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Regional Transport Connectivity for Sustainable Development

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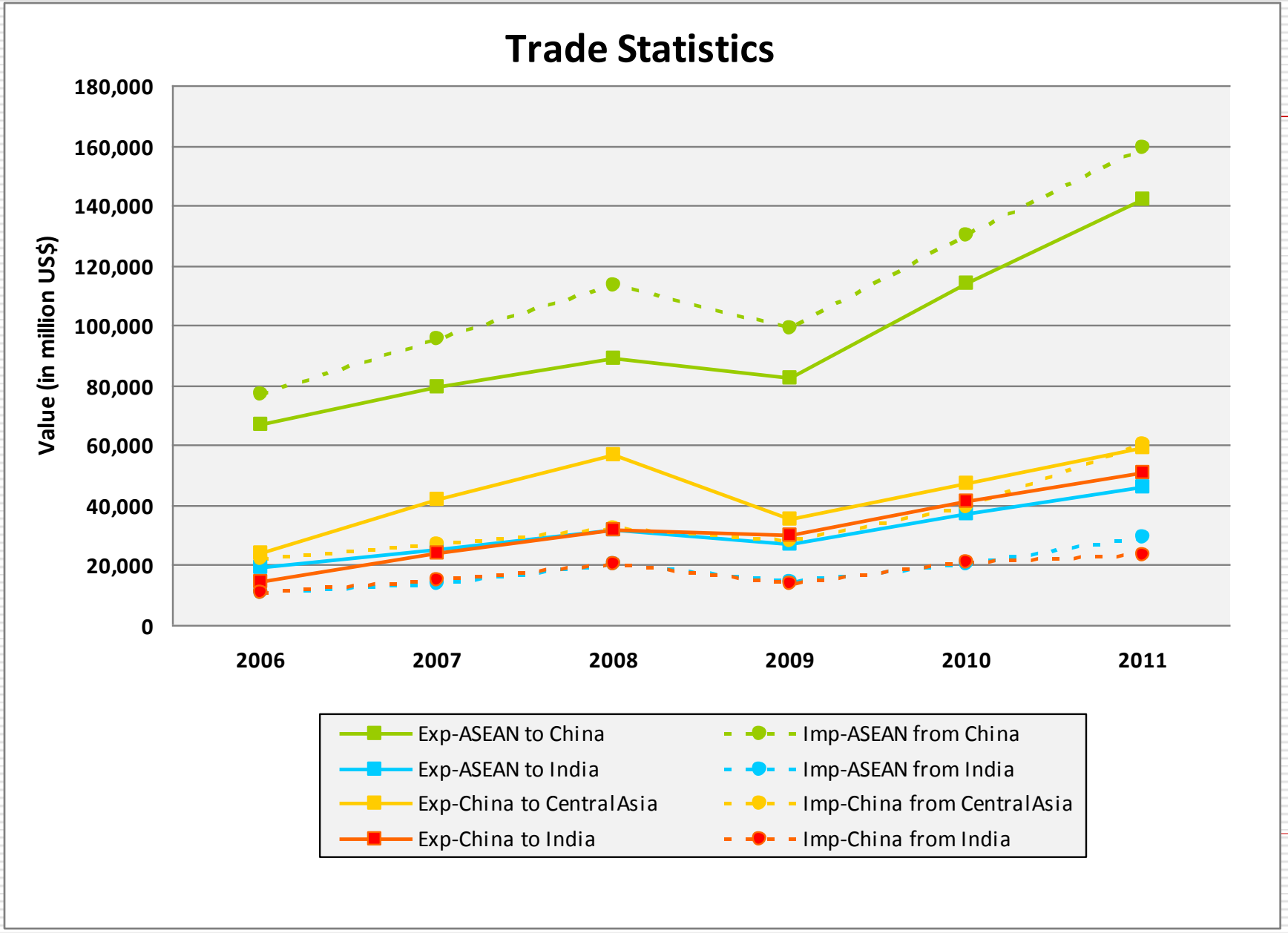
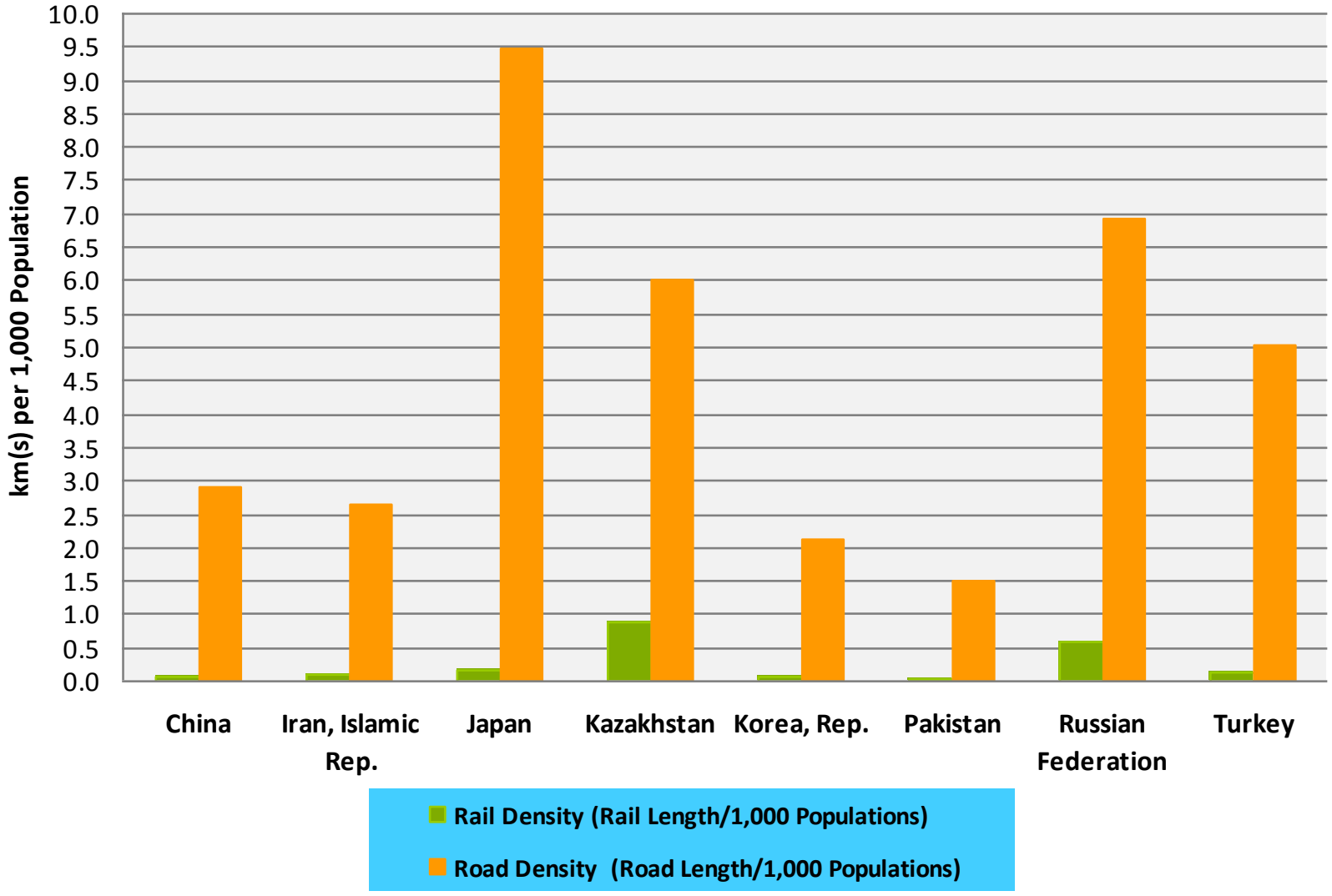
Outline:

