Chapter II
ACCESS ROUTES: PROBLEMS AND PROSPECTS
India faces formidable challenges in meeting its energy needs. More specifically, its energy deficit, rising domestic demand, and need to sustain a high economic growth rate make it imperative for securing reliable long-term sources of energy a vital strategic priority. (South Asia Monitor, 1 December 2001) Obviously, India’s increasing demand for energy sources suggests a naturally complementary relationship with Central Asian Republics (S. Enders Wimbush, p. 31; Sumit Ganguly, 2002, pp. 370–376) and Iran, which possess rich hydrocarbon (oil, natural gas and precious minerals) reserves. It is to be noted here that the establishment of transportation routes among these three regions would result in massive transnational trade and business opportunities besides fulfillment of energy requirements. Therefore, transport routes in these regions have been receiving considerable attention. It is in this backdrop that this chapter seeks to explore energy and transport routes between India, Central Asian Republics and Iran, i.e., the North-South Transport Corridor and the routes such as Mumbai-Chabahar-Zaranj-Dilaram-Herat-Naibabad-Khairaton-Termez as well as Mumbai-BanderAbbas-Mashhed-Turkmenabad-Bukhara.

**TRANSPORT AND TRANSIT ROUTES**

The pursuit of energy sufficiency and markets in Asia impels Indian policy makers to look seriously at Central Asia, East Asia and the Middle East, particularly Iran and attempt to influence the trends there. Lack of direct road, rail and sea links is one of the biggest hurdles in India’s economic interaction with Central Asia.
Realizing the importance of above-mentioned facts, India got into act quickly. The matter of utilizing the transit facilities in Iran for India’s trade with the Central Asian Republics was taken up for serious consideration at the New Delhi meeting of the Indo-Iranian Joint Ministerial Commission (10-11 November 1992). (Puri, 1997, p. 243)

India’s Ministry of Commerce sent two expert delegations for carrying out studies on the transport infrastructure and transit facilities in Iran (7-19 July 1993) as well as Central Asian Republics (13-27 November 1994). (Ministry of Commerce, Government of India, January 1995) Having thoroughly studied the possible trade and transit routes, the most practical, feasible and cost effective option was found to be the transit route through Iran. Because firstly, the roads and other transport infrastructure are in good condition for the movement of both container and break-bulk cargo; and secondly, the law and order situation is normal and stable. (Pandey, p. 193) The studies concluded that transit trade through Iran is not only logistically sound and commercially profitable, it holds promise of being fast, smooth and safe. The extensive Iranian network of well-maintained roadways, which permit heavy haul traffic to ply at 80 to 100 kms. per hour, makes for faster and cheaper transportation, given the abundance of cheap fuel and other low costs there. This is complemented with a fairly efficient railway system capable of taking the load of bulk and heavy cargo. (Puri, 1997, p. 243)

Following the above studies, a trilateral Memorandum of Understanding (MoU) was signed by India, Iran and Turkmenistan on 18 April 1995, to provide road
and rail access for Indian goods to Central Asia through Iran and vice versa. It envisages movement of Indian goods from Mumbai and other ports in Western India to the Iranian port of Bandar Abbas by sea and onward by surface transport to Sarakhs on Iran-Turkmenistan border. The MoU allows Indian registered vehicles to ply in both the countries and vice versa. (Pandey, pp. 195-196) It is believed that these two networks would provide India a reliable, cheap and less time taking transit route to that country.

In 1997, the then Indian Prime Minister, I. K. Gujral noted that much of India's foreign policy revolves around economic and infrastructural needs. He outlined a vision of regional economic development including Central Asia which he called "our near abroad." Gujral emphasized investment in infrastructure: railroads, roads, power generation, telecommunications, ports and airports, informatics, cross-border investments, energy exchanges, up to and including "Trans-Asian pipelines," strengthened regional organizations, tariff reductions and freer trade, and meeting "an exponential surge in energy demand" through the cooperative development of all forms of energy. (Gujral, pp. 181–191; Kelkar, p. 87.)

At the third India-Central Asia Conference in Tashkent in November 2003, External Affairs Minister, Shri Yashwant Sinha said for some years now, India has been paying attention to land and sea connectivity. The trilateral arrangement and the North-South Corridor have made the flow of goods to Central Asia faster. Earlier in 2003, India, Iran and Afghanistan decided to open a new sea and road route through Chahbahar port. India hopes to construct 200 kms. of the road linking Zaranj and
Delaram. Once this road is complete, it will reduce the distance from India to Central Asia by 1,500 kms. India’s desire for multiple transport links with Central Asia is in tune with her economic progress. (http://mea.gov.in/speech/2003/11/06ss01.htm)

India invests in energy producing fields in Central Asia, especially Kazakhstan. It also holds the deciding voice as to whether the projected Turkmen-Afghan-Pakistani pipeline will materialize. Although it would greatly benefit all these states—by offering Turkmenistan an alternative to Russia’s pipeline system and offering Pakistan and Afghanistan, energy and revenues from transit fees—there are considerable economic and political difficulties. Those difficulties are not solely connected to many political imponderables in all the three states apart from Pakistan’s rivalry with India. Financing is also still unsettled, partly due to these political issues but also because political instability precludes a stable climate for investment by the Asian Development Bank and other interested institutions. (Berniker, 19 December 2002, Online: Web; Hussain, The Independent, 19 June 2002)

**NORTH-SOUTH TRADE CORRIDOR**

A key route that connects Russia, Iran, India, and Central Asian Republic like Kazakhstan is the North–South Trade Corridor that originates in Russia, provides a corridor for trade, including energy, through Central Asia and then proceeds through Iran to India. (*The Hindu, 12 April 2001; Cutler, Central Asia Caucasus Analyst, 9 May 2001; Spector, Central Asia Caucasus Analyst, 3 July 2002*)
The transit routes under the North–South Corridor, between Northern Europe and the Persian Gulf can be classified as under:

- Route I, the Caucasus route
- Route II, the Central Asian route
- Route III, the Caspian Sea route
- Route IV, the South Asian route

These have been tabulated with (Refer Table 1) all the main routes and their transit regions. The major players include Iran and Russia. The route length, number of border crossings, number of break-of-gauge points, status of electrification, double and single track routes have been stated. It also looks into the status of possible corridor continuation in South Asia.

