

Chapter - II

Performance Audit

PUBLIC WORKS DEPARTMENT

2. Performance Audit on Indo-Nepal Border Road Project

Executive Summary

Government of India (GoI) approved (November 2010) construction of a road along the Indo-Nepal border (INB) in the States of Uttarakhand, Uttar Pradesh and Bihar. The Indo-Nepal Border Road Project (INBRP) was envisaged to add to the mobility of Sashastra Seema Bal (SSB) and enable them to dominate sensitive borders more effectively from Border Out Posts (BOPs). The capital expenditure for the construction of roads under INBRP was to be borne by the GoI and the State Governments, being the owners of the roads, were to bear the cost of land acquisition, if required.

In Uttar Pradesh, INBRP envisaged construction of approximately 640 km of INB roads with a project cost of ₹ 1,621 crore. The Public Works Department (UPPWD), which was implementing the project in the State, was responsible to prepare Detailed Project Reports (DPRs) and construct INB roads. The DPR was to be approved by a High Level Empowered Committee (HLEC) of GoI.

During 2012-20 (up to December 2019), UPPWD incurred an expenditure of ₹ 834.50 crore on implementation of the project and 132.64 km INB road was constructed. Due to delays in the project, GoI extended (February 2018) the scheduled date of completion from March 2016 to December 2019 for encumbrance-free stretches and December 2022 for stretches with encumbrances. The role of UPPWD in implementation of the project was examined in the Performance Audit, which revealed shortcomings in preparatory phase, project execution, monitoring and financial management, as highlighted below:

Preparatory work

- The initial road alignment of 640 km was revised (during 2012-13) to 574.59 km after survey. Out of 574.59 km of approved alignment, 302.16 km (52.6 per cent) was under protected forest (15.82 km), reserve forest (54.14 km) and wildlife forest (232.20 km). However, the forest and wildlife clearances, which were prerequisites for commencement of work, were yet (December 2019) to be accorded due to faulty/incomplete proposals submitted by UPPWD and lack of coordination with the Forest Department.

In view of proposal for cutting of approximately 55,000 trees falling on the entire alignment of Indo-Nepal border road, Uttar Pradesh State Wildlife Board directed (August 2018) to make changes in the alignment to ensure minimum felling of trees. Thus, the earlier approved alignment of 574.59 km road was rendered ineffectual and the new alignment was still under finalisation (May 2020).

(Paragraph 2.2.1)

▪ Out of 28 DPRs for 574.59 km INB road, GoI sanctioned (January 2013 and March 2014) 12 DPRs for 257.02 km road. The remaining 16 DPRs for 317.57 km road were yet to be approved (December 2019), as GoI directed (March 2014) UPPWD to obtain forest clearance and submit revised alignment in consultation with SSB. Out of 12 approved DPRs, only one DPR for 7.60 km road was on encumbrance-free stretch. In case of remaining 11 DPRs, 230.15 km alignment (92 *per cent*) required either land acquisition (73.04 km alignment in five DPRs) or both land acquisition and forest clearance (157.11 km alignment in six DPRs).

UPPWD was required to acquire 415.81 hectare of land for road alignment approved in 11 out of 12 sanctioned DPRs. However, the pace of acquisition of land by UPPWD was tardy as 27 *per cent* land was yet to be acquired as of December 2019 which would have a concomitant effect on further delays in completion of the project.

(Paragraphs 2.2.2 and 2.2.3)

Project execution

▪ In nine out of 12 approved DPRs, UPPWD applied different hire charges for the same machines (batch mix hot mix plant and generator), which were also at variance with MORTH rate for these machineries. As a result, the cost of the project was inflated by ₹ 11.93 crore.

(Paragraph 2.3.1)

▪ In case of 11 out of 13 contracts, Notice Inviting Tenders (NITs) were invited by INB circles 34 to 162 days prior to Technical Sanction (TS), which was in violation of UPPWD order (September 1999) directing that NIT should not be invited without TS. Further, as bids of successful bidders were higher than the estimated cost (TS), INB circles irregularly reduced the BOQ to bring the contract within the approved TS although the contracts were executed for the entire length of road as mentioned in NITs. However, with the reduced BOQ, construction of 53.71 km road (22 *per cent*) was not possible.