- Trade, transport and logistics development
- Status of transport connectivity in Asia
- Resilient transport connectivity
- Long haul intermodal transport
- Concluding remarks

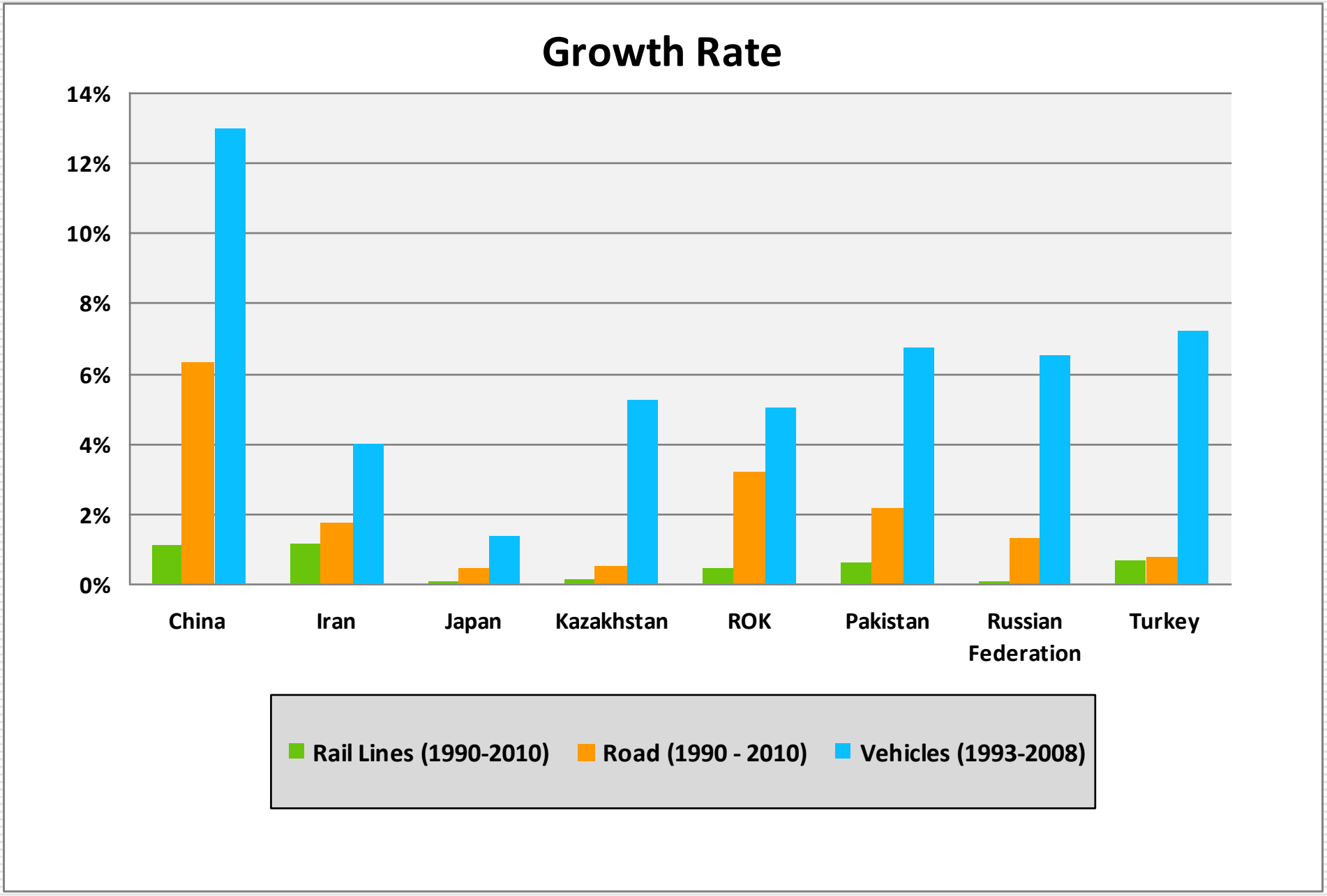
Pattern of Intra-Asian trade