The Caucasus Route

The route connects Finland with the Islamic Republic of Iran through the territories of Armenia, Azerbaijan and the Russian Federation. While the purview of this paper is not to study the details of the Caucasus route a brief summary of the same have been discussed below for better understanding. The table below gives a picture of the transit route through the Caucasus republics.

The Caucasus part of the length of the North South Corridor route has the major thrust in the Russian Federation (50 per cent) and in the Islamic Republic of Iran (36 per cent). In addition, Azerbaijan plays a dominant role as well.
Table 1
The North-South Corridor

<table>
<thead>
<tr>
<th>North-South Corridor</th>
<th>Helsinki (Finland) - Bandar Abbas (Iran)</th>
<th>Central Asian Route (Route I)</th>
<th>Helsinki - Bandar Abbas (Route II)</th>
<th>Caspian Sea Route (Route III)</th>
<th>Corridor continuation in South Asia (Route IV)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Through Taxiatash</td>
<td>Through Nukuss</td>
<td></td>
<td></td>
<td>Total length (km)</td>
</tr>
<tr>
<td></td>
<td>6,501 km</td>
<td>7,549 km</td>
<td>7,885 km</td>
<td>5,842 km through Bandar-E-Anzali</td>
<td>5,938 km through Noshahr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>With 1200 kms</td>
<td>7,718 km / 445 km</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>With 1400 kms</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Through Caspian Sea)</td>
<td></td>
</tr>
<tr>
<td>Major Players</td>
<td>Russia, Iran</td>
<td>Russia, Iran</td>
<td>Russia, Iran</td>
<td>Russia, Iran</td>
<td>Iran, Pakistan</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>No. of Borders Crossings</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>No. of Break-of-gauge points</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Double track</td>
<td>3,046 km (47%)</td>
<td>2,438 km (32%)</td>
<td>2,438 km (31%)</td>
<td>2,812 km</td>
<td>2,812 km</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single track</td>
<td>3,455 km (53%)</td>
<td>5,111 km (68%)</td>
<td>5,447 km (69%)</td>
<td>1,587 km</td>
<td>1,443 km</td>
</tr>
<tr>
<td>Electrification</td>
<td>2,360 km (36.3%)</td>
<td>1,598 km (21.1%)</td>
<td>1,598 km (20%)</td>
<td>1,563 km</td>
<td>1,563 km</td>
</tr>
</tbody>
</table>

Source: www.unescap.org
### Table 2
The Caucasus Route

<table>
<thead>
<tr>
<th>Origin</th>
<th>Helsinki (Finland)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destination</td>
<td>Bandar Abbas (Iran)</td>
</tr>
<tr>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Total length</td>
<td>6,501 km</td>
</tr>
<tr>
<td>• 283 km in Finland (1,524 mm track gauge)</td>
<td>4</td>
</tr>
<tr>
<td>• 3,221 km in Russia (1,520 mm track gauge)</td>
<td>50</td>
</tr>
<tr>
<td>• 622 km in Azerbaijan (1,520 mm track gauge)</td>
<td>10</td>
</tr>
<tr>
<td>• 50 km in Armenia (1,520 mm track gauge)</td>
<td>1</td>
</tr>
<tr>
<td>• 2,325 km in Iran (1,435 mm track gauge)</td>
<td>36</td>
</tr>
<tr>
<td>No. of Border Crossings</td>
<td>5</td>
</tr>
<tr>
<td>• Finland – Russian Federation</td>
<td></td>
</tr>
<tr>
<td>• Russia – Azerbaijan</td>
<td></td>
</tr>
<tr>
<td>• Azerbaijan – Armenia</td>
<td></td>
</tr>
<tr>
<td>• Armenia – Azerbaijan (AR of Nakhchivan)</td>
<td></td>
</tr>
<tr>
<td>• Azerbaijan (AR of Nakhchivan) – Iran</td>
<td></td>
</tr>
</tbody>
</table>

Source: [www.unescap.org](http://www.unescap.org)

#### The Central Asian Route

The Central Asian route connects the origin (Finland) with the destination (Iran) through the territories of Kazakhstan, Russia, Turkmenistan and Uzbekistan. There are two options of the route passing through the Central Asian republics—one is via Taxiatas (Turkmenistan) and the other is through Nukuss (Uzbekistan). Both the routes are more or less of equal length (Refer Table No 3)
Table 3