(Paragraph 2.3.2.1)

▪ INB circles entered into contracts for execution of 12 works between May 2013 and February 2018, though the land had not been acquired in 11 works. This was not only against the financial rules but also led to undue favour to contractors as they were paid ₹ 84.85 crore of advances whose recoveries were tied to the progress of construction. As a result, mobilisation advances of ₹ 27.25 crore (86 *per cent*) and equipment advances of ₹ 45.23 crore (85 *per cent*) remained unadjusted even beyond the stipulated date of completion of works. As of December 2019, mobilisation advances of ₹ 7.93 crore and equipment advances of ₹ 14.38 crore were pending for recovery.

(Paragraphs 2.3.2.2 and 2.3.2.3)

▪ UPPWD incurred (December 2019) expenditure of ₹ 5.15 crore on vehicles used for execution of works under INBRP, out of which, expenditure of ₹ 2.46 crore was incurred in excess of estimates approved in seven DPRs.

(Paragraph 2.3.2.4)

- Without obtaining the mandatory approval of the Forest Department, INB Division Lakhimpur Kheri constructed (widening and strengthening) 15.500 km road on forest land. Thus, the construction of road was in violation of the Forest Conservation Act, 1980.

(Paragraph 2.3.2.5)

Quality control and monitoring

- Mandatory tests of samples at various road levels (earthwork, granular sub base, wet mix macadam, bituminous concrete, etc.) were not carried out as per norms leading to shortfall ranging between 28 *per cent* and 91 *per cent*. Further, there was substantial shortfall in field inspections by Chief Engineer and Superintending Engineers. This was fraught with the risk of sub-standard work.

(Paragraphs 2.4.1 and 2.4.2)

Financial management

- The project was not able to absorb funds released by GoI for construction of roads due to slow progress of work. As of December 2019, ₹ 59.07 crore of funds remained unutilised as against GoI release of ₹ 650.79 crore. Further, UPPWD incurred expenditure of ₹ 242.78 crore of State Government's funds for land acquisition and there was substantial savings of budget provision on this account during the years 2011-12 to 2018-19.

(Paragraphs 2.5.1.1 and 2.5.1.2)

- Memorandum of Understanding (MoU) for implementation of INBRP was yet to be finalised between GoI and the State Government, which resulted in lack of clarity over admissibility of deductions made by INB divisions from GoI fund on account of establishment charges (₹ 13.45 crore), utility shifting (₹ 2.85 crore), depreciation fund (₹ 1.15 crore) and afforestation (₹ 0.20 crore).

(Paragraphs 2.5.2, 2.5.2.1 and 2.5.2.2)

Impact of delays on the implementation of project

- Inordinate delays in the implementation of the project had a cascading effect on its construction cost, as out of 12 sanctioned projects, the cost of nine projects was revised from ₹ 550.12 crore to ₹ 779.20 crore. Similarly, delays in land acquisition led to escalation of land acquisition cost by ₹ 284.80 crore (164 *per cent*) from the original cost of ₹ 173.53 crore to ₹ 458.33 crore. Further, the delayed/non-construction of INB roads impeded the fast mobility of SSB.

(Paragraph 2.6)

Link roads for BOPs not falling on main alignment

- Out of 71 BOPs to be connected under 12 sanctioned DPRs, 13 BOPs were located at a distance of up to 1,000 meter from the proposed INB road. Despite having agreed to construct link roads to provide connectivity to such BOPs, UPPWD did not make provision for link roads. As a result, five BOPs located off five completed INB roads were not connected through link roads.

