

# Study of Land Acquisition Issues causing delay of NHAI Projects

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**Abstract:** India's long-standing problems in delay in highway project included lack of funding, weak capability to implement projects, poor policy coordination, and delays in decision making. The government took actions to fill up the financing gap, such as increasing the funds for highway development and facilitating private sector participation. Despite these efforts, fundamental issues still remained including introducing more sophisticated financial instruments, diversifying methods to involve the private sector, and enhancing the financial and managerial autonomy of the National Highways Authority of India (NHAI) for eventual corporatization. During last financial year about 40% of projects totaling 14,000 km and costing around Rs 94,000 crores got delayed, and 70% of these are managed by NHAI and the total cost of these works is close to Rs 80,500 crores. NHAI was implementing 185 projects during 2014-15 costing Rs 1.36 lakh crores. Out of the 185 projects, 120 were delayed. This covered 9,376 km and their total cost was around Rs 80,500 crore. The major role in the delay of project is due to Land Acquisition, which is a major part of concern in our research work.

The paper deals with analysis of Western Transport Corridor which was funded by ADB. The Western Transport Corridor, comprising NH-8 and NH-4, connecting Delhi, Mumbai, Bangalore, and Chennai (Golden Quadrilateral) is one of the busiest corridors in India. The section between Bangalore and Mumbai falling within NH-4 also has high traffic volume. At appraisal, the project was envisaged to be implemented over 48 months, inclusive of procurement and pre-construction activities, and was expected to be completed by 30 June 2005 but it was completed on 7 August 2012.

**Keywords**— Project Delays, National Highways Authority of India (NHAI), Time Overruns, Land Acquisition

## I. INTRODUCTION

Time is money and the delay in any construction project affects time and hence money, which is the essence of any economy. The timely completion of highway construction projects is well-thought-out one of the most important factors referring to the project success, as well as the quality and the safety. Uncertainties, risks, delays related to land acquisition, protests and resistance on the part of the displaced have become the most important tailback for investments exclusively in the infrastructure sector. To be sure environmental protest that has a mass following also have their roots in the problems of land acquisition and rehabilitation. Thus if the problems arising out of land acquisition, rehabilitation and environment (especially environmental protest) are considered together, they account for the irresistible cause of delays, cost overruns and high risks in projects today.

This paper includes the issues regarding the acquisition of land in the highway projects in pre-execution process or during execution. It also enumerates the different types of process involved in land acquisition. The issues are also there in various fields like railways, canals, buildings etc.

**1: List of NH projects delayed due to Land Acquisition [2]**

State	Name of Project
Assam	1. Construction of new 2 lane road with paved shoulder from 52.00 to 67.600 of NH-154
	2. Reconstruction and widening of 2 lane from km.67.600 to 89.000 of existing road including paved shoulder of NH-154
	3. Construction of 20.35 km.2 lane Tinsukia bypass with paved shoulder between km.635.800 to km.653.400 of NH-37.
	4. Construction of 2 lane highway with paved shoulder between km.603/00 to km.637/0 of NH-37.(bypasses of Mohanbari, Chabua and other villages)
	5. Construction of 2 lane NH-37 with paved shoulder from end of rob at Makum TO NH-52 near Rupai.
	6. Realignment and construction of 2 lane NH-37 with paved shoulder from Rupai to Tallap.
Arunachala Pradesh	2 laning of NH-229 from Nechipu to Hoj section
Bihar	1.Construction of road NH-102 Takiya bridge in km.
	2.Patna-Muzaffarpur
	3.Laning of Mokama-Munger (Approved Length 70 Km)
Jammu & Kashmir	1.Upgradation of Srinagar-Uri (NH-1A)
	2. Construction of 2 Lane Road Batote -Kishtwar-SinthanpassAnantnag (NH-1B)
	3.Double Laning Of Road Srinagar-Kargil-Leh (NH-1D)
Goa	1.Goa -Karnataka Border -Panaji
	2.Maharashtra-Goa Border -Panaji
Kerala	1.Cherthalai To Ochira
	2. Ochira- Thiruvananthapuram
	3.Kerala/Knt Border-Kannur
	4.Kannur- Kuttippuram

	5.Thiruvananthapuram-Kerala/TN Border 6.Vadakkancherry-Thrissur(KL-3) 7.NH-Connectivity To ICTT Vallarpadam
West-Bengal	1.Dalkola Bypass 2.Siliguni-Islampur 3.Bahrapore-Farakka 4.Farakka-Raiganji 5.Raiganji-Dalkola 6.Barasat-Krishnagar 7.Krishnagar -Bahrapore

*Source: www.cerebral business .com, www.cerebral business research.mht*

## II. LAND ACQUISITION ISSUES CAUSES DELAYS IN HIGHWAY PROJECTS

Land acquisition in India is the process by which the Central or a State government in India acquires private land for the purpose of development of infrastructural facilities, industrialization or urbanization of the private land, and provides compensation to the affected land owners and their rehabilitation and resettlement.