Routes Passing Through Central Asia

<table>
<thead>
<tr>
<th></th>
<th>Through Tashkent</th>
<th>Through Nukuss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Length</td>
<td>7549 kms</td>
<td>7885 kms</td>
</tr>
<tr>
<td></td>
<td>• 4% Finland (1,524 mm track gauge)</td>
<td>• 4% Finland (1,524 mm track gauge)</td>
</tr>
<tr>
<td></td>
<td>• 34% Russia (1,520 mm track gauge)</td>
<td>• 32% Russia (1,520 mm track gauge)</td>
</tr>
<tr>
<td></td>
<td>• 10% Kazakhstan (1,520 mm track gauge)</td>
<td>• 10% Kazakhstan (1,520 mm track gauge)</td>
</tr>
<tr>
<td></td>
<td>• 7% Uzbekistan (1,520 mm track gauge)</td>
<td>• 16% Uzbekistan (1,520 mm track gauge)</td>
</tr>
<tr>
<td></td>
<td>• 12% Turkmenistan (1,520 mm track gauge)</td>
<td>• 6% Turkmenistan (1,520 mm track gauge)</td>
</tr>
<tr>
<td></td>
<td>• 33% Iran (1,435 mm track gauge)</td>
<td>• 32% Iran (1,435 mm track gauge)</td>
</tr>
<tr>
<td>No of Border Crossings</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>No of Break-of-gauge points</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Double track</td>
<td>2438 (32%)</td>
<td>2,438 km (31%)</td>
</tr>
<tr>
<td>Single-track</td>
<td>5,111 km (68%)</td>
<td>5,447 km (69%)</td>
</tr>
<tr>
<td>Electrification</td>
<td>1,598 km (21.1%)</td>
<td>1,598 km (20%)</td>
</tr>
</tbody>
</table>

Source: www.unescap.org
Table 4

Border Crossings in Central Asia

| Through Taxiatas | 7          | • Finland – Russia  
|                 |            | • Russia – Kazakhstan  
|                 |            | • Kazakhstan – Uzbekistan  
|                 |            | • Uzbekistan – Turkmenistan  
|                 |            | • Turkmenistan – Uzbekistan  
|                 |            | • Uzbekistan – Turkmenistan  
|                 |            | • Turkmenistan – Iran  
| Through Nukuss  | 5          | • Finland – Russia  
|                 |            | • Russia – Kazakhstan  
|                 |            | • Kazakhstan – Uzbekistan  
|                 |            | • Uzbekistan – Turkmenistan  
|                 |            | • Turkmenistan – Iran  

Source: www.unescap.org

a) Central Asian Route in Finland

   In Finland, the route originates in the port of Helsinki and goes to Vainikkala (283 km), the border station between the Finnish Rail Administration (RHK) and Russian Railways (RZhD). The Helsinki - Vainikkala link, which is fully electrified, is double-track to Luumäki (250 km) and single track thereafter to Vainikkala (33 km).

b) Central Asian Route in Russian Federation

   From Finland the route connects with the railways of the Russia (RZhD) at Buslovskaya. From there it covers a distance of 2,513 km to Aksarayskaya through St Petersburg, Bologoye, Moscow, Kochetzkovka, Rtishevo, Saratov and Volgograd. With the exception of the Volgograd - Verhny Baskunchak section (214 km) and
some portions of the Saratov to Petrov Val and Verhny Baskunchak to Aksarayskaya sections, the Buslovskaya - Aksarayskaya section is double-track. Over 52 per cent of the Buslovskaya - Aksarayskaya section is electrified. At Aksarayskaya, the route junctions off eastward and cover around 85 km to connect with the railways of Kazakhstan at Ganushkino.

c) Central Asian Route in Kazakhstan

In Kazakhstan, the Central Asian route covers a relatively short section of 815 kms from the border between Kazakhstan and the Russia to the border between Kazakhstan and Uzbekistan (Molnar and Lauri Ojala, 2003). From Ganushkino (near the border between Kazakhstan and the Russia), the route goes through Makat and Beyneu, respectively 368 kms and 668 kms from Ganushkino, and travels further south to the Kazakh-Uzbek border over 90 kms.

The link is entirely single track and operated under diesel traction. At Beyneu a single track, diesel-operated line section goes westward to Eralievo over a distance of around 480 kilometres. From there, a possibility could exist in the future to connect with the railways of Turkmenistan. This, however, would necessitate the construction of a 230 km-long line section connecting Eralievo (Kazakhstan) with Bekdash (Turkmenistan).

d) Central Asian Route in the Republic of Uzbekistan

Exiting the territory of Kazakhstan, the Central Asian route connects with Uzbekistan Railway at Karakalpakia (100 km south of Beyneu station in Kazakhstan)
from where the route continues south to Pitnyak over a distance of 593 kilometres. However, only 521 km of this distance is on Uzbekistan Railways, i.e. the 409 km-long section between Karakalpakia and Taxiatash, and the 112 km-long section between Station '449-km' and Pitnyak. The 72 km-long section between Taxiatash and Station '449-km' is located in Turkmenistan.

After the break up of the Soviet Union, it is understood that the joint interoperability of the line section from Karakalpakia (Uzbekistan) to Chardjou (Turkmenistan) could pose some operational problems between the two countries due to the number of new border crossings along the line resulting from their new status as independent states. This line was then the only rail section linking Tashkent, the capital city of Uzbekistan, to the country’s north-west region. In 1993, the Uzbek authorities began construction of a 342-km long section linking Uchkuduk and Nukuss in order to be able to reach Karakalpakia by rail without transiting the territory of Turkmenistan. The inauguration of the Uchkuduk-Nukuss section in February 2001 creates another possibility of routing cargo through Central Asian Republic. This new line section now makes it possible to route cargo from Karakalpakia to Khodchadavlet, the border point between Uzbekistan and Turkmenistan, through Nukuss, Uchkuduk, Navoi and Bukhara.

e) Central Asian Route in the Republic of Turkmenistan

Exiting the territory of Uzbekistan, the Central Asian route connects with Turkmenistan State Railway at Taxiatash from where the route continues south to Chardjou, Mary and Sarakhs at the border with Iran over a distance of 1,002
kilometres. However, only 890 km of this distance is on Turkmenistan State Railway, i.e. the 72 km-long section between Taxiatash and Station ‘449-km’ and the 818 km-long section between Gazodjak and Sarakhs. The 112 km-long section between Station ‘449-km’ and Pitnyak is located in Uzbekistan.