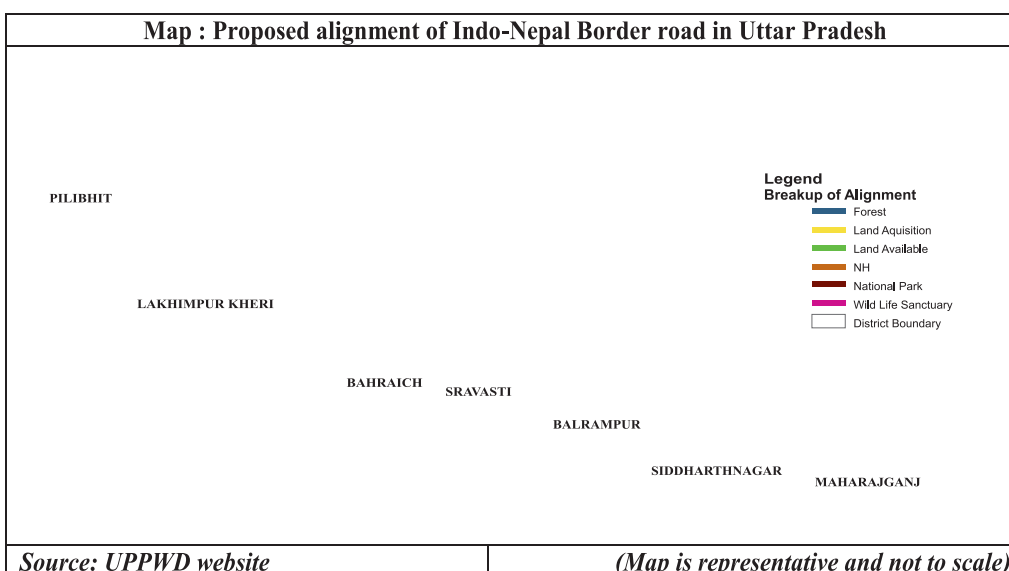
(Paragraph 2.7)

2.1. Introduction

The Ministry of Home Affairs (MHA), Government of India (GoI) approved (November 2010) construction of a road along the Indo-Nepal border⁷ in the States of Uttarakhand, Uttar Pradesh and Bihar. As per the approved project for development of roads along the Indo-Nepal border, Sashastra Seema Bal (SSB) battalions deployed on this border operate from 389 Border Out Posts (BOPs) located in Uttarakhand, Uttar Pradesh and Bihar, of which only 160 BOPs were connected by road. In Uttar Pradesh, 68 BOPs out of 150 were connected by road. The lack of road infrastructure severely limited the mobility of troops. The Indo-Nepal Border Road Project (INBRP) was envisaged to add to the mobility of SSB and enable them to dominate sensitive borders more effectively, besides these roads would also meet the requirements of the border population and catalyse better implementation of development initiatives in border areas.

INBRP was to be implemented jointly by the GoI and State Governments concerned. The capital expenditure for the construction of proposed roads was to be borne by the GoI. State Governments, being the owner of the roads, were to acquire land, if necessary, required for construction/ upgradation/widening of roads and bear the cost thereof. The State Government was also required to obtain the necessary clearances including forest/wildlife clearances wherever required.

In Uttar Pradesh, INBRP envisaged construction of approximately 640 km⁸ of border roads in seven districts⁹ with a project cost of ₹ 1,621 crore. The physical length of roads and financial projections were preliminary and indicative, which were likely to change after finalisation of Detailed Project Reports (DPRs). The pictorial diagram showing proposed alignment of Indo-Nepal Border road in Uttar Pradesh is depicted in the following map:



⁷ The Indo-Nepal border runs along the States of Uttarakhand, Uttar Pradesh, Bihar, West Bengal and Sikkim. The Indo-Nepal Treaty of Peace and Friendship, 1950 provides for an open border allowing free movement of Indian and Nepalese citizens without any travel document.

⁸ This included upgradation of 118.5 km of existing road

⁹ Bahraich, Balrampur, Lakhimpur Kheri, Maharajganj, Pilibhit, Shravasti and Siddharthnagar.

Considering the location of the proposed roads in the remote border areas and requirement of acquisition of land as well as statutory forest and wildlife clearances for some stretches in these roads, a time frame of five years with effect from 2011-12 was envisaged for completion of the project. Since the project could not be completed till March 2016 due to delays in land acquisition, forest and wildlife clearances, the Cabinet Committee on Security accorded (February 2018) approval for extension of time for completion of INBRP up to December 2019 for encumbrance-free stretches and up to December 2022 for stretches with encumbrances.

