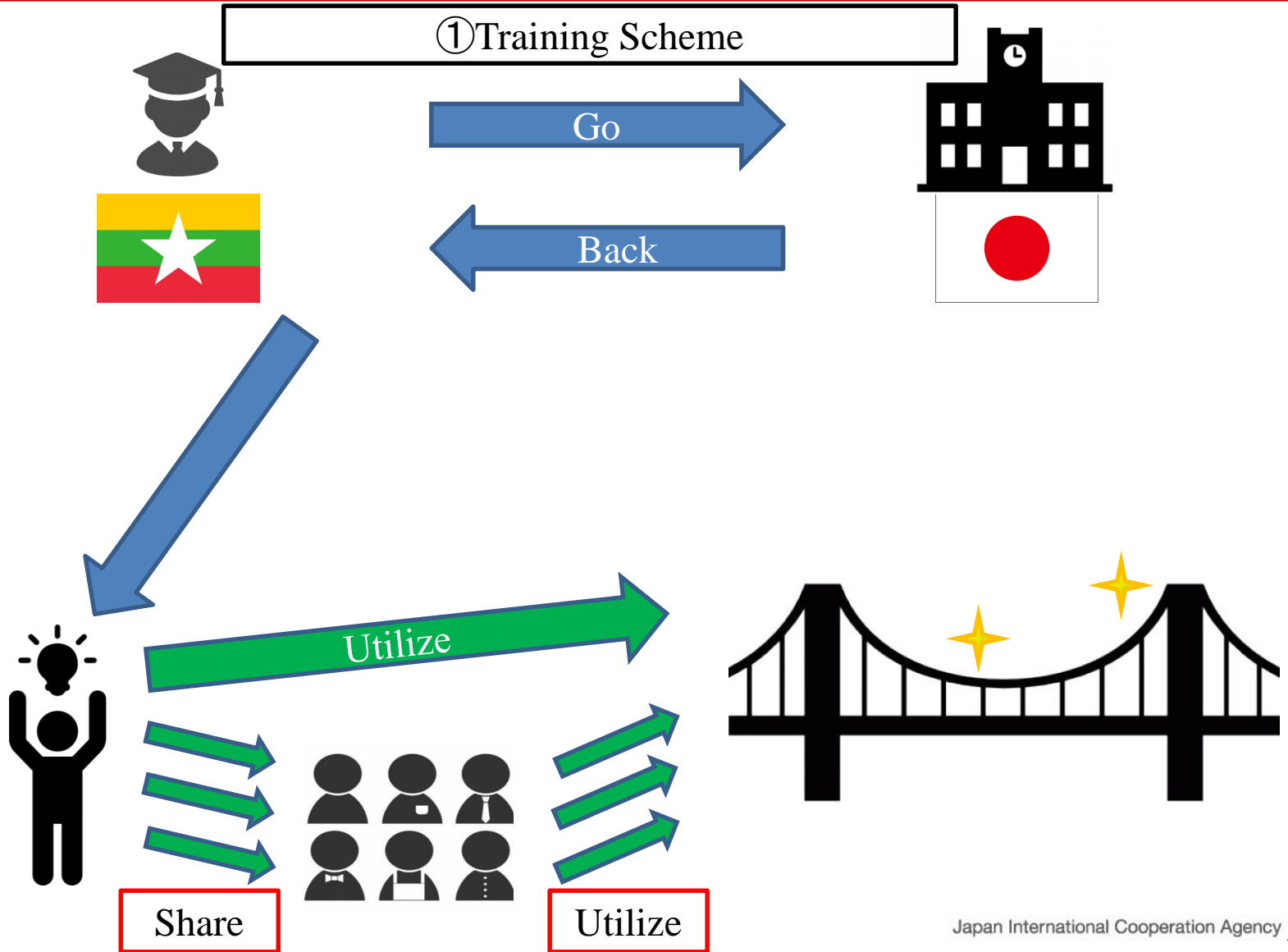
- 【Utilization of “Technical Cooperation Scheme”】
- ★Human Resource Development
- ★Development of Manual / System
- ★Conduct inspection of existing vulnerable bridges as the pilot project in Technical Cooperation Project
- ★Pick up the most urgent one which also needs advanced technology

