Pre-event on Rural-Urban Connectivity: 11th EST Forum

2 October 2018, Ulaanbaatar

Rural and Rural- Urban connectivity in the Asia Pacific Region



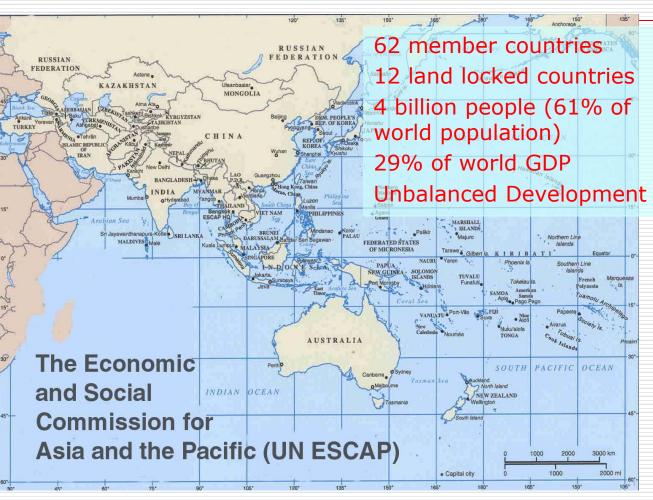
Madan B. Regmi, DEng Transport Division UNESCAP, Bangkok







Asia Pacific Overview



40% of the region or 700 million people do not have all-weather road access.

80-90%

of the poor live in rural areas in the region's major countries







ESCAP Transport Division













Policy, Infrastructure, Facilitation







Modes and Benefits

- Rural Access- More than Road
- Other forms of rural connectivity
 - Water transport
 - Trails ad tracks
 - Suspension bridges
- NMT and Intermediate Mode of transport
- Intermodal transfer facilities/hubs in sub urban areas
 - Economic opportunities
 - Poverty reduction
 - Access to market, health, & education
 - Employment generation
 - Community empowerment

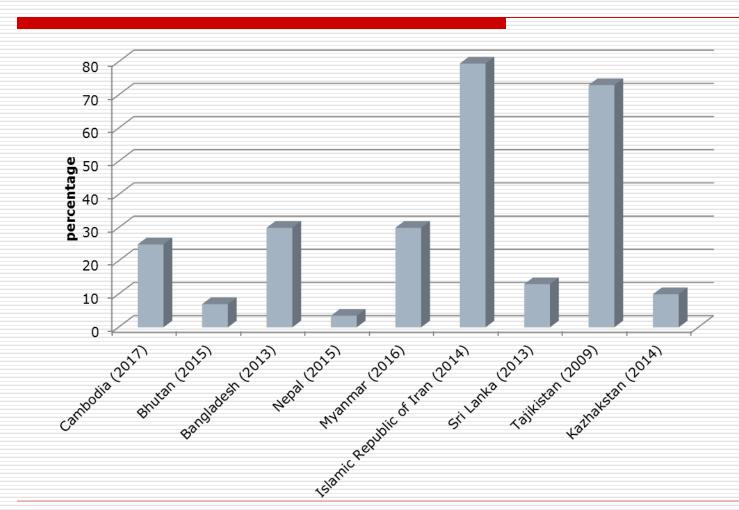






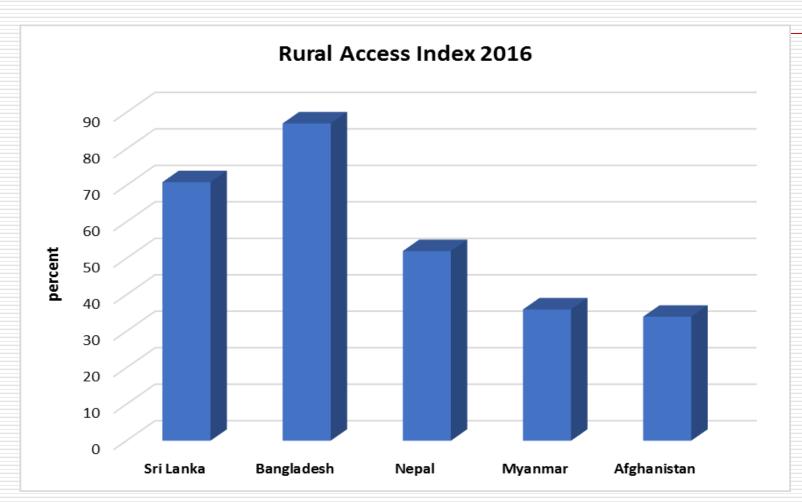


Paved rural road ratio





Rural road index



population living within 2 km (typically 20-25 minutes' walk) of all-weather road access



Rural Transport Policies

- ■Many countries in the region have focused rural transport strategies on:
 - Expanding the existing rural road network
 - Connecting more rural and isolated communities
 - Reducing travel time to nearest road head
 - Rural-Urban connectivity (Feeder roads?)





