# Public sector innovation and national highway development project economics essay...

Technology, Innovation



India had its rendezvous with fate on 15 August 1947 when it got independency after about 200 old ages under British regulation. India started its procedure to construct up the state so by following the policies of socialism, be aftering committees. However it was marked by ruddy tapes, controls, bureaucratism hurdlings, and authorities intercession. For about 40 old ages India grew at a slow gait of 3. 5 % which is now called Hindu rate of growing. In 1993 India dwelled into a new way to growing. The markets were opened ; liberalization and globalisation were the words of the twenty-four hours. However India could ne'er go the success narrative which it became without revamping its decennaries old transit substructure. India was now turning at a modest gait and to do certain that the growing degrees are increased and maintained it became imperative that the logistic substructure be improved.

Acknowledging these endangering jobs India under the regulation of NDA (National Democratic Alliance with the BJP as biggest party in the confederation) with the auspices of the so premier curate Atal Bihari Vajpayee announced a monolithic undertaking to revamp its substructure. It was called `` National Highway Development Project '' which paved the way for a new epoch of growing.

## Introduction

National Highway Development Project was implemented in 1998. It planned to widen, reconstruct the national main roads of the state which accounted for less than 2 % of the entire route web in India but carried about 40 % of the route traffic. Road denseness in India is among the lowest at 2. 75km per 1000 people and 770 kilometers per 1000 sq kilometer compared to 6. 7 and 841 resp. ( TCA Anant, 2008 )

The stage I of the undertaking was called the Golden Quadrilateral (GQ) Project. Subsequently seven more stages have been launched and the undertaking has been extended to cover all the of import hubs, ports to this national main road grid.

# The Undertaking

The bureau responsible for execution of NHDP was National Highway Authority of India (NHAI). It is a nodal bureau under the Ministry of Road Transport and Highways, Government of India. The stage I and phase II of the undertaking aimed at building and up step of 13, 146 kilometers of national main roads into 4 to 6 lanes. The aureate guadrangle undertaking and the north South and east West corridors were portion of these stages. Golden four-sided undertaking aimed at bettering route connectivity between the four metropolitan metropoliss of India viz., New Delhi, Mumbai, Chennai and Kolkata. Other major towns like Ahmedabad, Surat, Vishakhapatnam, Pune, Bangaluru were besides supposed to be a portion of these national main roads. East west corridor connected Silchar in E to Porbandar in West. North south corridor connected Srinagar in north to Kanyakumari in South. Phase III plans to incorporate the province capital and major economic hubs with the NHDP I and II and entire 12, 109 kilometer of main roads will be upgraded in this stage. In stage IV around 20, 000 kilometer of national main roads will be constructed and upgraded. These are majorly the main roads that were non a portion of stage I, II and III.

Phase V envisages to upgrade 5000 kilometer of 4 lane roads into 6 lane roads. The authorities still has to make up one's mind which subdivisions of the main roads will be upgraded in this stage. Phase VI plans to build freewaies in India on BOT footing. These freewaies will link major industrial towns of India. Phase VII plans to construct beltwaies, overpasss, pealing roads to increase route web in metropoliss to national main roads.

### **Economic Impact**

As the assorted undertakings were launched there was a rapid rise in the creative activity of occupations. There was besides a immense employment coevals in both skilled and unskilled sectors. During the stage I about 250000 individuals per twenty-four hours were required or around 40 individuals per km per twenty-four hours. ( www. nhdp. org ) . Assorted sectors like steel, cement industry and equipment makers saw high growing rates during the period. As per figures from imperativeness information agency, Government of India growing rate in cement, steel and commercial vehicles were 8. 1 % , 6. 8 % and 55 % severally. ( www. nhdp. org )

There was a direct correlativity in the advancement of the undertaking and the GDP growing. By the clip the stage one was approaching completion India was timing a GDP growing of more than 8 % systematically. Harmonizing to World Bank the one-year benefits the one-year benefits were about Rs 8000 crore on the GQ undertaking itself.

There were a batch of indirect benefits which were to be realized with the undertaking. These were chiefly a decrease in clip for transit of cargo and riders. There will besides be a decrease in vehicle operating costs, fuel costs, and care costs. As the roads will be made the connectivity of rural parts with the nearby major towns will better thereby impacting thedevelopment of the country. It would take to faster motion of the green goods and will profit trade. Most significantly there would be a great decrease in accidents.