↓*Feasibility Study*↓

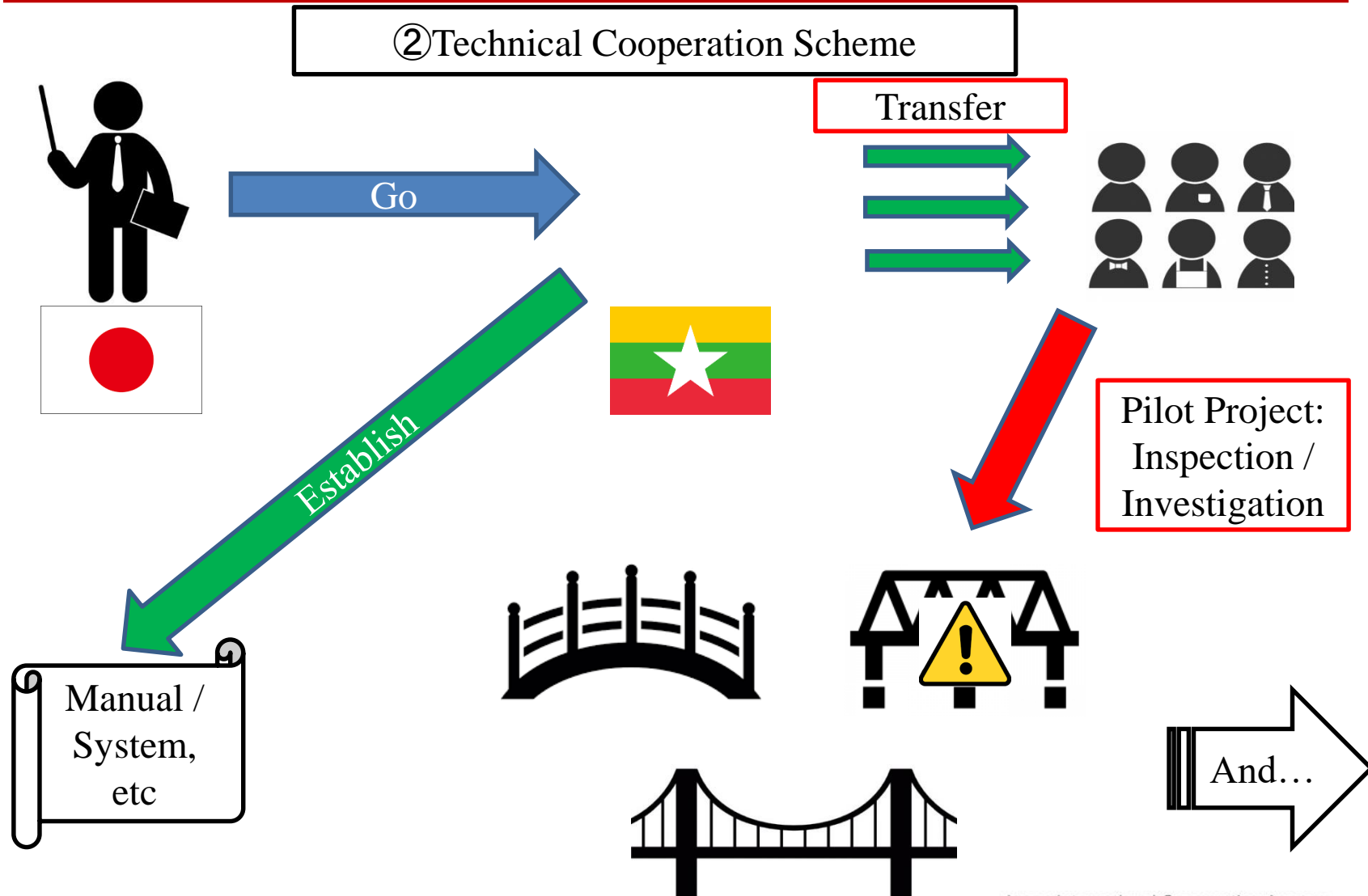
Step 3

- 【Utilization of “ODA loan / Grand aid” Scheme】

4. Flow of possible overall future cooperation