Still ...issues and challenges remains

☐ Low priority: the further from towns and urban areaslower the importance □ Remote communities -challenging terrain- hills & mountains ■ Lack of coherence between national and rural transport policy ☐ Economically viable? Funding for roads & maintenance Not well engineered and designed, quality of works Limited use of use of emerging technologies, guidelines, policy frameworks ☐ Limited capacities to plan and manage rural transport ☐ Over use of heavy equipment- even they decide the road route





Transport Modes for Rural-Urban Connectivity



Road



Inland waterway transport



Rail

Intermodal transport

Use modes of transport to their full potential





Considerations for Road Development







Road Safety

The Asia Pacific region accounts for 58% of traffic fatalities worldwide. Road safety and protection of VRU in road investment should be prioritized.

Regulation

Regulation of intermediate modes of transport and transport services should be improved without compromising the mobility of rural inhabitants.

Maintenance

Maintenance of new and existing roads is essential to the sustainability of road connectivity. There is a need for institutional capacity building to support this.

Transport Services

In order for road connectivity to reach the most vulnerable people accessible, affordable and safe transport services must be provided.





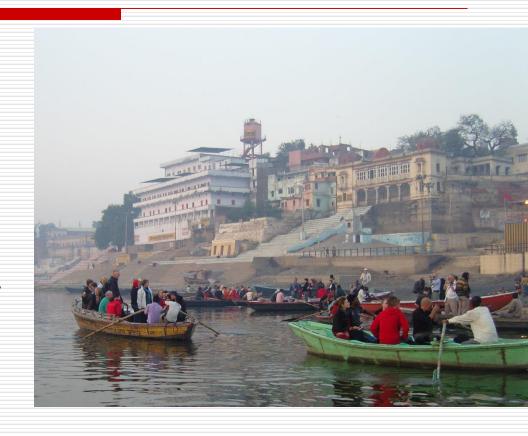


Inland Waterway Transport

National (freight)

Local (passenger)

- Cost-effective, environmentally friendly,
- Supported by much natural terrain in the region as well as man-made waterways.
- Provides connectivity between urban areas and isolated rural areas left unconnected by roads and rail.
- An indigenous form of transport that is sustainable, socially accepted, locally operated, homegrown and adaptive to technology.
- IWT not used to its full potential in the Asia Pacific.







Considerations for revitalizing IWT









Environment

IWT should be viewed as part of the wider water system to avoid compromising water use for other purposes. Pollution must be combatted for sustainable IWT.

Investment

IWT investment needs to be prioritized through raising the profile of IWT and placing emphasis on policy and planning integration between the relevant stakeholders.

Regulation and safety

Regulation should focus on implementing safety measures and ensuring convenient services that are integrated into the wider transport network.

Sustainability

Accessibility needs of users and existing modes of transport should be carefully considered, including factors such as cost, location, access and design inclusivity of disadvantaged









- Alternative to road transit for long hauls, higher levels of safety, lower energy consumption, lower C02 emissions and less air pollution (except diesel).
- Provides large-scale rural-urban connectivity but depends on intermodal connections to stations.
- Can promote economic growth and investment in rural areas.
- High speed rail can be inaccessible to the poorest communities due to high prices, which can lead to reduced economic and social ties as migrants stay in cities.