Rail and Road Density

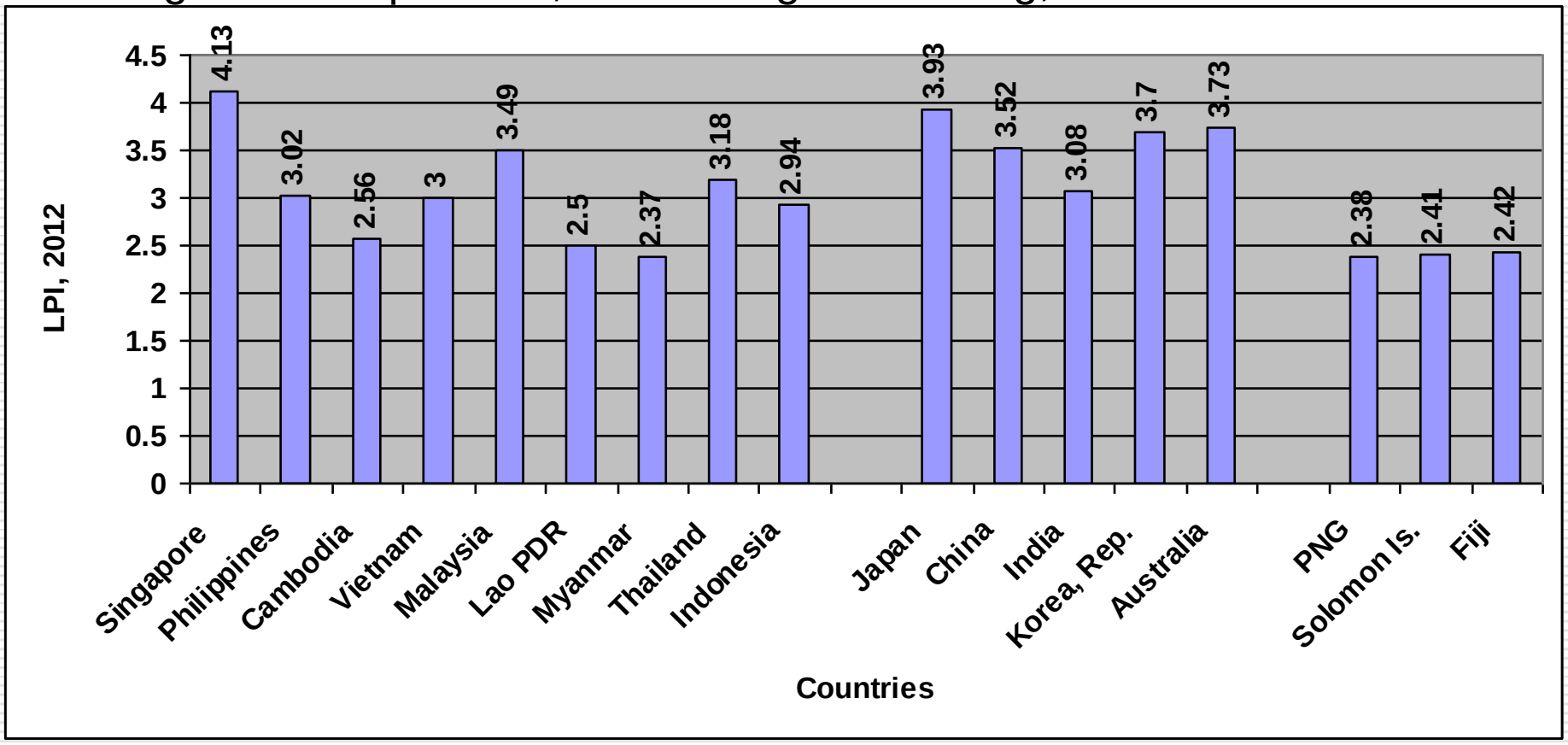


Growth of Railways, road and vehicles



Logistics Performance Index, 2012

1. Customs, 2. Infrastructure, 3. International shipments, 4. Logistics competence, 5. Tracking and tracing, 6. Timeliness