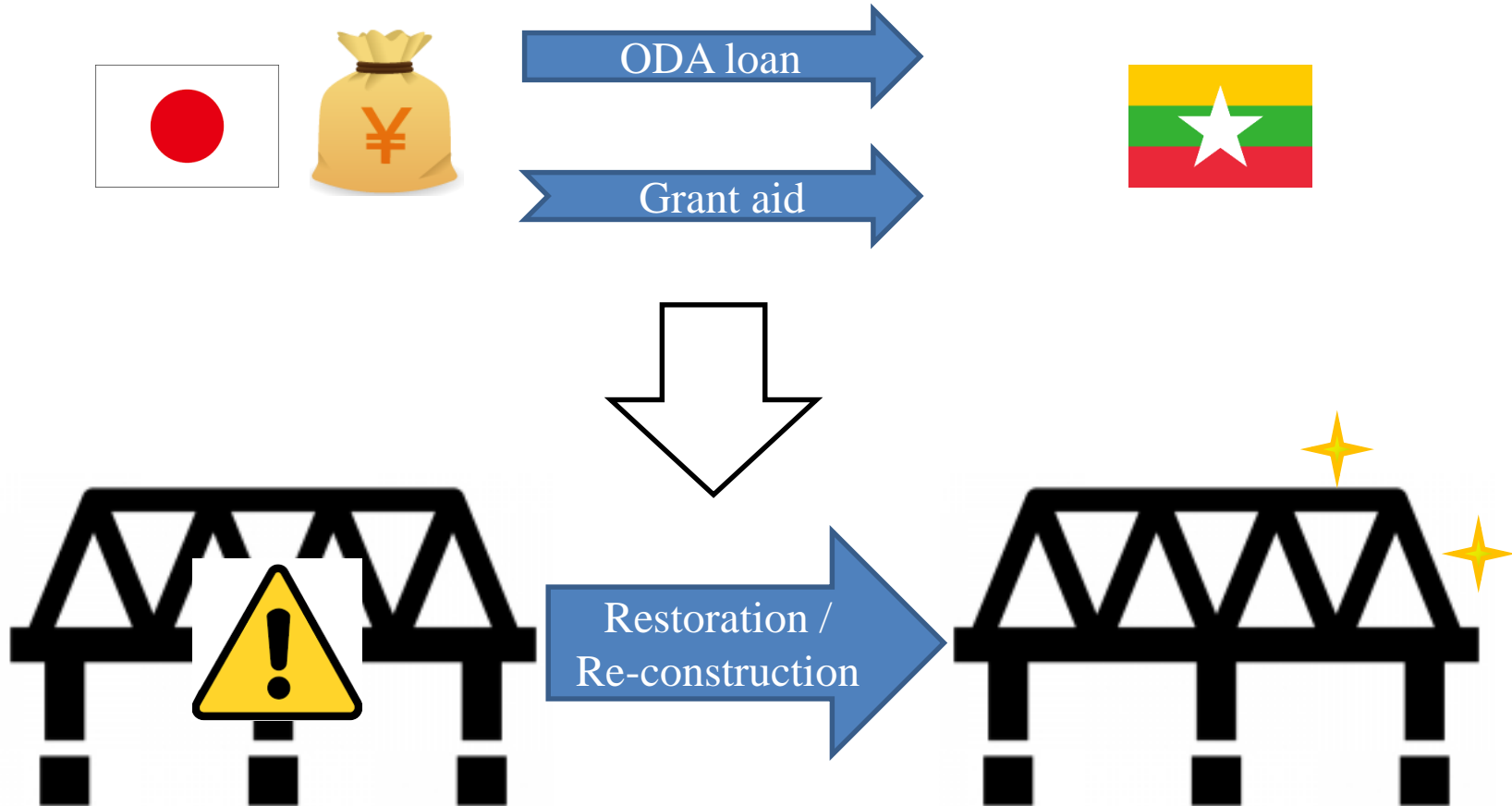


4. Flow of possible overall future cooperation



4. Flow of possible overall future cooperation

③ ODA loan / Grand aid Scheme



Thank you for listening !



