ABSTRACT

Title: An Analytical Study of the Supply Chain with Respect to Transportation Between India and CIS Region.

The aim of the study is to analyze the existing supply chain with respect to the transportation of various goods and commodities between India and Commonwealth of Independent States (CIS) region. India’s trade with CIS during the year of 2006-07 was USD 5.3 billion. However, the total trade turnover between India and CIS region has been volatile since 2001-2002.

Problem:

Supply chain management is one of the most critical activities in case of commodities. Traders need to streamline their logistics cost in order to remain competitive in the international market. In India, logistics cost as a percentage of GDP adds up to 13%. The comparative figure for US is 8.7%, Japan 11% and Europe 12%3. Indian traders are generally small (in terms of value of trade turnover per year). This restricts their investment ability and also the risk taking capability. As the knowledge sharing in this industry in India is relatively lesser than that in other countries, it becomes even more difficult to use common channels for supply by a group of traders.

In India, transportation is one of the major cost elements of the supply chain and accounts for nearly 40% of total cost of logistics4.

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1. The Commonwealth of Independent States (CIS) was established on December 8, 1991, by the Minsk Agreement signed by the Heads of States of the Republic of Belarus, the Russian Federation and the Republic of Ukraine.
2. Sourced from Directorate General of Commercial Intelligence & Statistics (DGCIS), Ministry of Commerce & Industry (MOC).
3. Sourced from an article on “Maritime logistics” in Livemint.
4. The logistic challenges of doing business in India by Mike Kilgore, President Chainalytics LLC; Abraham Joseph, Managing Director for India, Chainalytics, LLC; Jeff Mettersky, Vice President for strategic Planning, Chainalytics LLC – Logistics Management, 2/1/2008.
Although the road network in India is one of the largest in the world but only 20% is in good condition and also road traffic has been increasing at the rate of 10% per year since 1951. Deficiencies in the road network and congestion at the ports and less developed aviation systems hold back the foreign investments in India. The road freight industry consists of small players and total transport function is also shared among many players.

There is almost no road connectivity for trade purposes between India and CIS, so most of the times exporters and importers have to take the sea route only. Indo-CIS trade primarily moved through the Black Sea ports of Odessa, Illichevsk and Kherson. But over time on account of increasing goods traffic from Central Asian Republics (CAR), there has been increase in transit costs including rail freight. These alongwith transit delays have started making transport through Black Sea route uneconomical. One viable alternative appears to be international trade cargo movement through the ports of Bandar Abbass and Bandar Khomeini in the Persian Gulf and by the land route across Iran. The trade through land route will not only generate foreign exchange for every country on the route but it has the potential to provide a lot of employment, enhance multicultural activities and people to people contract.

Some of the land routes have been used intermittently. But the new ones in consideration in this study are through Pakistan, Afghanistan, Iran, and one through China. Although India is not on very good terms with these neighbours, the opportunity of increase in trade and the consequent economic benefits may encourage these countries to give serious consideration to development of alternative trade routes proposed in this study.

India has 11 major ports but most of them are lacking in many facilities like night navigation, latest equipments etc. The road links to ports are highly congested which pose serious issue.

So far, there has not been much work in regard to development of land route from India to CIS region via Pakistan, Afghanistan, Iran or China. India has the potential to network with CIS via Iran through more intensive use of land routes for greater trade.

Sourced from "Impact of transportation infrastructure on logistics in India" by Vijayaraghavan, T A S dated 23 May 2007.
Viability of the study

A cut in transport costs will make Indian goods cheaper and, therefore, more competitive in CIS countries as well as European markets via Russia. The land route will not only boost India’s trade with CIS countries and Iran but also that with the Baltic States and the Central Asian Region.

In order to pave a way to overcome the problem, the present study envisages to fulfill the following objectives.

Objectives:

a) To study the composition of supply chain between India and CIS countries with respect to Transportation.

It is virtually inconceivable in today’s economy for a firm to function without the aid of transportation. Transportation is an essential and a major sub-function of logistics that creates time and place utility in goods. In fact, the backbone of the entire supply chain is the transportation management that makes it possible to achieve the well known seven Rs- the right product in the right quantity and the right condition, at the right place, at the right time, for the right customer at the right cost.

The importance of transportation should also be seen by looking at its impact on a country’s economy. The major infrastructure required for moving goods from one place to another in India involve the active roles of Roads, Road Freight Industry, Railways, Ports and Shipping, and Pipelines, all of which are either managed or regulated by the government.