Central Asian Route in Islamic Republic of Iran

After Sarakhs the Central Asian route leaves Turkmenistan and connects with the Iranian Islamic Republic Railways (RAI) through the 120-km long Sarakhs-Mashad section commissioned in May 1996. With this section in place, movements by rail between the landlocked countries of Central Asia and a port on the Persian Gulf, i.e. Bandar Abbas, became possible, albeit with a break-of-gauge between the rail systems of Central Asian Republics (track gauge of 1,520 mm) and the rail system of Iran (track gauge of 1,435 mm). From Mashad, the route continues over 926 kilometres to Tehran through Azadvar, Sharood and Garmsar. From Tehran, the route continues south to Bandar Abbas through Qom, Meybod and Bafq over a distance of 1,443 km. Regarding traffic originating in Central Asia with Bandar Abbas for final destination, it must be noted that Iran is currently constructing a 756-km long, double-track section between Mashad and Bafq. When work is completed, traffic from Central Asia to Bandar Abbas could bypass Tehran and the overall distance to Bandar Abbas will be 1,000 kilometres shorter than the current route through Tehran.
In Central Asia there is a possibility to have in future a shorter route going to Iran directly through Turkmenistan, at Eralievo. However, such a route would necessitate the construction of:

- A circa 230-km long line section between Eralievo (Kazakhstan) and Bekdash (Turkmenistan),
- A circa 240-km long section between Bekdash and Turkmenbashi (in Turkmenistan),
- A circa 225 km-long section between Kazandjik and Kuzuletrek (in Turkmenistan), and
- A circa 90 km-long section between Kuzuletrek (in Turkmenistan) and Gorgan (Islamic Republic of Iran).

If all of the above links were provided, the Central Asian route would be around 7,000 km (as compared with 7,593 km using the existing route through Turkmenistan and Uzbekistan) out of which 2,438 kilometres would be double track (35 per cent) and 1,598 kilometres (23 per cent) would be electrified. However, there would still be a break-of-gauge point between Turkmenistan State Railways and the Iranian Islamic Republic Railways. However, there would only be four border crossings (against 7 on the route through Chardjou) as there would be no transit through the territory of Uzbekistan.

The authorities in the Islamic Republic of Iran gave higher priority to the Astara - Qazvin link. Only constructing the 230-km long line section between
Eralievo (Kazakhstan) and Bekdash (Turkmenistan) and the 240-km long section between Bekdash and Turkmenbashy would still allow connection with the Iranian Islamic Republic Railways through Sarakhs. From Turkmenbashy the route would then continue 894 kilometres to Sarakhs via Ashgabat and Tedjen on a single track, diesel-operated section. However, this would be the longest possible route with a total distance of around 7,900 kilometres.

The Caspian Sea Route

The Caspian Sea route connects Finland with Iran through the Russia and the Caspian Sea. Shipping services across the Caspian Sea which are of relevance to the route are between the Russian port of Astrakhan and the ports of Bandar-e-Anzali and Noshahr, Iran’s two main Caspian Sea ports. In 1998, Bandar-e-Anzali and Noshahr handled 1.6 and 0.83 million tonnes of cargo respectively.

Container traffic is also predominantly routed through Bandar-e-Anzali which handled 1,121 TEU in 1998 against 485 TEU handled in Noshahr. Given the cumbersome process of having to use ice-breakers to secure port operation at Astrakhan during winter, Russia has started the development of a year-round-operation port at Olya. A first development phase has already been completed and ferry services are already regularly operated between Olya, Turkmenbashy and Bandar-e-Anzali. From Astrakhan, shipping distances across the Caspian Sea are 1,200 kilometres to Bandar-e-Anzali and 1,400 kilometres to Noshahr.
The South Asian Route

Ultimately, the corridor could also serve the transportation of cargo destined for countries in South Asia, particularly India and Pakistan and even beyond. Connections to countries in South Asia could be by rail or shipping.

India and Pakistan are two countries in South Asia with a realistic chance of being served directly by rail through the North-South corridor, although this should only be envisaged as a long term prospect. However, in the present configuration of rail infrastructure in the region, this would mean completing construction of the single track, non-electrified 539 km section of 1,435 mm gauge linking Kerman and Zahedan in Iran for which work is currently underway. When this new line is commissioned, and pending the re-construction of a new Zahedan-Mirjaveh section to 1,435 mm gauge, in conformity with the rest of the Iranian rail system, transshipment facilities will be provided at Zahedan. Once standard gauge extends to Mirjaveh, the break-of-gauge point will be at the border between the two countries. Currently, the gap existing between the railheads at Zahedan and Kerman is bridged by road transport, although it is understood that comparatively little traffic is generated west of Zahedan.

From Kerman, a line runs in a northwesterly direction to Bafq, which is the junction station for the trunk line running south to the port of Bandar Abbas. As Bafq will also become the junction station for the new line under construction that will provide a direct link with Central Asia, completion of the Kerman-Zahedan line could
also permit direct movements by rail between places in Central Asia with final destination in Pakistan or India.

