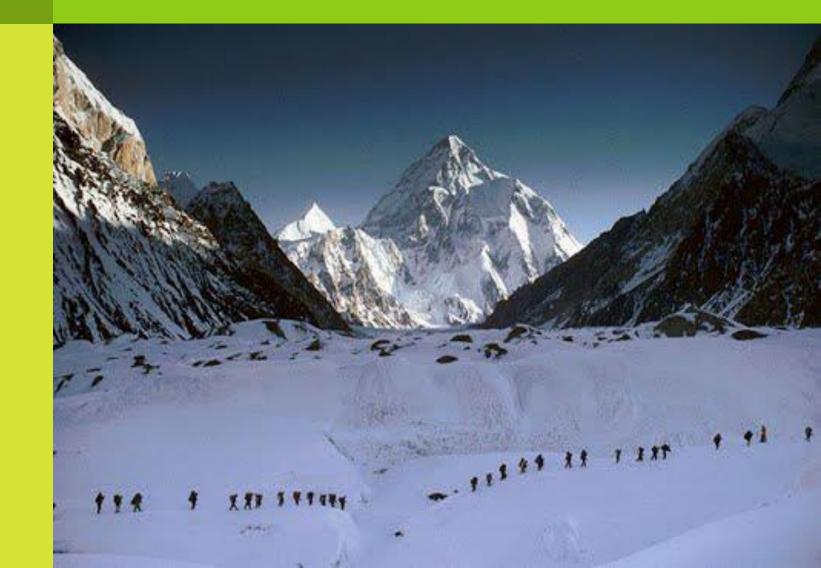
RAILWAY DEVELOPMENT IN NEPAL

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The country is famous for the majestic Himalayas and surprising geographic beauty that includes pristine forests, crystal clear lakes, towering peaks, beautiful water falls and ancient valley cities.











PHEWA LAKE AND POKHARA VALLEY



FROM SARANKOT POKHARA









BUDDHA WAS BORN IN NEPAL



BUDDHA WAS BORN IN NEPAL



TRANSPORTATION

- Transport is central to economic growth and thereby economic development.
- To maintain sustainable growth in the economic and social sector, it is well accepted that transportation means and facilities should be developed accordingly.

TRANSPORTATION

ROAD

- Roads are the principal mode of transport in Nepal carrying 90% of freight and passenger traffic.
- At present Transportation needs of Nepal are being met by either roads or air travel.

TRANSPORTATION

RAILWAY

The world over, growth of modern industry has moved along the railway network.

This is because the railways can carry bigger quantities at a lower cost over long distances and that too in much lesser time.



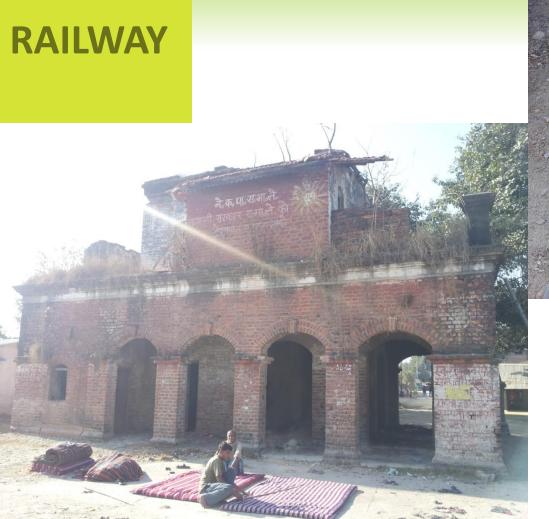
- **❖ The history of Nepal Railways** dates back to 1937.
- It was established by the then East India company.
 - ❖ 51 kilometers from Bijalpura of Mahottari in Nepal to Jayanagar in India.
 - * Raxual-Amlekhgunj (40 km)
 - *Rani-Dharan (50 km)

RAILWAY

Bijalpura-Jayanagar

- Heavy flood of 2001 in Bighi River in Mahottari washed away some parts of Railway Bridge, disrupting the services in Janakpur- Bijalpura sector (22 Km).
- ❖ From that day onwards and upto 2014 the railway is functioned on Janakpur - Jayanagar sector of 29 kilometers stretching along the eight stations.
- Now, this section is under upgrading. So that no any Rail Service in Nepal now except 800 m fright service at Birgunj.