Neighbouring Countries Economic Development Cooperation Agency (Public Organization)



To be an ally agency with Neighbouring Countries for the Economic Development Cooperation, leading to the prosperity and well – being of the region



NEDA'S FACTS



- *Thai Government's International Development Agency*
- *Established on May 17, 2005*
- *Provides :*
 - *Financial Assistance : FA*
(Grants and Concessional Loans)
 - *Technical Assistance : TA*
to Neighbouring Countries
(Lao PDR, Cambodia, Myanmar, Vietnam, Bhutan, Sri Lanka and Timor-Leste)

NEDA's Strategy 2018-2021

- *Provide Financial and Technical Assistance to enhance economic development in neighbouring countries.*
- *Cooperate with relating agencies to boost economic development in neighbouring countries and enhance private involvement to expand trade and investment opportunity.*
- *Conduct sustainable treasury management*
- *Continue to develop organization to reach international standard.*

OBJECTIVES OF THE PROJECTS



Facilitate Trade and Investment



Promote Industrial and Agricultural Cooperation



Transportation Linkage



Support and Promote the Service and Tourism Sector



Support the Human Resource Development



Support the Urban Development

ON-GOING FA PROJECTS



Lao PDR

- Project name: Hongsa District – Ban Chiangman (Chomphet District, Luang Prabang Province) Road Construction Project
- Budget Loan: 1,977 Million Baht (61.20 Million USD)
- Scope of Work:
 - To improve the approximately 113.954 Km of Road From Hongsa District – Ban Chiangman (Chomphet District, Luang Prabang Province)
- Progress of Work:
 - 85%
 - Construction to be completed in late 2018



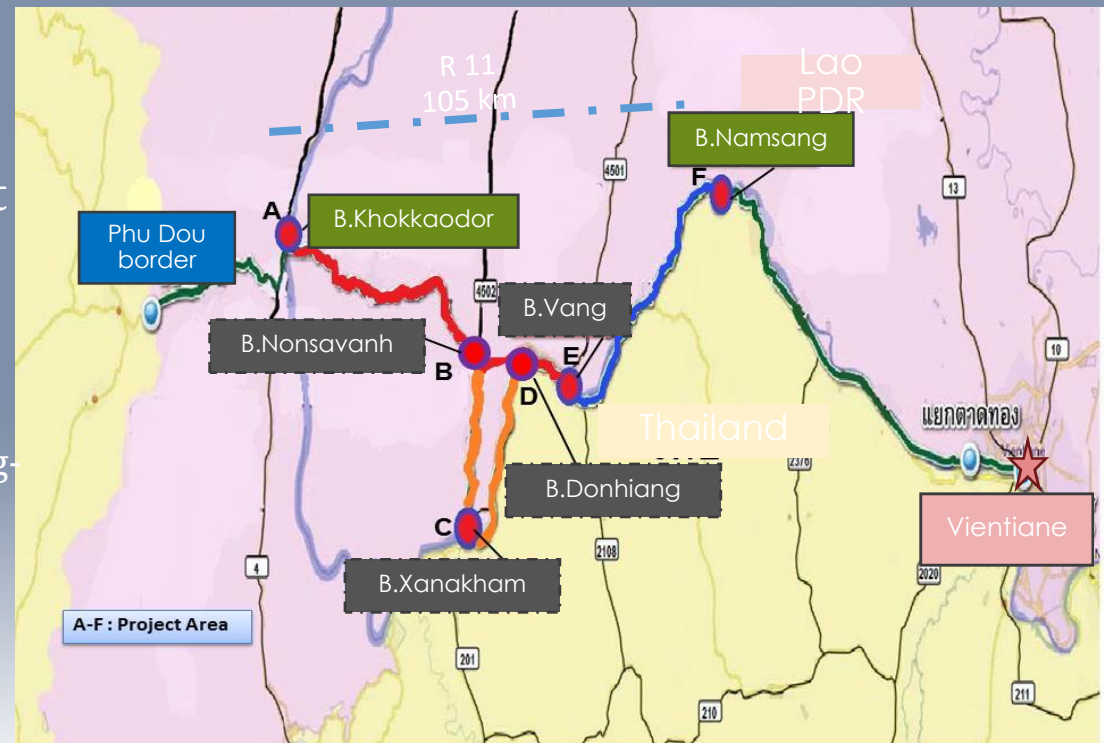
ON-GOING FA PROJECTS



Lao PDR

- Project name: The development of National Road no. 11 Section of Khok Khaodor-Ban Nonsavanh-nakham District-Ban Vang-Ban Nam Sang
- Budget Loan: 1,876.5 Million Baht (58.09 Million USD)
- Scope of Work:
 - To improve the approximately 122.59 Km of Road from Khok Khaodor-Ban Nonsavanh-nakham District-Ban Vang-Ban Nam Sang
 - To reduce logistics cost and time between Northern Thailand and Vientiane, Lao PDR by developing a DBST road.