**Corridor Extension in Pakistan**

Pakistan Railways, two main lines would continue the corridor. One would be the 1,730 km line which follows a west to east alignment connecting Koh-i-Taftan at the border with Iran to Wagah at the border with India through Rohri and Lahore. At Lahore, the line continues either northward, or eastward. The northward connection goes to Islamabad and Rawalpindi (around 290 kms from Lahore) and Peshawar (462 kms from Lahore). The eastward connection goes to Wagah at the border with India. The other line branches off at Rohri to travel south to Pakistan’s main ports at Karachi and Qasim over a distance of 480 kms. The overall line between Koh-i-Taftan and Wagah comprises 1,021 kms of non-electrified single track line, 245 kms of electrified single track line, 423 kms of non-electrified double track line, and 41 kms of electrified double track line. The 462 kms extension to Islamabad and Peshawar is a non-electrified single-track with the exception of short double track sections between Lahore and Shahdara (7 kms) and between Chaklala and Golra Sharif (19 kms). Meanwhile, the 480 kms line from Rohri to Karachi and Qasim is non-electrified and double-tracked over its entire length.

**Corridor Extension in India**

From New Delhi, the Indian Railway network, with its impressive 63,000 route-km (44,000 of which on broad gauge), radiates in all directions to serve all of
India’s major cities and provincial towns. Indeed, the Container Corporation of India Limited (CONCOR) has substantially developed rail container transport across India since the company started operating in November 1989.

There are two alternatives to the corridor continuation in India. The first and existing alternative is to use shipping services between Bandar Abbas and the two main ports serving Mumbai, i.e. Mumbai Port, which handle over 60 per cent of India’s container traffic, and from there continue by rail to inland destinations in India. The Mumbai-New Delhi line covers a distance of 1,510 km of 1,676 mm gauge and is multiple tracked and electrified throughout. It passes through important commercial centres such as Mathura, Kota, Ratlam, Baroda and Mumbai.

The other alternative, which is dependent on the completion of the Kerman-Zahedan line, is to direct cargo to Mirjaveh and then on through Pakistan Railways to connect with India’s rail system at Attari at the border between India and Pakistan. From Attari, the line goes in a southerly direction to New Delhi through Amritsar, Jalandhar, Ludhiana and Ambala. It covers a distance of 470 km and is entirely broad gauged (1,676 mm). It must be noted that this line provides the sole effective land transport connection with Pakistan, although reportedly there is currently only a limited exchange of freight and passenger traffic between the Indian border station of Attari and the Pakistani border station of Wagah.
Implications for Central Asia and South Asia

For the first five years after independence, the former Soviet Republics of Central Asia suffered severe economic contractions. The subsidies from the centralization system that artificially supported the economies disappeared from the scene. Markets evaporated for both raw materials and supplies of industrial products in the region. Real gross domestic product fell by 30-50 percent in all the countries. Inflation reached more than 1,000 per cent. The banking system retrenched and many banks were closed. Savings disappeared and there was a general crisis throughout the region as unemployment soared. As a natural consequence of these factors and after 70 years of more or less forced cooperation, the Central Asian republics began to focus on internal problems and issues in the need to build their own nations (World Bank, 2005, World Bank 2006). This in turn led to a separation and gradual widening between Kazakhstan, Kyrgyzstan, Uzbekistan, Turkmenistan and Tajikistan.

Long term growth and sustainable development depends upon finding new markets for traditional products, and new sources of raw materials and supplies to replace those disrupted by the breakup of the erstwhile Soviet Union (UNDP, 2004). In spite of national tendencies toward isolation and self-sufficiency, the governments of Central Asia clearly recognize their interdependency in transport, communication, energy, and trade. They recognize the need to develop broad market places for their enterprises and the benefit of regional political stability that can result from economic cooperation (UNDP, 2005).
At one end, one finds merging economies, merging currencies, merging political institutions and merging legal systems into a single entity. On the other end economic cooperation can be nothing more than an agreement between two countries to permit cars to pass across the borders or to reduce tariffs and other barriers to trade.

With the given background, the North-South Transport Corridor does provide a platform to an improvement in relationships, a reduction of barriers, and an improvement in communications that permit the economies of each country to grow independently, achieve its national economic objectives and enhance economic growth and development that benefit multiple countries without compromising their own national interests or sovereignty.

The North-South Corridor developments mirror the continually evolving system of multiple routes and relationships of the historic Silk Road. The North-South Transport corridor project is no doubt an attempt to create as much trade and transport opportunities in the landlocked regions of Central Asia and South Asia, but the strategic and political dangers, such as the potential for militarization of the Caspian, could pose a significant threat. Principal issues such as the jurisdiction of the national and fishing zones, militarization of the Caspian, transit of military and civil vessels can pose major hurdles for which the sides may not agree. (Ash Narain Roy, Online: Web)

North-South international transport Corridor is considered as the most important link between Europe and Asia for transit goods. The important section of this route is passing through the Iranian territory and is much faster and cheaper than
the other routes (Suez Canal). This route, at present, commences from Indian Ocean sphere (Bombay port) and links to Bandar Abbas in southern Iran through maritime transport. Then the goods will be shipped from Bandar Abbas to northern Iranian ports on Caspian Sea (Bandar Anzali and Bandar Amirabad) through roads and railway and then will be dispatched to Astrakhan and Lagan ports in Russia. This route also connects India to CIS countries and Afghanistan by road and railway.

India gets the benefit of being the entrepôt and final port for these goods by securing reliable access to Russian, Iranian, and Central Asian goods, including energy. Pakistan has very great ambitions for its own trade routes through Central Asia, which would eventually end up at its Indian Ocean port of Gwadar (Pakistan). Iran has been instrumental in bringing Central Asian states into this corridor. (Calabrese, pp. 60-82; Rethinaraj, pp. 38-40; Raja Mohan, pp. 38-39)

The importance of North-South corridor was enhanced when trade routes through Afghanistan and Pakistan came under the grip of Pakistan-backed terrorism. The North-South corridor bypasses Afghanistan and Pakistan and is a centerpiece of India's political closeness with Iran, Russia, and Central Asian governments.