RAILWAY



In addition:

Birganj (Nepal) is connected by Broad Gauge Railway line from Raxual (India).

This 5 km long B.G. Railway line serves ICD (Inland Container Depot) in Birganj

Out of 5 km long Railway line from Raxaul to Birganj, only about 800 m is in Nepal and rest is in India.

There is no passenger service on this section.

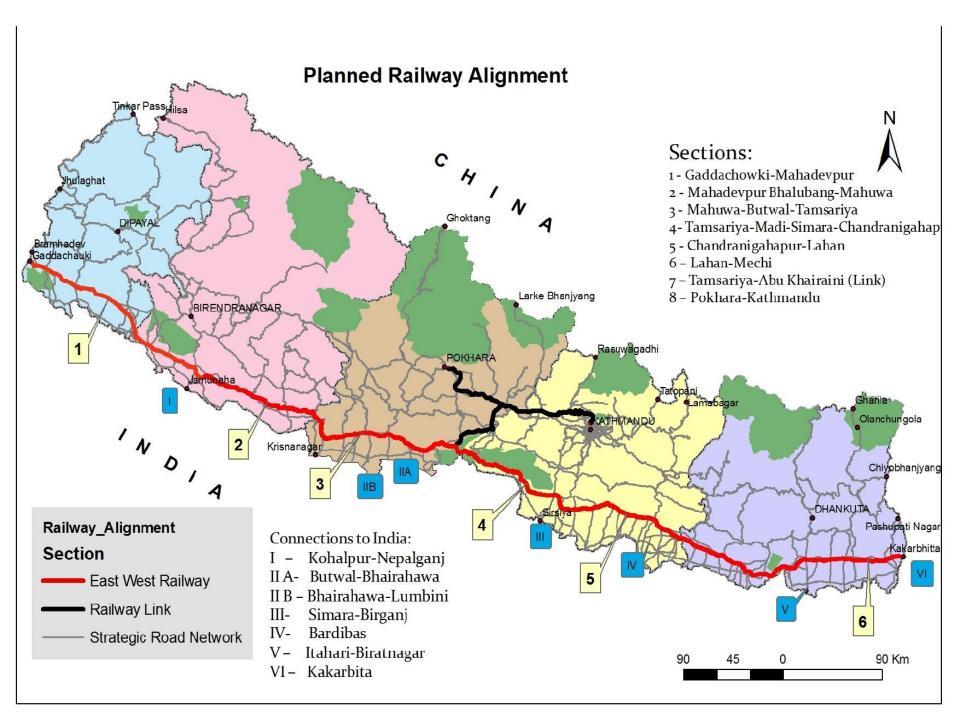
RAIIWAY

- In order to meet the growing passenger and freight transport demand, GON has long felt the necessity of development of railway as an alternative land transport mode for faster and cheaper movement of freight and passenger.
- For this purpose, the Ministry has completed a feasibility study for constructing new Railway lines in Nepal.

RAILWAY

- The feasibility study identified alternative alignments for:
 - Mechi Mahakali (945 Km)
 - Pokhara Kathmandu (187 Km)
 - Connection between proposed Mechi-Mahakali & Kathmandu Pokhara Railway lines. (72 Km)

In addition, network linkages with border towns of India at five locations have been planned.



ΡΔΙΙ Μ/ΔΥ

Construction of railway links between border towns of India and Nepal has already started at following 5 locations (under the grant assistance of Government of India).