Land acquisition in India is overseen by the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (LARR) and which came into existence from 1 January 2014. Till 2013, land acquisition in India was administered by Land Acquisition Act of 1894.

### *Issue 1: Efficiency of (Non- Government Organization) NGOs*

An NGO (Development Management Trust) was hired to assist the EA in effectively implementing the RP and to provide psychotherapy to APs. An NGO tasked to be responsible for such responsibilities so that to have a strong local presence and maintain close relationship with APs. The project WTC, comprising NH-8 and NH-4, connecting Delhi, Mumbai, Bangalore, and Chennai, is one of the busiest corridors in India. Support for road safety, capacity building and project implementation including land acquisition and resettlement activities were also provided. In this project the NGO was not as effective as originally visualized. The NGO was not locally based and hence it could not be expected to immediately have empathy with the APs and to be ethnically delicate to the Project-affected villages. Most of the time, the APs alleged the NGO as “an agent of NHAI” and not as an independent organization who would look out for their

welfares. The NGO failed to strategize for the effective income generating activities of APs. The NGO didn't perform as the facilitator to guide and advice APs on how best to utilize their compensation and assistance packages, even in creating linkages between APs and the government's development schemes, local finance institutions, and to encourage enterprise development. Moreover, the NGO didn't play an active and effective role in coordinating with the contractors in providing employment to APs, only few of the APs were employed.[3]

Typically people whose habitants and land are taken over by the government suffer a lot and their protest while unsuccessful result in much social loss and arouses the sympathy of the intellectuals so much so that a significant anti-development orientation among people, especially the intellectuals and (Non-Government Organizations) NGOs builds up.[4]

### *Issue 2: Compensation and Entitlements*

For this issue we are dealing with the same case of the project WTC which was funded by ADB. The compensation, entitlements, and accountabilities associated with impacts under the Project were set out and the detailed suitable matrix was developed. The APs suffered land losses have been categorized under two categories:

- (i) APs losing a part of their houses,
- (ii) APs losing entire houses.

Provisions had also been made for loss of orchard lands and private factory lands. In general, compensation at market rates would be paid to all persons losing lands. Compensation for loss of structures was computed at current construction (replacement) cost levels. Income losses would be compensated accordingly.

ADB's IR Policy stipulated that compensation for APs will be at replacement value of the asset. However, the laws and regulations in India, particularly the Land Acquisition Act, allow compensation at market value which is decided based on the asset registration value and is generally lower than the replacement value. In the case of agricultural land, the NHAI used certain approaches to calculate the replacement value of land. There was no established formula to derive the replacement value for urban land. NHAI calculated compensation as per the National Highways Act at government rate. A provision for arbitration was made

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available to the APs. Also the APs could appeal to the Arbitrator in case they were not satisfied with the compensation received.

According to the findings, the compensation was to be paid to APs in December 2002 or several months after the land acquisition notification was awarded between 2000 and 2001 and the issuance of the notice to land owners in 2002. After the receipt of the award in 2003, the APs came up to the Arbitrator but only received assistance between 2004 and 2005. The APs related that it took them endless excursions to the Arbitrator and NHAI office before they were able to receive their compensation, thereby rendering the whole process slow and inefficient.[3]

There are laws regarding land acquisition in most of the countries that require quick and acceptable monetary compensation for persons who lose their land and property. However, cash compensation has many undesirable consequences, predominantly for tribal and other marginal people. Tribal economies are in large part non-monetized, based on reciprocal exchange of goods and services; therefore, people are not well accustomed to managing cash.[5]

**Issue 3: Resettlement Plan**

The implementation of the RP, including land acquisition, was to be completed within 18 months from the start of the Project. Implementation of the RP including land acquisition, resettlement costs and services of NGOs, was estimated around Rs750 million (or \$15.9 million equivalent).