India's connection to Iran is perhaps the most remarkable aspect of the new policy. Whereas India's ties with Russia are long-standing and visibly saturated with strategic implications, Indo-Iranian relations have never been so prominent or important. While this relationship substantiates India's own claims to be a rising power and reflects Iran's awareness that cooperation with India is intrinsically beneficial to it in and around Central Asia, it also exemplifies the broader trend of
India’s relations with key actors there. Indeed, some analysts consider this relationship as opening the way to a new structure of regional relations including an Iran-American rapprochement. (Calabrese, pp. 60–82; Rethinaraj, pp. 38–40; Raja Mohan, pp. 38–39)

The powerful linkages that India has created thereby enable it to project itself for the development of the North–South trade corridor with Russia and Iran, which could only take shape on the basis of common political goals. The relationship with Iran is not exclusively based on this fact or on the fact that India’s main supplier of oil will continue to be the Gulf countries, Iran among them. (Calabrese, pp. 60–82; Pattanayak, Strategic Analysis, June 2001) Iran has sought assistance in building an overland gas pipeline through Pakistan to India. Other options include a pipeline along Pakistan’s shallow water coastline, or on the seabed from the Persian Gulf to India’s west coast, or an already existing fourth option, Liquefied Natural Gas (LNG), which is most expensive.

On 12 September 2000, during the Second Eurasian Conference held at St. Petersburg, India, Russia and Iran signed an inter-governmental agreement on a North-South Transport Corridor to facilitate faster and cheaper movement of goods from South Asia to Europe, and to establish a strategic transport link between Asia and Europe via Central Asia, Iran and Russia. The Transport Ministers of the three countries involved signed the agreement. The objectives of the agreement include the following: i) Increasing effectiveness of transport ties; ii) Promotion of access to international market, iii) Increasing the volume of passenger and goods transport, iv)
Providing security of travel, safety of goods as well as environment, v) Harmonization of transport policies law on legislative basis, and vi) Setting up equal non-discriminative conditions for all types of transport service providers. (http://www.iran-embassy.org.in/More_events.asp?ID=2008) With regard to the aforesaid objectives the states adhered to the agreement will do their utmost to focus on the following:

1. Reducing transit time for passenger and goods transport in their respective territories;

2. Minimizing transit and transport costs to 30 per cent cost;

3. Simplifying and unifying all administrative documentation and procedures (including customs) applicable to goods and passengers. (http://www.iran-embassy.org.in/More_events.asp?ID=2008)

This Transport Corridor is primarily an attempt to restore the historic trade of conventional commodities between South Asia and Europe. (Ash Narain Roy, Online: Web) The idea of North-South Transport Corridor is a bold initiative to bring Central Asia on the global trade map. The North-South transport corridor envisaged stretches from ports of India across the Arabian Sea to the southern Iranian port of Bandar Abbas, where goods then transit Iran and the Caspian Sea to ports in the Russian sector of the Caspian. From there, the corridor stretches along the Volga River via Moscow to northern Europe. This, as experts believe, would reduce the trading delivery time by 10 to15 days. Currently, the favoured destination for the bulk of
goods is through the Mediterranean and the Suez Canal. The operational cost will also be estimated to be reduced by 20 to 25 per cent. (Ash Narain Roy, Online: Web)

There are various reasons behind India being so keen on pushing the North-South Transport Corridor. India is fast developing into an industrial powerhouse. It is already a major consumer of energy and its dependence on outside markets is increasing day by day. By the end of the present decade, India will become the fourth-largest consumer of energy in the world. In order to sustain its present level of growth, India needs to emerge as a big exporter and its export items must become competitive in the world market. Industry sources maintain that a boost can be given to Indian exports if the North-South Transport Corridor becomes fully operational. (Ash Narain Roy, Online: Web)

Indian cargo transported via this route has already shown a dramatic increase over the past few years, reversing the marked decline of the 1990s. Once this route is fully operational, Russia alone will earn hundreds of millions of dollars from taxes and customs revenues. India and Iran will also benefit immensely. This is a project that has massive potential, but neither Russia nor India has enough cash flow to invest rapidly, and Iran has its own problems. Over the years, Russia and Iran have invested in road, rail and port infrastructure, but the expenditure hardly matches the required need for a vastly improved infrastructure. (Ash Narain Roy, Online: Web) Besides, the corridor can help boost exports to the Baltic and Scandinavian countries. Several middle-income States of Europe are keen to gain access to the dynamic economies of South East Asia as well.
Kazakhstan’s President, Nursultan Nazarbayev already endorsed the North-South Transport Corridor on 3 June 2001 Summit with the then Indian Prime Minister, Atal Behari Vajpayee. Azerbaijan, Armenia, Lithuania, and perhaps Turkmenistan have also expressed interest in trading along this route. Linking India’s port in Mumbai to Russian and Iranian ports by road and rail, the Corridor can reduce shipping time by ten to twelve days for exporters who currently ship across the Mediterranean Sea and Suez Canal. These shorter delivery times may attract some companies that use the congested Suez route. They will also encourage the countries involved to compete with the European Union’s TRACECA (Transport Corridor European Caucasus Asia) Corridor, and with plans to revive a Silk Road trade route from Asia to Central Europe. (Mark Berniker, Online: Web)