Phase I (Under Construction)

Jogbani (India) –Biratnagar (Nepal) 18.60 Kms

Jaynagar (India) –Bardibas (Nepal) 69.00 Kms

Phase II

New Jalpaiguri (India) – Kakrabitta (Nepal) 70.00 Kms

Nautanwa (India) –Bhairahawa (Nepal) 15.30 Kms

Nepalganj Road (India) – Nepalganj (Nepal) 12.10 Kms

RAILWAY

After the Establishment of Department of Railways on 15 June 2011. **Preparation of Detailed Project Report** (DPR) and Construction of Civil **Engineering Works has been started:** ❖ Mechi-Mahakali 945 Km (TAR Link) is in progress. (National Priority Project)

Design works:

Completed DPR:

- Bardibas-Simara Section of MMER (108km) and Simara-Birgunj Link (27 km)
- Simara-Tansariya Section of MMER (127km)
- Tansariya-Butawal Section of MMER (64km) and Butwal-Bhairahawa-Lumbini Link (67km)

Design works:

Ongoing DPR:

- Bardibas-Inaruwa Section of MMER Link (137 km)
- Inaruwa-Kakarbhitta Section of MMER (103km)and Itahari-Biratnagar Link (22km)

Design works:

Ongoing DPR:

- Butwal-Lamahi Section of MMER (115km)
- Lamahi-Kohalpur Section of MMER
 (102 km) and Kohalpur-Nepalgunj Link
 (14km)
- Kohalpur-Sukhkhad Section of MMER (95 km)
- Sukhkhad-Gaddachauki Section of MMER (94 km)

Design works:

Feasibility Study of:

- Kathmandu-Birgunj
- RAILWAY Kathmandu-Kerung



Construction works:

Construction of:

- Jogbeni-Biratnagar (18 km)
- Jayanagar-Janakpur-Bardibas (69 km)
 (BG: 1676 mm, Design Speed 120kmph)
 - Mechi-Mahakali Electrified Railway (TAR Link), Bardibas-Simara Section, (108 km)

Design Standard:

Design Speed :200 kmph

Operating Speed :180 kmph

Track Gauge :Standard (1435mm)

Radius of Horizontal Curve :2300 m

Transition Curve :Cubic Parabola

Track Slope (Grade) : 1%-1.25%

Min radius of vertical curve :13000-16000 m

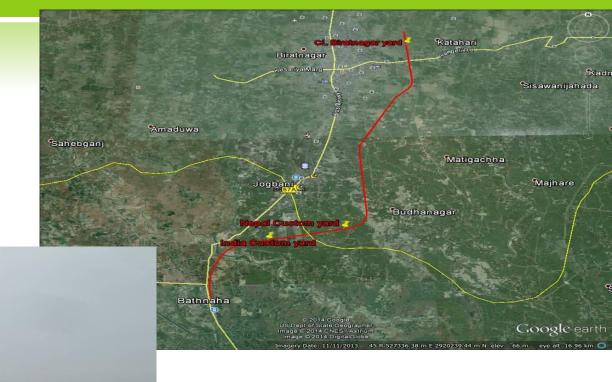
Maximum Cant :165 mm

Cant deficiency :75 mm

Cant excess : 75 mm

ROW :50 m

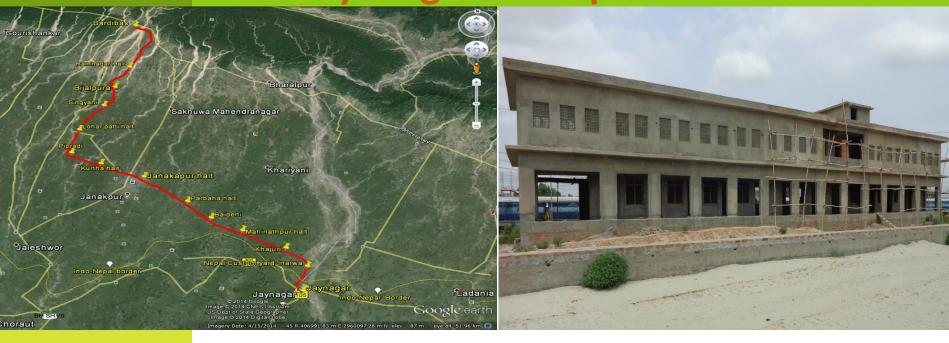
Jogbeni-Biratnagar



Jogbeni-Biratnagar



Jayanagar-Janakpur-Bardibas



Jayanagar-Janakpur-Bardibas





MMER (TAR Link)