Relocation of forty-four shops took place under the Project, mainly owned by displaced non-titled APs who had been successfully running their shops long along the Highway for at least 18 years (with a proof of panchayat license and record of stay). The 44 shop-owners had systematized themselves into the Sri Maruthi Squatters Association (SMSA) in 2001. The SMSA had so far collected a total of Rs70,000 (\$1,485) to buy the 1 acre land for their relocation site that NHAI had bought from the State Government. SMSA also covered the cost of the operating license from the local panchayat at Rs14,000 (or \$297) through member contributions. NHAI had constructed the shops and allotted Rs2,000 (or \$42) to each member of the 44 families as cash assistance but the APs refused to take this

assistance since they preferred working capital to reinstate their respective businesses.[3]

The research has largely focused on the impacts of relocation and strategies for adjustment (see Hansen and Oliver-Smith 1982).

There will be two issues of cultural survival quarterly (vol.12, Nos.3 and 4[1988]) they are also focus on problem of dislocation and resettlement. This article having also focuses on various aspects of the resettlement process Land acquisition & compensation.

**Main causes for the Delay are:**

- ◆ Work of District level administration formed by the NHAI was not so effective that they had a proper influence on the people
- ◆ Recruited NGOs were not able to convince the people efficiently for the resettlement plan made by NHAI
- ◆ Micro-level planning was not done with an proficient manner

Upon completion, the NGO that was recruited to assist in the implementation of the resettlement action plan prepared a final report. The report indicated that

- (i) The affected persons compensated with cost of Rs202.3 million,
- (ii) The resettlement was carried out adequately with assistance from the implementation unit of the project
- (iii) The common assets affected were well relocated

**Issue 4: Environmental and Forest Clearances**

Environmental clearance process has emerged as one of the critical pain areas impeding the infrastructural growth in India. The problem of balancing the environmental concerns with the needs of the growing economy and expanding population has thwarted infrastructural developments in the country for quite a few years now. It is extremely distressing that most of the crucial infrastructure projects in sectors like mining, national highway, thermal power, special economic zone, cement industry etc. have been unnecessarily and immensely delayed due to the process of environmental clearance. Delayed projects include crucial sixteen major highway projects within four states including the Chennai Port-Maduravoyal road in Tamil Nadu, Bahrapore-Farakka and Krishnanagar-Bahrapore projects in West Bengal, Cherthala -Ochira and Thiruvanthapuram (Kerala)/Tamil Nadu border. Projects in Kerala and

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Goa/Karnataka border-Panaji in Goa which are awaiting environmental clearances from the Ministry of Environment and Forests (MoEF).

In addition to this, certain projects have also suffered delay due to the time taken for reconstitution of the Expert Appraisal Committee from time to time. It has been seen both at the centre as well as the state level that Appraisal Committees are constituted and reconstituted periodically and their sittings to appraise projects and EIA can be more frequent than the present situation.

EC procedures for environmental clearance and public hearing are generally cumbersome. Factors like submission of incomplete information, poor quality of EIA/EMP, disproportionate details required with applications, delays in the meetings of the Expert Committees and site visit, etc., are the major reasons behind delays. Besides, projects after completion are also subjected to many regulatory requirements in terms of periodic inspections, returns, licenses, etc.; extending the whole procedure and thereby delaying the clearance. These regulatory constraints delay the grant of environment clearances.[7]

The whole environment zone covering approximately more than five km on both side of the proposed alignment was studied, and strip plans prepared to lateral direction for the proposed alignment in parallel as well as diversion section. [8]

Details of projects for which concessionaires/developers have served termination notice to NHAI and projects already terminated due to delay in environment and forest clearance [1]

S.No	Name of the Project	Name of the Concessionaire	Remarks
1	Kishangarh-Udaipur-Ahmedabad	M/s GMR	Concessionaire issued termination notice on the grounds of non availability of Environment Clearance (EC)/Forest Clearance (FC). Both the clearances are received. The matter is subjudice
2	Sholapur-Bijapur	M/s Sadbhav Engineering	Project is foreclosed/terminated due to non availability of Wildlife Clearance (WC).
3	Cuttak-Angul	M/s AshokaCuttak-AngulTollway Ltd.	Concessionaire issued termination notice on the grounds of non availability of EC. EC since been received, the matter is sub-judice in the court.
4	Kota-Jhalawar	M/s Keti Constructions Ltd.	The project is terminated due to non availability of FC/ WC.
5	Aurangabad-BarwaAdda	M/s KMC Constructions Ltd.	The project has been foreclosed due to non availability of FC/EC.