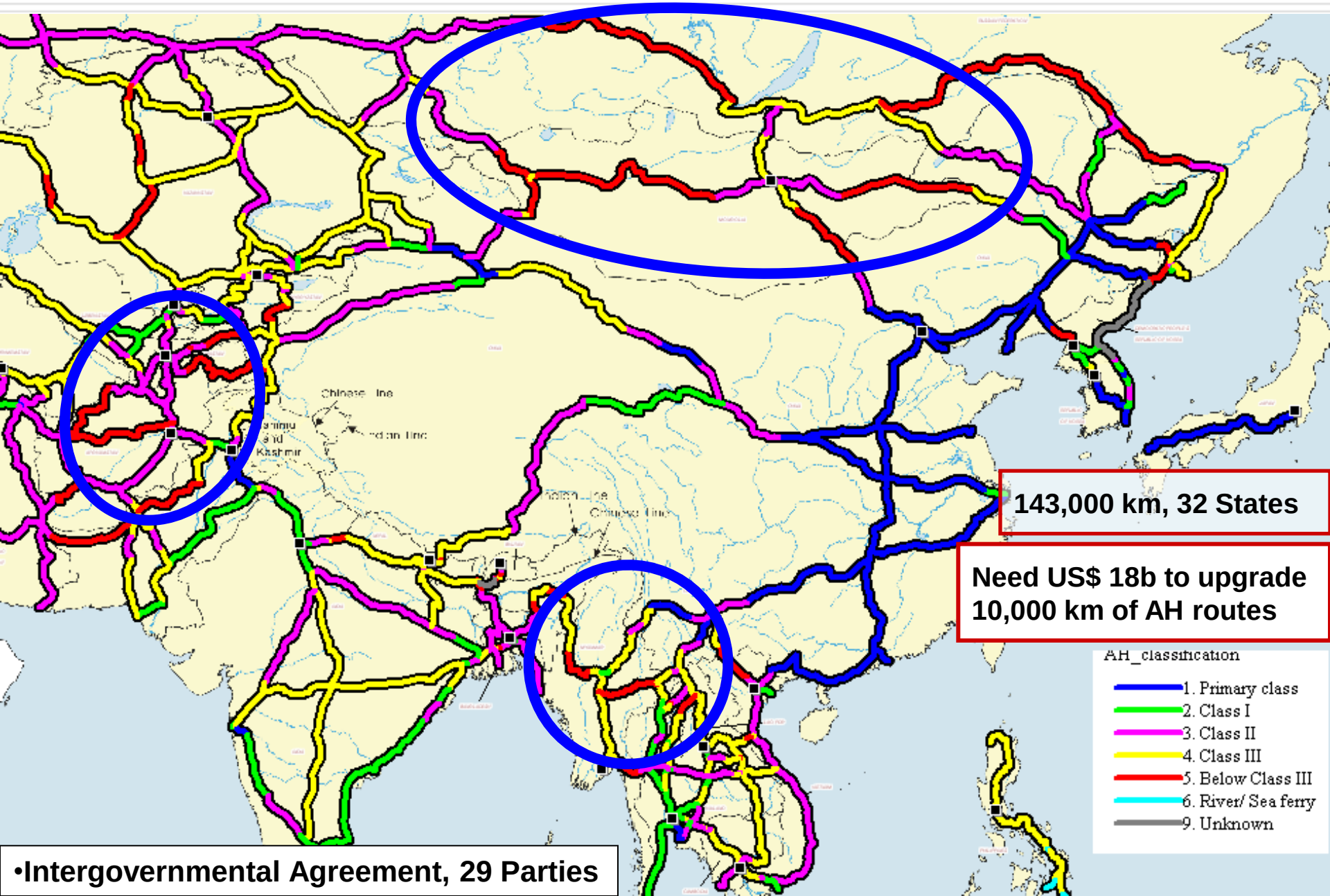


(World Bank, 2012)

Transport Connectivity in Asia

- Two aspects of sustainability
  - Contribution of connectivity to sustainable development
  - Making transport connectivity sustainable
- Regional connectivity
  - Regional transport networks: Asian Highway, Trans-Asian railway, Logistics centres and dry ports
- Subregional and Inter-subregional connectivity
  - ASEAN, SAARC, GMS, ECO, CAREC, SASEC
  - ASEAN-China
  - ASEAN- South Asia
  - North East Asia - Central Asia
  - South Asia-China
- Intercity connectivity
  - Roads, rails, high speed rails
- Rural connectivity
  - Farm to market roads, rural roads

Asian Highway



Trans-Asian Railway Network

117,000 km, 28 countries
10,500 Km Missing Links

US$ >25 billion

Islamic Republic of Iran – Afghanistan
(ongoing)

Islamic Republic of Iran – Azerbaijan
(ongoing)

China - Kyrgyzstan

ASEAN - China

Turkey - Georgia
(ongoing)