- Progress of Work:
 - Received Formal Request from Lao PDR
 - NEDA Board approved FA



ON-GOING FA PROJECTS



Lao-Thai Railway Construction Project Phase II (Thanaleng – Vientiane)

Project Scope consisted of
2 section

Section I (Completed)

655.32 Million Baht (approx.
20.48 Million USD)

- Container Yard: CY
- Track work from Thanaleng to CY, Signaling and Telecommunication Systems
- Office Building and Row Houses

Section II

994.68 Million Baht (approx.
31.08 Million USD)

Mainline track work from CY
Thanaleng to Vientiane (Total
length approx. 7.50 km)

Vientiane Main Station

Level Crossing

ON-GOING FA PROJECTS



Lao-Thai Railway Construction Project Phase II (Thanaleng – Vientiane)

Budget

Category	Allocation in an Agreement (with revision) (baht)	Section I (baht) (completed)	Section II (baht) (on-going)
1. Civil Works	1,504,517,209.00	620,319,474.31	884,197,734.69
2. Consulting Services	79,000,000.00	29,000,000.00	50,000,000.00
3. Administration	18,000,000.00	6,000,000.00	12,000,000.00
4. Contingency	48,482,791.00	-	48,482,791.00
total	1,650,000,000.00	655,319,474.31	994,680,525.69

30.795 million USD

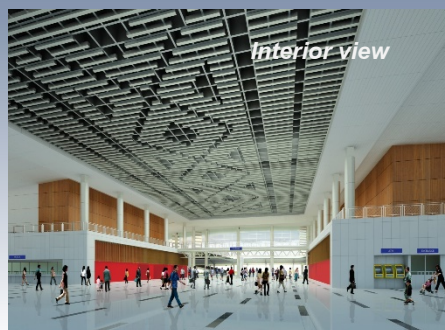
ON-GOING FA PROJECTS



Lao-Thai Railway Construction Project Phase II (Thanaleng – Vientiane)

Project Status

- Section 2 – On-going
 - EA starting the contract with consultant since January 2018
 - Working Period: Overall 46 months consisted of preconstruction 7 months (review detailed design which completed since 2010 & prepare bidding documents) 27 months during construction and 12 months of defect liability period
 - EA working on procuring the contractor, expected time to award the contract to the contractor – August 2018



ON-GOING FA PROJECTS



Cambodia

- Project name: The Development of Stung Bot Border Crossing facilities and the Access Road to National Road No. 5 Project
- Budget Loan: 928.11 Million Baht
(28.73 Million USD)
- Scope of Work:
 - To develop Stung Bot Border Crossing facilities and construct Access Road to National Road No. 5
- Progress of Work:
 - EA working on procuring the contractor, expected time to award the contract to the contractor – Within June 2018