**Issue 5: Change in Scope**

Scope change could be result in delay and cost overrun of the project. Scope can be defined as the entire accomplishment that is expected to be achieved at the end of a project. It can be said that all estimation, schedule, project plans, base lines & quality are generally designed as base in the early project scope. Thus, during execution any change in the project scope will mean that the entire early project plan will have to be revised such that as a revised budget, schedule and quality will have to be developed. This results in the consumption of more time and hence resources will be needed as against the initial baseline. Scope change in the project could be as a result of wrong initial scope definition, intrinsic risk and uncertainties, sudden change in interest, change in funding of project, etc. this could lead to request for change which in turn could lead to change in project accomplishment, budget or even the entire project team. Change in management due to poor scope could lead to dispute which may necessitate spending time and money on arbitration and litigation for what the contractor or the client believes he is entitle to. Hence it would surely lead to delay of the highway projects.

We are dealing with the same case here, the WTC project. Encroachers on government land private owners was notified to remove their structures before civil works commenced and were allowed to salvage materials from the demolished structures, but no other compensation was provided to them. Susceptible families in this category were assisted on a case-to-case basis to improve their incomes and compensated for their lost assets at replacement value. Public utilities such as water tanks, bore wells, and water pumps; public buildings such as schools, hospitals; common property resources; and boundary walls would be affected. The original alignment design was changed to minimize negative impacts, predominantly land acquisition and resettlement; bypasses were constructed to avoid heavily populated areas. This results in the delay in the completion of project.

**Issue 6: Delay due to Land Encroachment.**

It was observed that when we are acquiring land for construction of proposed alignment lot of land which exist as government property was acquired by the people living near about and further they construct their houses and so on.

Delay due to land acquisition is the one vital issues in construction industry. All the delay causes will affect the

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progress of the project as per their significance and occurrence.

Ennore Port Road Connectivity Project was done to validate the questionnaire survey. The project involves adequate improvement on four major roads connecting the Chennai – Ennore port involving total of 30.1 kilometers. The contract value is about 258.78 Crore and the actual duration of project was 24 months. The date of commencement of project is 03-06-2011 and the completion period was 02-06-2013. The special purpose vehicle (SPV) were formed comprising of NHAI (National highway authority of India), Chennai port trust, Ennore Port Limited and Govt. of Tamil Nadu they are looking after the funding of the project. The project was given at least five extension time.

The project was given four extension of time by NHAI itself and the fifth extension was recommended by the contractor. Even after the fifth extension of time (EoT) being granted, the project was just 91% completed till Jan 2015. Since it's a complex project consisting of four major roads, the works were carried out parallel. The major factors comprising of delay in the project are:

- Land acquisition process.
- Delay due to land encroachment, temples, sewage pipes affected the progress of the project. [10]

### III. CONCLUSIONS & RECOMMENDATIONS

#### 1. Recruitment of NGOs

Hiring of NGOs is a very important and effective work, so this work should be done well before with the proper planning according to the schedule of project.

#### Role of NGOs:

- ◆ NGOs act as the pilots for larger projects mainly government projects by virtue of their capability to act more quickly and efficiently than the government bureaucracy.
- ◆ Upward communication involves updating government about what local people are thinking, doing and feeling while downward communication involves notifying local people about planning and doing and doing of government.

- ◆ In some cases, NGOs become representatives for the poor people and endeavour to influence government policies and programmes on their behalf. This could be done through various means fluctuating from demonstration and pilot projects to participation in public scenes and the formulation of government policy and plans, to publicize the research results and case studies of the poor people. Thus NGOs play roles from advocates for the poor to implementers of government programmes; from agitators and critics to partners and advisors; from sponsors of pilot projects to mediators.
- ◆ NGOs use interpersonal methods of communication, and study the right entry points whereby they gain the trust of the community they seek to benefit. They would also have a good idea of the feasibility of the projects they take up.

In this project the NGO was not as effective as originally visualised. The recruitment of the NGO should be done after analysing it very carefully and on the basis of its past experience. The NGOs were not able to play even a single role successfully.