2.1.1 Organisational structure

In Uttar Pradesh, the Public Works Department (UPPWD) has been implementing the INBRP as executing agency. Principal Secretary, PWD represents the Department at the Government level, while the Department is headed by Engineer-in-Chief (E-in-C). In June 2012, UPPWD reorganised its circles/divisions and created two circles (INB Gorakhpur and INB Barabanki) and seven divisions¹⁰ (one INB division each in seven districts) for implementing INBRP. INB circles and divisions are headed by Superintending Engineers (SEs) and Executive Engineers (EEs) respectively. A post of Chief Engineer (CE), Indo-Nepal Border (INB) was also created (August 2013) for administrative control of two circles and seven divisions involved in INBRP.

UPPWD was responsible to prepare DPRs/cost estimates for roads and construction of roads under INBRP. The estimates framed by PWD were to be examined at GoI level by a Technical Committee (TC) headed by Director General, Central Public Works Department. The recommendations of TC would be placed for approval before a High Level Empowered Committee (HLEC), headed by Home Secretary, which was empowered to take appropriate decisions for execution of the project.

2.1.2 Audit objectives

The Audit was conducted to examine:

- whether preparation of DPRs for Indo-Nepal Border road has been completed as envisaged in the project and the connectivity to Border Out Posts (BOPs) has been achieved; and,
- whether adequate fund was made available and the project was executed in an economic, efficient and effective manner.

2.1.3 Audit criteria

The audit criteria were drawn from:

- Decision of Cabinet Committee on Security (November 2010 and February 2018) and approved scheme for INBRP;
- Ministry of Road Transport and Highways (MORTH)/Indian Roads Congress (IRC) codes and orders/circulars of UPPWD;

¹⁰ One each in Balrampur, Maharajganj and Siddharthnagar districts under INB circle Gorakhpur and one each in Bahraich, Lakhimpur Kheri, Pilibhit and Shravasti districts under INB circle Barabanki.

- Standard (Model) Bidding Document issued by UPPWD/Contract documents, guidelines issued by Central Vigilance Commission, Financial Handbook of Government of Uttar Pradesh (GoUP), and orders/instructions issued by the State Government/Government of India.

2.1.4 Audit scope and methodology

Audit scrutinised the records for the period 2012-19 (updated up to December 2019) in the offices of the Principal Secretary, PWD, CE (INB), two INB circles and seven INB divisions during January-April 2019 and July-August 2019. Data and information were also collected from the Forest Department and SSB. However, records prior to creation of INB divisions in June 2012 were not available with the CE, INB which limited the scope of audit.

Audit criteria, audit objectives, scope and methodology were discussed with the representative of the GoUP in an entry conference on 05 July 2019. Replies to the draft report were furnished by GoUP in January 2020 and an exit conference was held on 28 May 2020 with the Secretary, UPPWD, GoUP to discuss the draft report. The replies of the Department and the deliberations during the exit conference have been suitably incorporated in the report.

2.1.5 Acknowledgement

Audit acknowledges the co-operation and assistance extended by UPPWD, Forest Department and SSB during conduct of this performance audit.

Audit findings

2.2 Preparatory work

The work of construction of roads was to be preceded by preparatory work of identification of the alignment of roads, getting statutory clearances for roads passing through forests and wildlife sanctuaries, acquisition of private land falling on the planned alignment and preparation of Detailed Project Reports (DPRs). Planning for resettlement and rehabilitation of the displaced people was also to be done. Further, it was to be ensured that clear sites were available for commencing construction work.

2.2.1 Finalisation of alignment and forest clearances

Under INBRP, the executing agency (UPPWD) was to finalise the alignment of roads, in consultation with SSB, State Government and MHA. In this context, based on estimates of UPPWD, the State Government submitted (August 2008) the initial alignment to MHA for construction of 639.70 km road on the Indo-Nepal border in Uttar Pradesh. GoI also sanctioned (November 2010) the same length of road (640 km) for construction/upgradation under INBRP.