During the clip another strategy `` Pradhan Manti Grameen Sadak Yojana '' was besides envisaged and implemented by the authorities. The strategy vowed to better route substructure in the rural countries. It was decided to construct roads in the small towns and link them to the national main roads. Thus the thought on the portion of the authorities to better basic substructure was truly applaudable.

In January 2012 when the authorities announced that the aureate undertaking is complete it was the 5th longest main road in the universe. The undertaking was completed in Rs 32000 crores and was under budget as the authorities had estimated that the undertaking cost would be Rs 60000 crore ( at 1999 monetary values ) . The undertaking was besides a first of its sort when it was completed before agenda which is new for a undertaking of this graduated table.

The authorities was really dedicated to finish the undertaking and because of this allowed 100 % FDI in the sector. This was one of the earliest sectors where 100 % FDI was allowed. However, recognizing that it would still non be able to bring forth adequate funding for the undertaking assorted funding theoretical accounts was adopted. Cess on gasoline and Diesel along with external and market adoptions were adopted to raise capital for the undertaking. Private partnership was introduced to raisefinanceand joint ventures with international contractors were made.

# **Financing of Highway Projects**

History

Until the creative activity of National Highway Authority of India (NHAI), roads were treated as public goods. The funding for developing and keep these roads came chiefly from revenue enhancements. There was no or really small connexion between cost of developing the roads and the income from the revenue enhancements. There was really small effort at direct route pricing.

#### The Problems

Limited Support: Highway development requires big investings but the authorities was already under big financial shortage.

Inefficiencies: There were big inefficiencies that led to project over tallies thereby intensifying the undertaking budgets exponentially.

Hazard: With full development with authorities, all hazard was concentrated at one point. This strained the funding capableness of the

#### Creation of NHAI

NHAI started its operation in 1995, the major motive for an independent organic structure under authorities of India was to increase the rate at which

national main roads were been developed. One of the major hinderances in increasing this gait was the limited capital available with the authorities. NHAI realized that to full make full its vision it has to look outside authorities for capital to develop its national main roads.

The Financial Innovations

To understand the fiscal inventions at NHAI, foremost we have to understand the assorted hazards associated with building of National main roads

Pre-development: Environmental clearance, land acquisition and other such demands before the building of roads can be done. Delaies in acquiring clearances cause holds and dearly-won undertaking over tallies.

Construction: Changes in designs, conditions and geological conditions, financess inaccessibility, incorrect planning of material handiness and unanticipated labor deficits may take to project over tallies

Use: Less than expected route use, users unwillingness to pay higher toll rate, may significantly impact the grosss from the route.

Foreign exchange rate: Fluctuations in exchange rate may take to important cost over tallies for abroad developer

Act of God: Natural catastrophes like temblor, inundations may take to holds and rework. These will take to important cost impact on the undertaking. Political Hazards: Change of authorities, expiration of the undertaking, undue infliction of high revenue enhancements, may set considerable fiscal hazard on the undertaking.

The assorted funding theoretical account implemented by NHAI are

EPC (Engineering procurance and building) contract: The undertaking is wholly finance by the public financess (E. g. World bank/ADB). Except for building hazard all hazards are borne by NHAI. The advantages that NHAI has achieved through this manner are rapid execution of undertakings, improved quality of roads, foreign investings organize big multinationals. The inefficiencies involved in development of big substructure undertakings like national main roads have been minimized. Foreign multinationals have set up joint ventures with Indian companies driving up inventions and successful execution of undertakings

Annuity Contract: Financing of undertaking is done from the contracted rente. Undertaking is financed through these rente receivables. But the fiscal hazard is borne by NHAI. Here NHAI is responsible merely for financing the undertakings. Advantage for NHAI in this manner of funding is that, it has to pay the contractor every twelvemonth specific sum to construct the route.

BOT contract: Build operate and transportation as the name suggest, the company to wins the contract has to construct the roads, maintain it and bring forth grosss so as to acquire back all themoneyinvested and so reassign the main road back to authorities after specific period of clip. These contracts are project fundss, with all the capital coming from the private participants. A particular purpose company is created and all the hazard except for political hazard is borne by it.