Selected Good Policies and Practices

- India: PMGSY- connecting communities, use of local materials
- China: vast expansion of network
- Nepal: expansion of rural network, labour based construction, performance based maintenance
- Viet Nam: community mobilization for maintenance
- Thailand: Good Rural Road Maint. Mgt. system
- Bangladesh: LGED-Road Asset management System
- Lao PDR: RMS-Provincial Road Maint. System

Measure of Accessibility: RAI- proportion of rural inhabitants who live within 2 km of all-season road







UNDA Project: Transboundary Transport Connectivity Russian Federation ekaterinburg/ okshetau Barnaul aylodar Irkutsk Surgan Astana Arkalyk Carabutak Karaganda Tosontsengel Ulutay Hovd Uliastay Kazakhstansh Taskesken Aralsk <mark>Bu</mark>lgan Soum Burubai Kyzylorda Mongolia Turkestan Bishkek Hami Naryn Aksu Kuca rashkent Jiayuguan Dushanbe Wingyzstan Wuwei ngabat Golmud China Dir Indian line Kabul 🙀 İslamabad Chinese line

Major Connectivity Corridors

Corr.	Route	Countries
Cor-1	Barnaul-Tashanta-Ulaanbaishint-Hovd-Yarant- Urumqi(-Almaty-Astana)-Kashi-Irkeshtam-Sary-Tash	Russian Federation, Mongolia, China, Kazakhstan Kyrgyzstan
Cor-2	Lianyungang –Zhenzhou- Xi'an- Lanzhou- Turpan – Urumqi- Alashankou – Dostyk – Aktogai – Ushtobe – Almaty (– Bishkek)	China, Kazakhstan, Kyrgyzstan
Cor-3	Yekaterinburg-Petropavlovsk-Astana-Karaganda-Chu (-Almaty)-Bishkek-	Russian Federation, Kazakhstan, Kyrgyzstan,
Cor-4	Tianjin-Beijing-Eranhot-Zamin Uud-Ulaanbaatar- Darkhan-Sukhabaatar-Ulan Ude-Irkutsk	China, Mongolia, Russian Federation



Connectivity Types

- Cross-border connectivity
- Connectivity of Rural and Urban Communities along the Transboundary Transport Corridors
- Connectivity/mobility within Urban Settlements
- Issue of Accessibility, Inclusiveness and Financing

Objective: improving inclusiveness, accessibility and connectivity





State of transport

Mongolia

- Rural Access Index is 36% and only 10% of roads are paved
- Urban and rural linkages are not well addressed in the ongoing connectivity
- BRT in Ulaanbaatar construction ongoing-3 phases-3 routes, study on MRT
- UNDAF: investment in urban built and transport infrastructure, logistics

Kazakhstan

- Rural Access Index is 77% and only 10% of rural roads are paved and road density is quite low
- Subway in Almaty-11.3 km, 9 stations, improvements of cycle tracks and pedestrian walkways
- Astana LRT under construction, 22.6 Km, capacity 146,000 pass/day, Dec18?
- UNDAF: promoting energy-efficient technologies & sustainable transport
- solutions, "green' public transport, improving connectivity with regional and global transport and infrastructure corridors

☐ Kyrgyzstan

- Rural Access Index is 76% and per percentage of paved road is low and rural roads are mostly unpaved
- Inclusiveness, and rural and urban connectivity, not well addressed in the ongoing connectivity initiatives
- Bishkek- Public transport-Bus, Trolley Bus and Minibuses
- UNDAF: Invest into local infrastructure development in rural and urban areas

Assessment criteria and approach

- Condition of access to urban and rural areas
- Time and cost taken to reach destination
- How do we evaluate inclusiveness?
- What are ongoing policy measures
- Measure:
 - Rural Accessibility Index
 - Accessibility (Urban)
 - Sustainable Urban Transport Index (SUTI)
- □ Data issues?
- □ What are possible solutions (pilot areas)
- Could we derive a generic policy guideline

ESCAP Planned Activities on Rural Transport

- □Study on Innovative Approaches for rural Transport Development
- ■Expert Group Meeting on Rural Transport
- Review of Regional Development on Rural Transport







Ways forward

- Develop comprehensive integrated transport master plan
- Consider full project cycle
- Access to knowledge products
- Improve local, rural and urban governance
- Strengthen institutions
- Ensure sustainable maintenance of connectivity
- Initiate rural, rural-urban transport services
- Finance rural roads/rural-urban connectivity











THANK YOU

regmi.unescap@un.org

DEVELOPMENTS IN TRANSPORT IN ASIA AND THE PACIFIC 2017

TRANSPORT FOR SUSTAINABLE DEVELOPMENT AND REGIONAL CONNECTIVITY