Audit could not verify the basis on which the initial alignment of 640 km was finalised, as the related records were not produced by UPPWD. CE (INB), however, informed (June 2020) that the respective PWD divisions would have finalised the estimated road length in consultation with the Forest Department and SSB. However, as against the initial alignment of 640 km, the alignment finalised by UPPWD (during 2012-13) with the approval of SSB had only

574.59 km road in Uttar Pradesh under INBRP. Audit further observed the following:

- While communicating the approval for INBRP to the State Government, MHA stated (November 2010) that the work may be started in patches where land acquisition and statutory clearances under Forest Conservation Act and Wildlife Protection Act was not required. Audit noticed that out of 574.59 km of approved alignment, 302.16 km (52.6 *per cent*) was under protected forest (15.82 km), reserve forest (54.14 km) and wildlife forest (232.20 km), which required forest and wildlife clearances¹¹. Further, acquisition of private land was required for 245.52 km of stretch in the proposed alignment. As a result, only 26.91 km road in the proposed alignment was on encumbrance free land and thus, available for construction.
- Despite the fact that a major portion (155.78 km) of the finalised alignment (57 *per cent*) in three districts (Balrampur, Bahraich and Maharajganj) was in forest/wildlife area, the road alignment (272.92 km) was finalised without involving the Forest Department.
- UPPWD submitted 14 project wise proposals to the Forest Department between October 2013 and November 2015 for forest clearance (10 proposals) and wildlife clearance (four proposals). Meanwhile, the Forest Department asked (August 2015) UPPWD to submit a consolidated requirement of forest land for INBRP. Accordingly, UPPWD submitted a consolidated forest clearance proposal (January 2016) and wildlife clearance proposal (February 2016). However, the Forest Department pointed out (November 2016) various deficiencies in the proposal, such as lack of information on component-wise break up of major/minor bridges, underpasses, over bridges, etc. and land required for these structures, mitigation measures certificates, environment clearance status, etc. In compliance, UPPWD submitted (March 2017) an amended consolidated wildlife clearance proposal for six districts¹².

Owing to queries by the Forest Department and directions (September 2017) for counting of trees on the proposed alignment, UPPWD again submitted a consolidated proposal for forest clearance in February 2018 and wildlife clearance in April 2018. Audit noted that the Forest Department raised several queries¹³ on the forest clearance proposal and wildlife clearance proposal, such as non-submission of prescribed certificates/information regarding unavailability of alternative suitable non-forest land for the project, site inspection report of forest area involved in the project, geo-referenced digital map of compensatory afforestation site, etc. Thus, the consolidated proposals submitted by UPPWD were still deficient leading to further delays in forest/wildlife clearance. Subsequently, in the case of district Siddharthnagar,

¹¹ As per section 2 of the Forest (Conservation) Act 1980, no State Government or other authority shall make, except with the prior approval of the Central Government, any order on direction that any forest land or any portion thereof may be used for any non-forest purpose.

¹² Bahraich, Balrampur, Maharajganj, Lakhimpur Kheri, Pilibhit and Shravasti. Proposal for Siddharthnagar was pending with Forest Department.

¹³ As per Parivesh portal (forestsclearance.nic.in) of GoI, Forest Department raised queries on seven occasions for forest clearance proposal (19 February 2018, 19 March 2018, 10 April 2018, 18 April 2018, 26 April 2018, 3 May 2018 and 15 June 2019) and nine occasions for wildlife clearance proposal (10 April 2018, 20 April 2018, 28 April 2018, 8 May 2018, 14 May 2018, 28 May 2018, 6 July 2018, 17 July 2018 and 26 November 2018)

forest clearance was accorded (August 2018) for 2.09 hectare forest land in respect of 1.28 km road. Audit, however, noted that queries in connection with forest clearances (15 June 2019) and in respect of wildlife clearances (17 July 2018 and 26 November 2018) were yet to be attended by UPPWD (December 2019).