The deficiencies in the road network in India are causing huge economic losses because of slow transportation. The delay on the roads and ports also results in high inventory cost for the industry, thus affecting its competitiveness vis-à-vis
international industry operating on JIT (just-in-time) principles. The congestion at the ports and the insufficiently developed air services also affect foreign investment decisions, which often place a great premium on the infrastructure. International trends indicate that with the growth of the highway and aviation technologies, the traffic tends to shift away from the Railways. However, in the continental economies like United States, China and Russia, the Railways have maintained their dominance. India's size, geography and resource endowments also mandate a dominant role for the Railways, not to mention the environmental considerations, which in recent years have caused a rethinking even in the developed world.

This study would emphasize the need for a land route to make the trade between India and CIS countries much more viable. Reduction in the transportation cost by using a land route for transportation would help make the Indian goods competitive in CIS market.

b) To study the viability of land route from India to CIS countries

This land route development is a critical issue for both India and CIS countries. The reason behind is the pricing of commodities. Currently the route followed by the traders is multimodal. It is a mix of air, sea and land routes. While air route is very expensive, sea route is both costly and time consuming. Air route takes very less time but given the pricing mechanism of products if the quantity traded is not high the per unit air fare becomes very high. For sea route, on the other hand, the time taken is very high as generally the route which is taken is a very long one and also the insurance costs makes the shipping even more expensive option.

A land route between the regions would help Afghanistan and Pakistan benefit from the trade between Central Asian States and India. The trade route would not only generate substantial income for the cash starved Afghan Government, but it will also help improve Pakistan's relation with arch rival India as well as with CIS countries.
For Afghanistan, the issue of having a land route to India is more urgent: India used to be Afghanistan’s largest trading partner until 1979. Revival of land trade route would bring much needed cash into Afghanistan, providing a push to the economy and a vote of confidence in a country brutalized for years.

A viable and all time running land route would boost the trade dramatically. It would help India strengthen its trade relationship with CIS countries as well as countries like China and Pakistan. It would be a positive step towards better relations with the neighbours.

c) To study payment procedures followed in trade between India and CIS

Here the attempt is to study the current payment systems those are in practice in CIS countries. A detailed study of the legal payment systems like cash in advance, consignment sales, letter of credit etc is done. There is abundant trade which is taking place through Hundi system. The existence of such system along with the need of same has been studied in detail.

The primary purpose to study various payment procedures is to find out the deficiencies in the payment systems and how can it be streamlined to make it hassle free thereby encouraging more number of traders to participate in Indo-CIS trade.

Scope:

The study is restricted to the transportation for commodities and goods from India to CIS countries. Not withstanding the restricted scope of the study, it will help in identifying weaker areas of the supply chain in terms of transportation from macro as well as micro view points and recommend suitable strategies. There are many things to be seen in case of transportation to CIS countries. On the surface these things might look small but they affect trade practices heavily. How an issue of custom practices in India and CIS affect the trade volume is a case in point. Another example could be viability of land route which is very important aspect to study.
Limitation:

Major limitations were non-availability and reliability of corporate data. Non-availability of a database having the details of firms trading with CIS countries was a major limitation. Many a time, corporate was not ready to reveal trade related information/data as they suspect the motive of survey. On the other hand there are many traders who are comfortable with these kinds of surveys but still hide many trade related useful information. In such cases it is difficult to check the authenticity of the data.

Methodology:

A study was initiated to find out the following variables among the exporters/importers from India. This helps in defining the composition of the land route.

Also help from secondary sources obtained in analysing the composition of the Transportation.

Variables measured in the survey are total export/import, the target market, nature of business, understanding and perception of the trade formalities like code, description of item, custom procedure etc., and payment procedure. These include various infrastructure and logistics apart from extra transaction cost incurred by the trader due to various procedural measures and malpractices on part of government authorities.

Snowball sampling method was followed. The database of exporters and importers having trade relations with CIS countries was generated through internet search. In addition, as the second step, industry associations like Confederation of Indian Industry (CII), Federation of Indian Chamber of Commerce and Industries (FICCI), PHD Chamber of Commerce and Industry (PHDCCI) were contacted. A database was purchased from Federation of Indian Export Organisation (FIEO) containing the list of Indian companies involved in export & import but it had had only few firms dealing with CIS.
Relevant export promotion bodies in various major cities of India (Delhi, Mumbai, Kolkata & Bangalore) like FIEO, Indian Tea Association, Chemicals and Allied Products Export Promotion Council, Engineering Export Promotion Council, Agricultural and Processed Food Products Export Development Authority (APEDA), Soybean Export Promotion Association (SOPA), Rice Exporters Association, Bombay Chamber of Commerce were also identified and list of exporters was obtained. But when these exporters were contacted almost all of them denied that they were trading with CIS. Thus majority of the exporters and importers were identified through references.