For now, though, mired in an ongoing debate over transportation routes, ambitious energy export plans have yet to deliver. Eager to skirt arch-rival Pakistan, India has supported a controversial 890-mile, two billion dollar “Energy Highway” that would run from Russia via Uzbekistan, Turkmenistan, and Kazakhstan, and on to Kashmir through the Line of Control between India and China. (Ibragim Alibekov, Online: Web) At the India-Central Asia Conference in Tashkent on 6-8 November 2003, the Indian External Affairs Minister, Yashwant Sinha confirmed the addition of a Tajik leg to the planned Russia-Iran-India trade corridor that would reduce the distance between India and Central Asia by 1,500 kms [932 miles]. A trade agreement between Iran, India and Turkmenistan and, now, Tajikistan is expected to further smooth the way. (Ibragim Alibekov, Online: Web)
DEVELOPMENT OF OTHER VIABLE ROUTES

ZARANJ-DILARAM ROUTE

The Zaranj-Dilaram route, which will provide landlocked Afghanistan with a valuable lifeline, connects all major cities in Afghanistan. This road also links up further north with the Central Asian republics. For this route, Iran would facilitate the entry of Indian equipment and the purchase of material. As India hopes that the road link through Iran and Afghanistan will open up markets for its goods in Afghanistan and beyond in Central Asia, hence it takes immense interest in completing the Dilaram-Zaranj highway. India's Border Roads Organization (BRO) is constructing the 217-kilometer Zaranj-Dilaram highway in the southwest province of Nimroz. About 300 Indians work for BRO on the Zaranj-Dilaram project. It will link Zaranj, which lies on Afghanistan's border with Iran, to Dilaram, situated on the "Garland Highway". The garland highway links Kabul, Kandahar, Herat, Mazar-e-Sharif and Kunduz. Once the highway is completed, Zaranj will be linked to several Afghan cities. Iran has been working on improving road links from its ports to towns that lie on its border with Afghanistan. It has completed construction of a vital bridge on the Helmand River marking the frontier between itself and Afghanistan, and is busy upgrading the road from Chabahar, where its new port on the Makran coast is coming up, to Zaranj. So once the Zaranj-Dilaram highway is completed, goods from Afghanistan's main cities can be brought overland to the border with Iran from where they will be transported to Chabahar, and vice versa. The Dilaram-Zaranj highway opens up another option for Afghanistan via Iran. What is more, the overland option
through Iran to the port of Chabahar is shorter than the one currently available through Pakistan.  (Ramachandran, online: web)

India's involvement with road-building is bitterly opposed by both the Taliban and its sponsors in Pakistan, as the highway under construction not only will boost Afghanistan's connectivity and trade ties with the outside world, it will also enhance the trade and influence of Iran and India - countries whose relations with Islamabad and the Taliban are hardly friendly. Pakistan fears that with the completion of the highway, India's presence and influence in its neighborhood to the north, i.e., Central Asia, will increase manifold.  (Ramachandran, online: web) India is now building 200 kms of road in Afghanistan linking Zaranj-Dilaram route, but worsening security situation in southwestern Afghanistan has increased the cost for this project. In 2005, a driver working with the Zaranj-Dilaram highway project was abducted by the Taliban and killed later.  (Times of India, 7 January 2007) Although India is keen to complete the project as soon as possible, it is behind the December 2006 completion date, with only a fourth finished. And the cost of the project, which was originally pegged at about $70 million, has almost doubled.  (Ramachandran, online: web)

The second project involves the linking of the Chabahar port to the Iranian rail network which is connected to Central Asia and Europe. For Iran, the Chabahar complex could become the main entrepot for energy and commercial trade with Afghanistan, Central Asia and the Caspian region. Islamabad, too, has been pursuing a similar objective and has plans to develop the Gwadar port not too far away from
Chabahar on the Makaran coast of Pakistan. A third project is about building marine oil tanking terminal in Iran. (Raja Mohan, Online: Web)

In a meeting held in Tehran on 4-5 January 2003, India, Iran and Afghanistan, signed an MoU on the Development and Construction of Transit and Transport Infrastructure in Chabahar-Milak-Zaranj-Dilaram route, which aims at improving access to Afghanistan, and upgrading the infrastructure at Chabahar port and relevant road segments. In this connection, India, Iran, and Afghanistan, meeting in Tehran in January 2003, signed a memo on the “Development and Construction of the Transit and Transport Infrastructure” with the intent of improving the route from Chabahar in Iran to the Afghan cities of Zaranj and Dilaram. (Parliament Q & A, Rajya Sabha)

India, Iran and Afghanistan held a trilateral meeting in Teheran on 4-5 January 2003 to discuss alternative transit routes to Afghanistan as Pakistan refused to allow India access to the overland route to Afghanistan. The Foreign Office spokesman said that the Minister of State for External Affairs, Digvijay Singh, led the Indian delegation to the talks, while Iran was represented by its Road Transport Minister, Ahmad Khorram and Afghanistan by its Trade Minister, Sayed Mustafa Kazemi. (www.hinduonnet.com)

The talks focused on how to operationalise the Chabahar-Melak-Zaranj-Dilaram route from Iran to Afghanistan. Chabahar is a port on the Iranian coast and is crucial to opening this alternative route. Iran, the spokesman said, planned to upgrade the Chabahar-Melak road and construct a bridge on the route to Zaranj. Iran, he
maintained, would facilitate the entry of Indian equipment and the purchase of material for the section of the road to be constructed by India. (www.hinduonnet.com)

According to highly-placed sources, the Iranian side is looking at diverting most of the trade to Afghanistan and Central Asia from Chabahar, located not far from its maritime border with Pakistan, while reserving the port of Bandar Abbas mainly for trade with Russia and Europe. The development of this route would have major implications for Afghanistan, Iran and India. Landlocked Afghanistan has so far been highly dependent on Pakistani ports for its trade. But access to Chabahar will give it more options to govern its overseas trade and lessen Islamabad's political leverage on it. The Afghan Government is keen to lower its political and economic dependence on Pakistan, as its core is made up of the erstwhile Northern Alliance leadership that fought the Pakistan-backed Taliban regime. (www.hinduonnet.com)