▪ In a meeting of the Uttar Pradesh State Wildlife Board¹⁴ (Board) held in August 2018, objections were raised by the Board on account of cutting of approximately 55,000 trees falling on the entire alignment and accordingly the Board directed that a team of officers from the Forest Department, SSB and PWD should survey the existing roads along the Indo-Nepal Border and make required changes in the alignment to ensure minimum felling of trees. Audit noticed that the survey was completed in three districts (Bahraich, Balrampur and Shravasti), whereas it was in progress (October 2019) in three other districts (Lakhimpur Kheri, Maharajganj and Pilibhit). Subsequently, in another meeting (November 2019), the Board directed to finalise the alignment by taking the forest land as per requirement of a single lane road adjacent to the no man's land in order to minimise the cutting of trees.

Thus, the forest and wildlife clearances, which were prerequisites for commencement of work, were yet (December 2019) to be accorded for INBRP. Besides, the earlier finalised alignment of 574.59 km road, approved during 2012-13, was rendered ineffectual in view of directions of the Board for revision in alignment.

The Government stated (January 2020) that a consolidated proposal was submitted (February 2016) for forest clearance after completing the due formalities in consultation with Forest Department. The proposal was pending with the Forest Department despite regular pursuance and re-submission of proposals in compliance to objections of the Forest Department. As per the direction (November 2019) of the State Wildlife Board, an alternative alignment along the international border for the construction of single lane (3.75 meter wide) road was being prepared. The Government further stated during the exit conference (May 2020) that since PWD was an executing agency and alignment must be agreeable to the user agency (SSB), survey work was in progress and approximately 76 per cent alignment had been finalised. It was further stated that so far as faulty forest clearance proposals were concerned, new proposals would be submitted to the Forest Department and to the Board after finalisation of the new alignment. The Government also stated that the objections raised by the concerned forest divisions had been removed.

The fact remains that finalisation of alignment was flawed as UPPWD did not take the Forest Department on board while finalising the alignment. Further, faulty/incomplete forest clearance proposals submitted by UPPWD and lack of co-ordination with the Forest Department led to multiple queries on forest/wildlife clearance proposals. As a result, forest/wildlife clearance was not yet received (May 2020), although INBRP was initially scheduled to be completed by March 2016.

¹⁴ During exit conference, State Government informed that Uttar Pradesh State Wildlife Board (Board) was not in existence and it was constituted in 2018.

2.2.2 Preparation of DPRs

The State Government assigned (May 2011) the work of fixing initial alignment and subsequent consultancy work to Uttar Pradesh State Highways Authority (UPSHA)¹⁵. UPSHA executed (August 2011) an agreement with a consultant firm¹⁶ for preparation of DPRs for 640 kilometer for the proposed Indo-Nepal border road at an agreement cost of ₹ 2.83 crore. As per the terms and conditions of the agreement, the firm was to submit inception report, project preparation report, land acquisition report, detailed project report (DPR) and bidding document for selection of contractor, jointly inspect trees with forest authorities, application for forest & environmental clearances and project clearances from the concerned agencies within 24 weeks, i.e., by January 2012.

Scrutiny of records revealed that the consultant firm submitted inception report (September 2011), draft project preparation reports for 39 km (November 2011) and for 120 km (March 2012). Audit further observed that UPPWD returned (April 2012) draft project preparation report for 120 km to UPSHA being defective and directed UPSHA to submit the amended report. However, no action was taken by UPSHA in this regard. UPSHA, in a meeting (May 2012) showed inability in preparation of DPRs and stated that action was being taken to terminate the agreement executed with the consultant firm. Subsequently, UPSHA terminated¹⁷ the agreement in July 2012 due to non-submission of draft project preparation plan for 481 km, applying for forest clearances, final project preparation plan and DPRs. Non-preparation of DPRs by UPSHA had a consequential effect, as UPPWD prepared DPRs afresh which were submitted to GoI for approval in June 2012, i.e., after a lapse of more than 18 months of approval of project (November 2010).

The Government stated (January 2020) that punitive action had been taken against the firm by forfeiting the security deposit of ₹ 14.18 lakh. The fact remains that UPPWD failed to get DPRs prepared timely. Further, UPSHA terminated the agreement with the condition to recover the amount of ₹ 36.15 lakh paid to the firm, which was not recovered (January 2020).