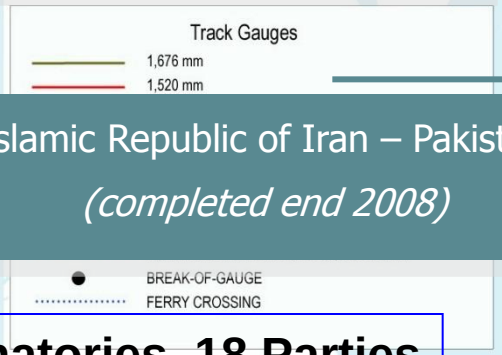
Islamic Republic of Iran – Armenia

Thailand - Lao PDR
(inaugurated March 2009)

Islamic Republic of Iran – Pakistan
(completed end 2008)

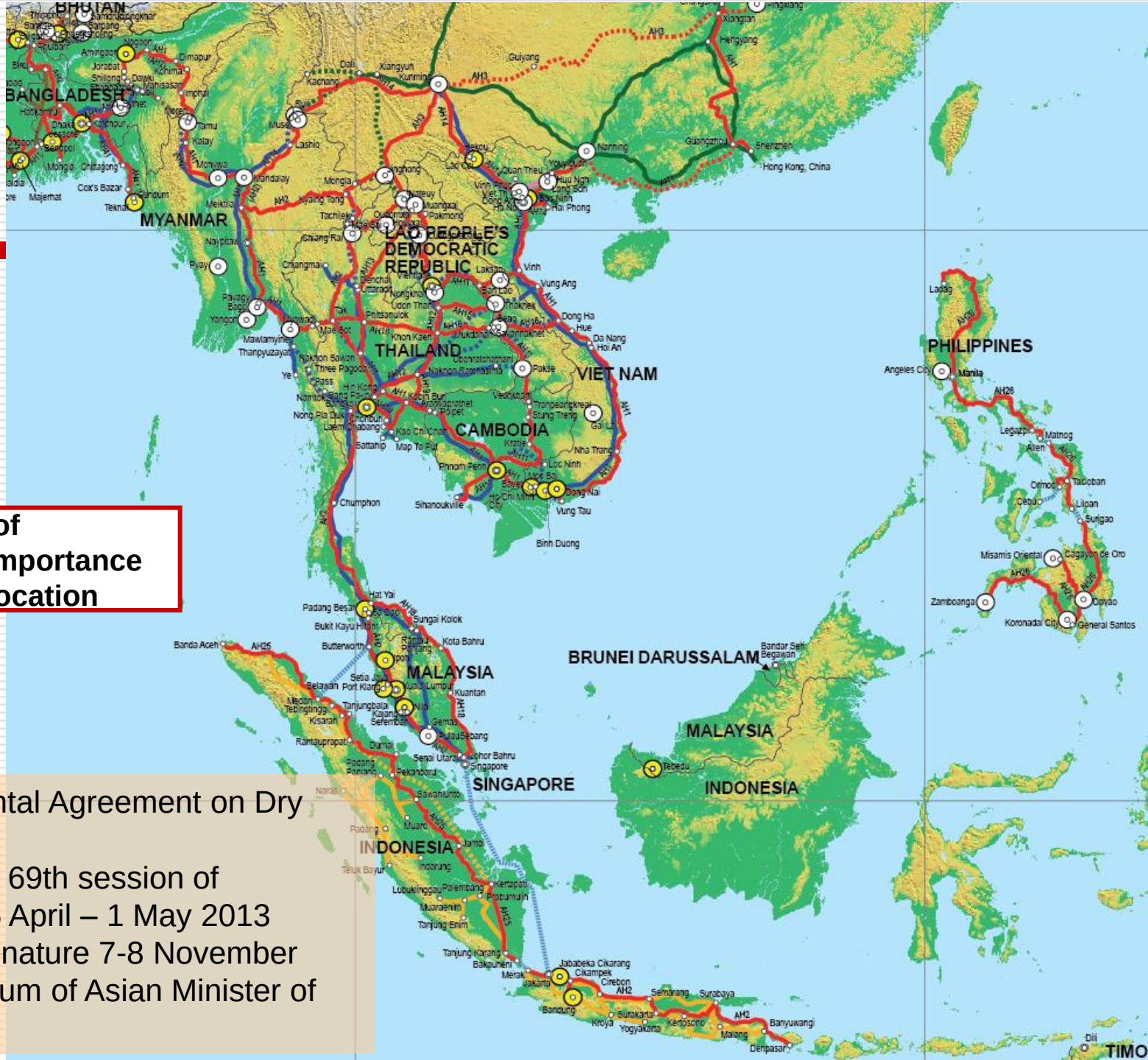
Myanmar - Thailand
Myanmar - India

Thailand - Cambodia
Cambodia - Viet Nam



22 signatories, 18 Parties

Logistics centres and Dry Ports



240 dry ports of international importance
110 potential location

- Intergovernmental Agreement on Dry Ports
- Adoption at the 69th session of Commission, 25 April – 1 May 2013
- Opening for signature 7-8 November 2013 during Forum of Asian Minister of Transport