The sample size was 57 traders in four cities across India namely, Delhi, Kolkata, Mumbai, and Bangalore. Apart from direct exports and imports, indirect exports and imports have also been seen at the time of interview.

The data then are processed to arrive at three transportation alternatives, out of which one has been extensively used by the traders as of now. The routes are compared on basis of distance. Each route is detailed with respect to distance and efforts are made to find out the best possible route.

Basic method of payments used by the exporters and importers are cash in advance, letter of credit, documentary collection or draft, open account and other methods like consignment sales etc. But with every payment method there are some risks involved. In any transaction it is tried from each side that their risks are minimized. Efforts are made to understand the payment through each mode and an analysis is also offered on illegal method of payment, which is known as hawalla.

Data Analysis and Major Findings:

Following are supply chain composition in terms of transportation from survey in case of three different products.
CASE A:

Name of commodity: Meat

Exporter: Delhi

Slaughtering, De gland and De boning is done in Meerut in UP.

Mumbai: It reaches Mumbai at exporter’s cold storage in 72 hrs at cost of Rs 4/kg

Bandar Abbass: From exporter’s cold storage Meat goes to Mumbai port. Before that at cold storage packaging and labeling is done. Then according to demand it is sent to Mumbai port. This particular activity takes around 8 days. From Mumbai port the meat goes to Bandar Abbass in 6-7 days. For this ocean freight is around USD 1800-2000. CHA charges around Rs.12000 per container.

CASE B:

Name of Commodity: Drugs

Exporter: Mumbai

Exporter’s factory: at factory, packaging and labeling is done. Insurance of the consignment is also done. Transportation costs around Rs. 150 to 200 per kg. It includes the charges for clearance at the airport. Insurance charges are .25% of the invoice value.

Packaging & labeling takes around 5 hrs and inspection around ½ hr. From factory to Mumbai airport takes 1 day.

Mumbai airport: custom clearance & inspection is done which is managed by freight forwarder. Air freight charges from Mumbai to Tehran come around Rs 110 per kg.

Customs clearance and inspection takes around 1 day and cooling period also takes around the same time. Mumbai to Tehran it takes around 2 hrs.
CASE C:

Name of commodity: Aluminum sheets

Exporter: Kolkata (sea)

Renukot: Costs around Rs 30000-35000 inclusive of loading and transportation charges from Renukot to Kolkata at exporter’s godown. Time taken is around 4 days.

Kolkata exporter’s godown: CHA files documents for clearance. Charges are around Rs 2500.

Pick up container from exporter’s warehouse for checking and stuffing the container. Charges around Rs 2000-2500 for 20 ft container. After appraisal by custom officer container goes to Kolkata port. Port charges from the custom warehouse is around Rs 1100 (public goods) and Rs. 2000 for private goods. Consignment remains there for around 2-3 days depending upon the availability of the feeder vessel.

Kolkata port: from here container goes to Bandar Abbass via Singapore by ship. This takes around 17-21 days.

Singapore: transshipment of goods is done at Singapore and then goods move to Bandar Abbass which takes around 12-14 days. Transshipment takes around 1-2 days at Singapore.

Export of goods to CIS countries

- 17% of the traders interviewed feel that customs procedures are more complex when exporting to CIS than when exporting to US/UK in similar products.
- More than 25% of the traders feel difficulty in understanding codes.
- A large percentage feels custom classification as a problem. As these issues elongate a trade transaction time, they make business people feel distracted from trade.
• 14% of the respondents told that they have problems with rules of origin for exports to CIS.

**Import of goods from CIS countries**

• 22% of the respondents feel that customs procedures are more complex when importing from CIS than when importing from US/UK in similar products.
• Many respondents told that Customs generally mentions that the categorization is not clear, so please submit the catalogue.
• Almost One third of the respondents told that customs valuation pose problem for them.
• Importers use industrial tribunals for dispute settlements but still the percentage is very low.

**Existing routes and Proposed Land Routes:**

**North-South Corridor:** New Delhi, Moscow and Teheran signed an agreement in St. Petersburg on September 12, 2000 for sending Indian Cargo to Russia through a 'North-South Corridor'.

According to the arrangement Indian goods will be sent from Mumbai or Okha to the Iranian hub of Bandar Abbas via the Strait of Hormuz in the Persian Gulf. From here, containers will be reloaded on trucks or railway wagons and dispatched to the Iranian port of Anzali on the Caspian Sea. After transhipment at Anzali, goods will be loaded on ships and taken to the Russian port of Astrakhan.