MMER (TAR Link)





MMER (TAR Link)





MMER (TAR Link)

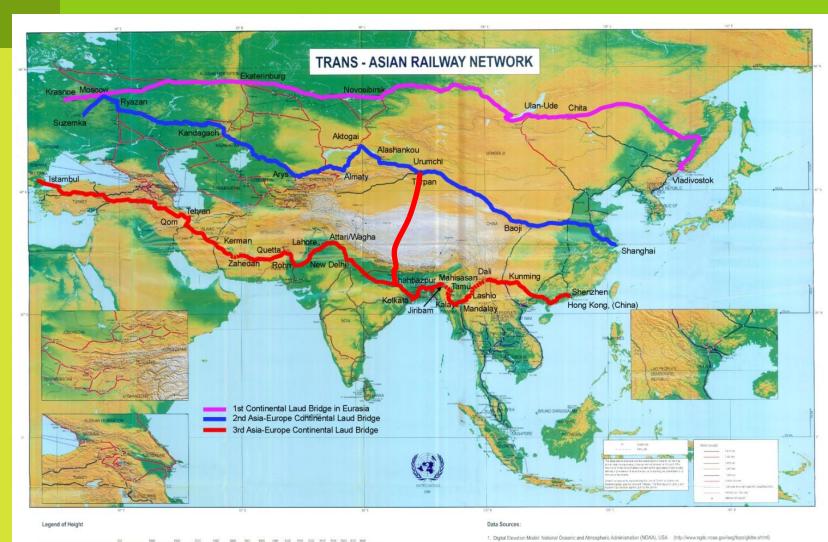






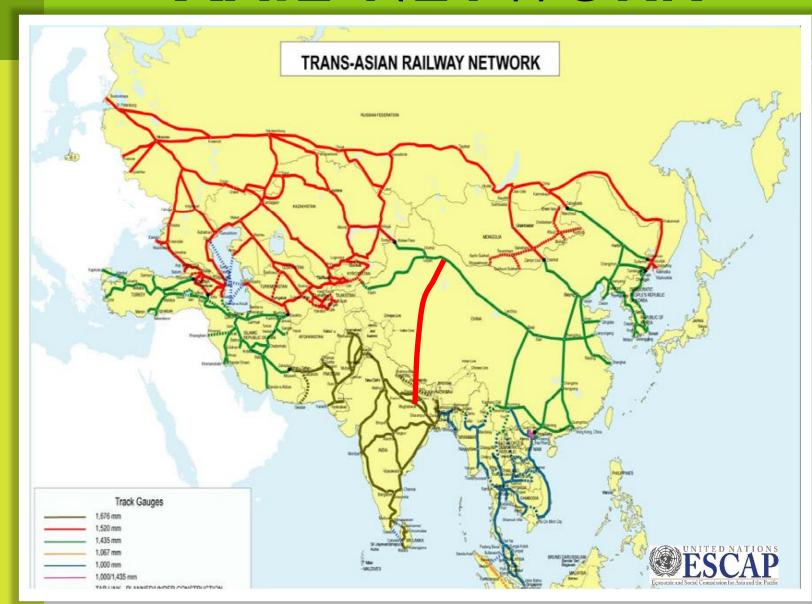


RAIL NETWORK



2. Inland water body: The Department of Geography, University of Maryland, USA (http://www.geog.umd.edu/landcover/1km-map.html)

RAIL NETWORK



TAR

THANK YOU