Submission and approval of DPRs

Audit noticed that out of 28 DPRs (each DPR contains one road) for 574.59km road (estimated cost ₹ 2,805.56 crore) submitted by UPPWD, HLEC approved only 12 DPRs for construction of 257.02 km road, of which 11 DPRs were approved in January 2013 and one DPR was approved in March 2014. Status of DPRs submitted by UPPWD and approval thereagainst by HLEC is detailed in **Table 2.1**.

¹⁵ Uttar Pradesh State Highways Authority is constituted by Uttar Pradesh Act No. 19 of 2004 (13 August 2004) for the development, maintenance and management of state highways and related matters.

¹⁶ Enarch Consultants Private limited, NOIDA in joint venture with NNP Infra Consultants Private Limited, Delhi.

¹⁷ With the condition to recover the amount of ₹ 36.15 lakh paid to the consultant firm between January and March 2012 and forfeited security deposit of ₹ 14.18 lakh of the firm.

Table 2.1: Submission of DPRs vis-a-vis approved DPRs

Sl. No.	District	Total Length (km)	Total no. of DPRs	No. of DPRs approved	Length approved (km)	Executed length up to surface level as of December 2019 (in km)
1	Bahraich	118.83	5	1	20.36	17.460
2	Balrampur	84.31	3	1	7.48	07.260
3	Lakhimpur Kheri	124.80	6	2	57.35	42.000
4	Maharajganj	69.85	3	2	67.60	13.900
5	Pilibhit	37.00	3	1	7.00	02.800
6	Shravasti	64.29	5	2	21.72	21.470
7	Siddharthnagar	75.51	3	3	75.51	27.750
Total		574.59	28	12	257.02	132.64

(Source: CE (INB), UPPWD)

In respect of the remaining 16 DPRs for 317.57 km road, which involved forest clearance for 270.06 km alignment and land acquisition for 47.45 km alignment, HLEC directed (March 2014) UPPWD to obtain forest clearance and submit revised alignment after finalising it in consultation with SSB.

Further scrutiny revealed that out of the 12 approved DPRs for estimated cost of ₹ 735.83 crore, only one DPR (estimated cost ₹ 22.03 crore) for Thuthibari-Bargadwa road (7.60 km) was on encumbrance free stretch, as it did not require either land acquisition or forest land. In case of five other DPRs, including one DPR approved in March 2014, though no forest land clearance was required, land acquisition (73.04 km) was required in these five DPRs and both land acquisition and forest clearance (157.11 km) was required in case of the remaining six DPRs. Audit noted that the award of contract for road works under 11 approved DPRs without ensuring availability of land and requisite statutory clearances led to delays and cost overrun, as discussed in subsequent paragraphs.

This also resulted in construction of roads in patches thereby leaving gaps in intra as well as inter-district connectivity of INB roads as the roads were not constructed in continuous stretches, thereby defeating the objective of adding to the mobility of SSB, and enabling them to dominate sensitive borders more effectively.

2.2.3 Acquisition of land

Considering the longer time required for acquisition of land under the Land Acquisition Act, the Government decided (February 2013) to purchase land from the landowners in terms of the land acquisition policy order (June 2011) issued by the State Government. According to the order, the general policy for land takeover would be that the land be purchased directly from the landowners on the basis of mutual understanding/agreement arrived at between the land owners and the acquisition bodies by following the relevant rules/orders relating to the purchase of land. In addition to the cost of land, financial assistance was also to be provided for resettlement and rehabilitation of landowners. Thus, land acquisition involved preparation of resettlement and rehabilitation plan (RAP) in seven project districts by establishing legal

boundaries of the right of way and identifying current usage of land in terms of owners, squatters, trees, fixed and mobile structures.

2.2.3.1 Preparation of RAP

Scrutiny of records revealed that INB circle, Gorakhpur entered (April 2013) into a contract with a consultant firm for preparation of RAP to be completed by April 2014. Under the terms and conditions of the contract, the firm was to prepare micro-plans¹⁸ as part of the RAP, identify the Project Affected Persons (PAPs) and counsel the entitled persons. The information gathered for each PAP was to be recorded and computerised along with video recordings and photographs. The firm was also responsible for facilitating disbursement of compensation¹⁹ and transfer of ownership of land in the name of the State Government.