NGO should be locally based so that it has greater influence on the people so that all the roles can be performed in a very efficient manner and which will ultimately result in the less or no delay in the land acquisition.

#### 2. Resettlement Plan

District level administration work should have done an efficient work in understanding the people with scope of the project.

Communication between these administration and localities took long time to get the conclusion and further continuation of the work. Therefore they should have communicated well with them even they could have convinced them about the project scope and the advantages of this highway project.

Proper resettlement plan could be prepared well before the commencement of the project and which could be basically done by these local district administrative bodies. The role of recruitment of NGO is to be done in a well-organized manner after analyzing it properly and on the basis of their work and influence on the local people. Communication between and NGO and people is assumed to

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be very successful as they stand by their side and work for them and make them understand every scenario of the project. This thing was something lacked in the project.

### **3. Compensation and Entitlement**

The Project required the acquisition of 1,601 acres of land, out of which 1,341 acres were agricultural land, 173 acres non-agricultural land, and the remaining 87 acres are government land. Land acquisition was expected to affect an estimated 18,906 persons.

APs were not compensated properly or quickly. The compensation was allotted to them in 2002 or several months after notification was awarded to them about the land acquisition in between 2000 and 2001 and the issuance of the notice to land owners in 2002. Compensation should have given to them as per by the local district administration.

This compensation issue took them to endless trip to arbitrator and NHAI office which was the major cause due to land acquisition in the delaying of the project.

These issues could have resolved well earlier if the proper planning had been done before and APs could have compensated well before by the administration.

These issues are not good for the health of project so, an efficient communication is required and the main aim of the project should be accomplishment without affecting larger people and with proper effectiveness.[9]

### **4. Environmental Clearance**

Whether is it the Environmental Clearance process itself or purely the procedures? It is the later one in my understanding. The Environmental Clearance process consists of a chain of steps ranging from screening whether the project requires an environmental clearance or not; to identifying the potential impact of the project; followed by a public consultation to a recommendation by the Expert Appraisal Committee to the Ministry of Environment and Forests.

The most crucial issue in the process of environment clearance that comes in the way of implementation of project is the lengthy process of the Environmental Clearance. In general, a minimum of around 10- 12 months is the timeframe that project proponents face to only obtain an Environmental Clearance. This time frame is more often than not stretched due to mere procedural delays.

The process has also been made uselessly elaborate wherein after the review of the projects by the Expert Appraisal Committee; the recommendations are sent to the Ministry of

Environment and Forest, which then awards the Environmental Clearance. This also results in inordinate delay. If this procedure is done away with, considerable time can be saved.

Environmental management plan should be prepared relating to major environmental factors such as land-use patterns, water resources, biodiversity, air quality and the potential impact of air pollution on the health of local people to get the quick Environmental Clearance.

### **5. Change in Scope**

The first and the foremost thing is to identify the fact that change is anticipated in project and could equally be beneficial to the overall project success so that to achieve an efficient control for scope change. To incorporate a proper change management plan such that a proactive approach could be adopted and this is the most important thing to do. It should involve the project investors and assimilating their needs during the course of the project lifespan. Identifying the key success factor in conjunction with the client and establish KPI in the form of milestone during the planning phase of project plays a vital role. This will measure the accomplishment for reaching towards the project scope.

### **6. Land Encroachment**

As per the observation in this case the main root cause of delay in project is due to land acquisition and it is excusable type delay the two major parameters that determine the success of the project is overall project cost and time. Since infrastructure brings economy to the country, any delays have to be avoided by clients and the contractors. In case of any delays, EVM is found to be helpful in finding out the probable completion time for the projects.

#### **IV ABBREVIATION**

WTC	Western Transport Corridor
ADB	Asian Development Bank
NGO	Non-Government Organization
EA	Executing Agency
RP	Resettlement Plan
NHAI	National Highway Authority of India
APs	Affected Persons
EIA	Environmental Impact Assessment
EC	Environmental Clearance
WC	Wildlife Clearance
FC	Forest Clearance

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EoT                    Extension Of Time  
NHAI   National Highways Authority of India

[Http://Wiki.Iricen.Gov.In/Doku/Lib/Exe/Fetch.Php?Media=14201:Sharad\\_Jain.Pdf](http://Wiki.Iricen.Gov.In/Doku/Lib/Exe/Fetch.Php?Media=14201:Sharad_Jain.Pdf).

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