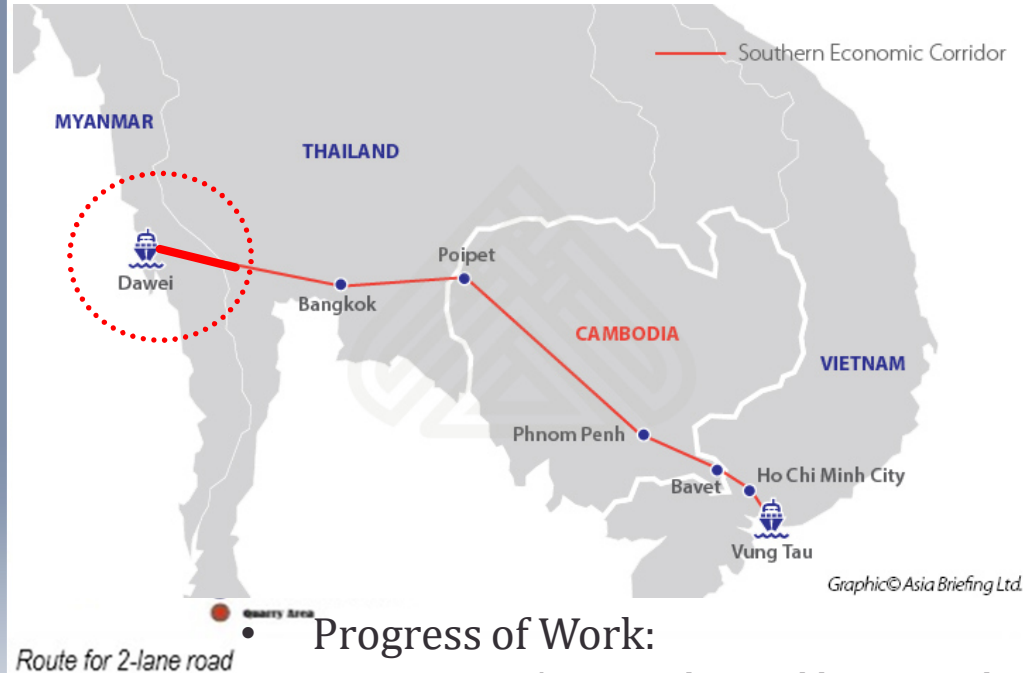


ON-GOING FA PROJECTS



- Project name: The Road Improvement project in Pu Nam Ron – Dawei

2-lane Road – Overview



Key characteristics

- > Existing road will be upgraded to 2-lane asphalt road
- > 138 km
- > 2 directions of 3.5 m width
- > Side drain & slope protection
- > In line with Design Standard of Highways Department of Thailand, Class 4 – Two Lane
- > 4 toll booths
- > Administration & rescue buildings
- > Service centre & vista point

Progress of Work:

- Myanmar's National Assembly approved a 4.5 billion baht (US\$144.54 million) loan from Thailand
- Preparing detailed design reviewing study

ON-GOING FA PROJECTS



Myanmar

- Project name: Upgrading of Electric Power Distribution System in Yangon City (North Okkalapa and North Dagon Township) project
- Budget Loan: 1,200 Million Baht
(37.15 Million USD)
- Scope of Work:
 - Construction & improvement of three 66/11 kV substations
 - Construction of five Routes 66 kV transmission lines.
- Progress of Work:
 - On the process of detailed design reviewing by Myanmar.





THANK YOU



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**GMS Regional Investment Framework
(RIF) 2022
Progress Report**

**Transport Sector
NEDA Thailand**

June 2018

Reported at the 22nd Meeting of the
GMS Subregional Transport Forum (STF-22)
21–22 June 2018, Mandalay, Myanmar



TABLE A- I. INVESTMENT PROJECTS in Original RIF 2022 List

No.	Project Title	Description	Year of Approval	Latest Cost Estimate (\$ million)	Latest Potential Funding Source and Amount (\$ million)	Status Updates	Key locations and GMS Economic Corridor Alignment	Expected/Planned Measurable Outputs
1	Mekong Bridge at Bungkan–Paksan (Road & Bridge)	facilitate the transport of goods and passengers from northeastern Thailand to central Lao PDR and central Viet Nam via NR8.	2018	40.31 for Lao PDR section (1,300 million baht and total project cost is 3,930 million baht)	NEDA for Lao PDR section	<ul style="list-style-type: none"> ▪ Adjusted Detailed Design completed on Oct, 2016 ▪ Formal Financial Request from Lao PDR to NEDA on Aug 28, 2017 ▪ Under financing proposal 	<ul style="list-style-type: none"> ▪ Bueng Kan ▪ Laos' western township of Pakxan in Bolikhamsai ▪ Supporting NSEC 	<ul style="list-style-type: none"> ▪ Road Length <ul style="list-style-type: none"> - 12.13 km (Thai side) - 2.86 km (Lao PDR side) ▪ Bridge Length <ul style="list-style-type: none"> - 815 m (Thai side) - 535 m (Lao PDR side) ▪ Border crossing facilities



ADB

Thank You

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