EPC and Annuity presently dominate majority of the undertakings. Therefore most of the hazard is still with NHAI.

For undertaking funding as in instance of BOT contract, the certainty of use of main roads and thereby the toll aggregation is really less. This puts a batch of hazard on the investor and hence really few BOT contracts have been materialized.

Is Securitization the solution?

National main roads have long gestation periods, with hard currency flows coming really tardily in the entire undertaking continuance. This puts considerable fiscal hazards on the private company to take is such undertakings. To minimise this hazard securitization mechanism can be put in topographic point.

Securitization is a manner of finance in which assorted hard currency flows are pooled together and sold to particular purpose vehicle created to implement this undertaking. SPV so issues debt securities which are backed by the hard currency flows.

Is the feasible solution to hike main road development in India, should NHAI implement this theoretical account?

## Challenges

Land Acquisition Act, 1984

When railroad web was being expanded in India in the nineteenth century the British Government so swayers of India faced jobs related to the private land acquisitions. They so enacted and passed the jurisprudence whose first ordinance was passed every bit early as 1824. India adopted the jurisprudence in 1947 to chiefly take attention of land acquisition for public usage. However this was merely a land acquisition jurisprudence and did non had commissariats for rehabilitation. Presently the authorities has to cover with this act along with 16 other Acts of the Apostless for commanding private land acquisitions by the authorities and its organic structures.

Harmonizing to the jurisprudence the land has to be valued at monetary values on the day of the month of presentment and the compensation has to be paid consequently. However, this had led to broad spread unfavorable judgment and protests from land proprietors. The authorities has been dragged into a figure of differences refering to set down acquisitions. Presently over 80 NHDP undertakings are acquiring delayed due to differences in land acquisition. It is argued by a subdivision of society that the regulations under the act are Draconian. The compensation paid by the land acquisition officer to the land proprietors is besides less than the market value due to money being siphoned off at many phases due to corrupt functionaries. There are charges that the land is under evaluated by the functionaries and when the compensation is being paid at below market monetary values to the land proprietors there is non much public-service corporation for them. Besides, non much attention is taken about rehabilitation of the people who are displaced by the undertakings.

The authorities had appointed commission to see into all these issues and to come up with new recommendations to better the act. The authorities is be aftering to postpone a new jurisprudence in the parliament nevertheless the bill of exchange has led to fresh concerns by the industries and societal militants likewise. The new jurisprudence will do cost of land acquisitions up to four times the market rate in rural countries and twice the market rate in urban countries. Still the societal militants argue it to be pro-market and one which will increase land differences. The investors and houses argue it to be one which will do investings in undertakings dearly-won. President of Confederation of Indian Industries ( CII ) Adi Godrej said after reading the commission 's recommendations `` Rather than turn toing concerns of the industry over the commissariats of compensation and consent required for land acquisition, the recommendations of the commission do non look to be taking into history the demand of the industry, thereby, go forthing it to fend for itself, "

#### Coordination among ministries

In India acquiring blessings for substructure undertakings requires a close coordination between assorted cardinal, province and local municipal degrees. It involves coordination amongst all these parties and leads to detain in acquiring undertaking approved. This finally makes the fiscal viability of the undertaking questionable. (Wang et al, 2000). Despite authorities confidence of a individual window and fast clearance of substructure undertaking they are still acquiring delayed due clearances

involved.

Change of authorities and its precedences

The undertaking was envisioned during the government of NDA in 1999. However, when the elections were held in 2004 UPA (United Progressive Alliance) came in to power and has been in power for the last 8 old ages. There focal point has shifted to other public assistance strategies like MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act ), farm loan release among others. This has shifted the precedences of the authorities to raise fundss for its public assistance strategies and non the NHDP undertakings. Subsequently, the undertakings have been running on holds and many undertakings have delayed because the contracts have still non been handed over.

## Roadmap

Given the challenges being faced will the authorities now take steps to convey in fresh reforms in the sector so that the marks of NHDP are met? This might affect taking in some tough steps which might be opposed by subdivisions of society. However, will a better sense prevail and a greater good of the society, GDP growing ends be achieved.