[Sketch of Existing and Proposed Land Routes]
Astrakhan, in the past, has been the springboard for expanding Tsarist Russia's influence towards Central Asia. The land route from Astrakhan to the Russian mainland is straightforward and containers from here can be sent either to Moscow or St. Petersburg.

**India-China-Kyrgyzstan Route:** China is connected by road to Kyrgyzstan through the Xinjiang province. India could use this road by constructing a link road in Ladakh joining the Tibet-Xinjiang road. Ladakh is already linked by road with Himachal Pradesh. Therefore, connectivity is what India and the CIS should focus on if existing relations need to be strengthened.

**India-Pakistan-Afghanistan-Turkmenistan Route:** The shortest route from India to the Central Asian republics is through Pakistan and Afghanistan. Goods from Delhi can be transported from Lahore, Peshawar, and Herat to reach Turkmenistan. However, the route to booming trade and economic development is not without obstacles. The potential of the transport corridor will be determined by the funds available to upgrade their rail and road networks and other related infrastructure. However, the potential for Indian-Central Asian trade has been hamstrung by the India-Pakistan rivalry.

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1 International North-South Transport Corridor (INSTC), is a multi modal transportation established in 12 SEP 2000 in St. Petersburg, by Iran, Russia and India for the purpose of promoting transportation cooperation among the Member States. This corridor connects India Ocean and Persian Gulf to the Caspian Sea via Islamic republic of IRAN, then is connected to St. Petersburg and North European via Russia Federation. The INSTC was expanded to include eleven new members, namely: Republic of Azerbaijan, Republic of Armenia, Republic of Kazakhstan, Kyrgyz Republic, Republic of Tajikistan, Republic of Turkey, Republic of Ukraine, Republic of Belarus, Oman, Syria, Bulgaria (Observed). (Source: website of International North-South transport corridor).
While considering alternative routes between Indian and CIS countries, the researcher found that the best route would be India-Pakistan-Afghanistan-Turkmenistan because the distance is shortest compared to India-China-Kyrgyzstan route. The shorter route will reduce transit time and transportation cost. Also, the India-China-Kyrgyzstan route via Ladakh may not be operational during winter months due to heavy snowfall.

**Conclusion and Recommendation for further studies:**

1. Most of the traders in one way or the other is using sea route. As the sea route is longer than the possible land routes, the budgets for transportation consume large part of investment if the sea route is taken. In such condition as it has been proved above that land route is very economical, efforts should be made from both the sides to develop an efficiently working land route.

2. Both the countries should reduce the custom procedures for each other or should at least try to make them less complex.

3. Healthy and transparent trade practices should be promoted for long lasting relationships.

Both India and CIS need to work together to establish some kind of bilateral or multilateral arrangement to facilitate the smoother transport of the goods. Land route to CIS countries via either Pakistan or China can reduce the cost of transportation drastically. It would automatically make the Indian goods competitive in the CIS market. Both the sides should try and enter into bilateral agreements on customs. These agreements not only give direction to the trade but also they benefit it in more positive way. Also a sense of compulsion comes in which in many situations turns into better performance. In this sense giving each other status of most favored nation can also help. This would serve as an incentive for businessmen wanting to do business in both the countries. Not only this but both the countries should sit together and discuss a plan about how they can leverage upon each other’s researchers. These researchers if carry a detailed study which is free from biases can indicate major loopholes in each other’s system which can be rectified to improve
the trade relations. Also this will provide enthusiasm the otherwise scared businessmen to do business in these countries.

The trade relations between India and CIS are weak because of less developed financial institution network between the two. Both the countries should try to develop direct relations between existing or newly formed financial institutions and banking agencies. This would help in clearing a trade transaction much faster than today. Also as this is one of the main inhibitions in the business community, this is something which should be taken care of as soon as possible. This would also help in reducing the illegal practices like Hawala trade.

Security is one of the major concerns for every country today. As we are globalizing more we are getting entwined in a close network. If the countries start cooperating on the security front then it will become easier for the countries to rely more upon each other. Both the countries should also try to create regional/sub-regional avenues for cooperation between the CARs and South Asia.

For the recommendations on further studies, it can be said that later on a comparison of non branded and branded product supply chain could be taken up. This would not only show up the loopholes in each of them but also will give direction as in which practice of one supply chain can be implemented in another. To improve this study more if the direct contact with the traders in CIS is possible then it would add more authenticity to the study. Also some live case studies can be incorporated as the part of study.