Cross-border connectivity

- Much focus on hard infrastructure
- Many forms of barriers to cross-border transport
  - Inconsistent and time consuming, costly border crossing formalities and procedures;
  - Restriction/limitation on entry of vehicles;
  - Transshipment needed at the border;
  - Difficult and different process for transit traffic;
  - Differential/reciprocal tariffs/charges;
  - Incompatible working hours at borders;
  - Coordination among various stake holders; and
  - Excessive security checks

- Need to give more focus on streamlining procedures and "soft" issues
- Single window system
- Corridor based approach

Intercity connectivity

- Intercity highways, expressways, railways
  - NHDP, China
- High speed rail gaining popularity
  - Thailand-intercity connectivity
  - China- connecting major cities – 9,300 km
  - Singapore- Malaysia
  - China-Lao PDR
  - Lao PDR-Viet Nam
- Nepal -East-west railway development plan
- India- Dedicated freight corridors
- Use of coastal shipping and inland waterways

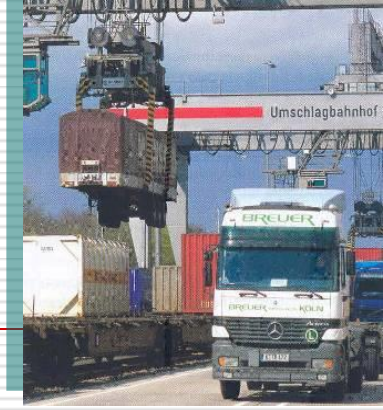
Rural connectivity

- Rural roads
  - India, China, Viet Nam, Bhutan, Nepal, Sri Lanka
  - Contributes to employment generation, poverty reduction and sustainability,
  - Improve access to market, health services and education
- Mostly unpaved road
- Explore low cost pavement options
- Many rural roads - poorly engineered and maintained
- High operation and rehabilitation cost
- Policies for maintenance of roads and rural roads
- Involve communities

Resilient Transport Connectivity

- Frequent disasters, extreme climate events, sea level rise- Thailand Flood, Japan earthquake
- Damage to transport infrastructure and affect services
- Planning for resiliency of critical infrastructure
- Higher design standards and review of guidelines
  - Height of bridges, embankments, drains
  - Coastal transport infrastructure
  - Vulnerable location and high risk areas
- Life cycle costing
- Transport network redundancy- for disaster relief operation
- Reliance on one mode to the concept of multi-modal transport
- Network hierarchy- prioritization

Long haul intermodal transport



- Optimal use of road, rail, maritime transport, logistics centres and dry ports
- Integration of different modes
- Farm to market, manufacturing center connectivity
- Rail based intermodal transport can relieve road congestion
- Potential emissions reduction
  - Consolidation – reduce less than truck loads runs and reduce number of trucks
  - Improved logistics can reduce 10-20% emissions (OECD, 2010)
  - Consolidation and distribution centres in UK have combined 25.7% emissions reduction (Zanni and Bristow, 2009).
  - Replacement of trucks by freight train from port to dry port in Sweden led to 25% CO_2 emission reduction (Roso, 2007).
  - 43% of freight modal shift to railways, 30% less CO_2 emission (Laos-Thailand corridor)
- Regional economic development: industrial centres, free trade areas

Concluding remarks: The way forward to enhance sustainable connectivity

- Utilize existing regional infrastructure and facilitate cross-border transport/trade
- Promote regional intermodal transport
- Prioritize maintenance of transport infrastructure
- Revive inland waterways and use coastal shipping
- Plan for resilient infrastructure
- Invest in infrastructure to improve connectivity particularly railways

Thank you