Iran, with the new arrangement, is positioning itself as the custodian of new trade routes to Afghanistan, Russia and Central Asia. Iran has already engaged Russia and India to improve the North-South Corridor that can carry goods from India to southern Iran and thereafter across the Caspian Sea into Russia and Europe. Iran, India and the Central Asian republic of Turkmenistan have also signed an agreement to transit goods from the Iranian port of Bandar Abbas to Central Asia via Turkmenistan. Goods can be transferred either by road or rail as the Iranian and the Central Asian railway systems have been inter-connected since the mid-nineties. (www.hinduonnet.com)
For India, the Teheran meeting is seen as a consolidation of its post-Taliban Afghan policy in partnership with Iran and the new dispensation in Kabul. Iran, India, Russia and the Northern Alliance had earlier worked together in seeking the removal of the Taliban from Afghanistan and the Teheran meeting is seen as part of New Delhi's effort to add a new strategic dimension to this relationship.

India also committed 70 million US dollars for the construction Zaranj-Dilaram road. In addition, an Indian consortium has been engaged by the Iranian Ports and Shipping Company to undertake development work at the Chabahar port and on the Chabahar-Fahraj-Bam railway link. (Berlin, October 2004, p. 5) Earlier, in February 1997, India along with Iran and Turkmenistan had already entered into an agreement to transit goods from the Iranian port of Bandar Abbas to Central Asia via Turkmenistan. As such the agreement provides for Mumbai-Bandar Abbas-Sarakhs route for carriage of freight onwards to Central Asian countries. (Parliament Q & A, Rajya Sabha) Goods can, therefore, be transferred either by road or rail as the Iranian and the Central Asian railway systems have been inter-connected since the mid-nineties. With the opening of Bandar Abbas route after the completion of the rail link between Meshed and Sarrakh on the Turkmenistan’s border with Iran, India’s difficult access to Central Asia has been totally changed.

During Prime Minister Manmohan Singh’s two-day state visit to Uzbekistan on April 25-26, 2006 at the invitation of the Uzbek President, Islam Abduganievich Karimov, various issues concerning energy figured prominently. The main hurdle is
Trans-Afghan transport corridor
how to bring hydrocarbons from Central Asia to India. In this regard, the issue of the transport corridor assumes significance. It is noteworthy that Uzbekistan will be an important connecting point in the new transport corridor between India and Central Asia, which is likely to come up soon. The new upcoming route connecting India to Central Asia via Mumbai-Chabahar-Zaranj-Dilaram-Herat-Naibabad-Khairaton-Termez and further, has great potential. It will reduce the distance by 1,500 kms when compared to the existing operational route, i.e., Mumbai-Bandar Abbas-Mashhed-Turkmenabad (earlier Chahar Su)-Bukhara. (Dwivedi, 25 April 2006)

TRANS-AFGHAN TRANSPORT CORRIDOR

Besides the above possible transport routes, there is hope on the Trans-Afghan Transport Corridor, which can be extended to India. The Corridor Project is viewed as one of the most pivotal social and economic projects. Apart from the direct beneficiaries, its realization meets the far-reaching economic interests of countries such as India, Azerbaijan, Armenia, as well as several European and Asian nations. The Trans-Afghan Corridor is the shortest route linking Uzbekistan with the Caucasus and southern destinations. It is twice as short as the Far East routes and 1.8 times shorter than the Baltic route, which provides Uzbekistan with access to Europe. The Corridor Project stipulates the construction of a direct route from the Uzbek town of Termez via Mazari-Sharif and Herat and Iranian communication systems to the seaports of Bandar-Abbas and Chabahar. (Embassy of Uzbekistan in Berlin Press Release, 27 March 2007)
During the visit of the Uzbek Foreign Minister, Sadik S. Safaev to India in November 2004, there was discussion on this corridor, which could be a new bridge between India and Central Asian Republics via Afghanistan. Safaev said, “Hopefully, our initiative to create the corridor would be materialized soon and will break our dependence on the existing communication systems by connecting Uzbekistan and large Central Asian market with India.” The proposed corridor from Uzbekistan and Mazar-e-Sharif will connect Herat, Dogarun, Dilaram or Melak in Afghanistan to Iranian ports and further on to Ahmedabad and Mumbai in India. (Online: Web, www.financialexpress.com)

To conclude, these transport routes are very important for India, Iran and the Central Asian countries. In particular, the idea of the North-South Corridor has multiple purposes. (Blank, 2003, p. 149) While it is an opportunity for Russia to bypass the Silk Road, Iran gains political and economic benefits from trade with Russia, Central Asia and India. And India gets access to Russian, Central Asian and East European markets for its goods, and links to a variety of energy import sources. Similarly other routes too have tremendous importance in terms of overall development. If these routes are opened, transnational trade will increase not only among the nations involved, but also other countries of the Asian and European region. Such trade and transit routes will provide a platform to ameliorate relationships and partnerships, reduce barriers and hurdles, and to improve communications. All these would permit the economies of each country to grow independently, achieve their national economic objectives and enhance economic
growth and development that benefit them without compromising their own national unity, integrity and solidarity. Keeping in view the importance of these trade and transportation routes, the policy makers of these countries should make all out efforts to realize these goals for the greater benefit of the individual countries as well as the entire region. In this background, the next two chapters will discuss India's political, diplomatic and economic relations with Uzbekistan and Turkmenistan.