Audit noticed that the consultant delayed preparation of micro-plan and thus, was given two more years (up to April 2016) beyond the stipulated time (April 2014), which affected the progress in land acquisition. In this context, the functioning of the firm was questioned by the EEs and SEs *inter alia* regarding delays in submission of micro-plans, gross mistakes in micro-plans and non-deployment of personnel²⁰. Besides, the micro-plans submitted by the firm required subsequent revisions due to changes in revenue records in view of time lag and changes in alignment of road. Further, there was no evidence about the firm facilitating the work of the registry of land. Audit noted that officers of divisions were deputed to contact the title holders and bring them to the registry office for getting the registry in the name of the department. Regarding compliance with other terms and conditions of the agreement by the consultant, viz., recording and computerisation of information gathered for each PAP, disbursement of compensation, ID cards for PAPs, etc., INB circle, Gorakhpur did not furnish records/comments. Thus, compliance with all the terms and conditions of the agreement was not ascertainable in audit.

Further scrutiny revealed that the micro-plans prepared by the firm were unrealistic, as the requirement of land assessed in the micro-plan vis-à-vis actual requirement of land delineated in the progress reports of respective UPPWD divisions had deviation of 14 to 37 per cent in six out of seven districts, as detailed in **Table 2.2**.

¹⁸ Khasra/ Gata no., area affected, name of land owner, land compensation to be paid, cost of structure, etc.

¹⁹ For resettlement, compensation amount of ₹ 10,000 per family was to be given to the affected families in terms of the State Government Order dated 17 August 2010. The provision for compensation amount was withdrawn vide order March 2015 while implementing 'The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013' in Uttar Pradesh.

²⁰ Against the contracted amount of ₹ 47.55 lakh (excluding service tax), payments of ₹ 48.70 lakh (including taxes) was made to the firm against the contract as of March 2019.

Table 2.2: Land requirement as per micro-plan vis-à-vis actuals

Districts	Micro-plan		Actuals		Deviation between column 2 and 4 (in per cent)
	Land required (in hectare)	No. of villages	Land required (in hectare)	No. of villages	
1	2	3	4	5	6
Bahraich	29.8240	10	30.2000	10	1
Balrampur	19.2940	04	12.0600	04	(-) 37
Lakhimpur Kheri	3.3713	12	4.5700	14	36
Maharajganj	145.6947	40	167.5500	40	15
Pilibhit	8.5080	02	7.3000	02	(-) 14
Shravasti	57.6690	16	45.5000	13	(-) 21
Siddharthnagar	128.8910	63	148.6300	63	(-) 15

(Source: UPPWD divisions)

Thus, INB circle, Gorakhpur did not enforce the terms and conditions laid down in the contract on the consultant firm for compliance as neither micro-plans were accurate nor was there any evidence in support of other terms and conditions. Besides, delays in preparation of the micro-plans had a consequential effect on acquisition of land.

The State Government stated (January 2020) that micro-plans prepared by the consultant were checked and countersigned by the revenue authorities and accordingly, land acquisition was being carried out. The Government further stated that in some cases due to death of the owner or some discrepancies in revenue records, at a later stage minor changes in the micro-plan was inevitable. The State Government, however, did not provide reasons for deviation from 14 per cent to 37 per cent from the micro-plans for land acquisition in six districts, except Bahraich.

2.2.3.2 Acquisition of land

Audit observed that in five districts (Balrampur, Bahraich, Lakhimpur Kheri, Maharajganj and Siddharthnagar) the consent of more than 80 per cent landowners was obtained for transfer of land, whereas in the other two districts it was not verifiable in the absence of records. The status of private land acquired by UPPWD in the seven districts is given in **Table 2.3**.

Table 2.3: Land required vis-à-vis actual acquisition of private land

District	Actual requirement of land		Actual acquisition (up to 12/2019)	
	Land required (in hectare)	No. of villages	Land acquired (in hectare) (per cent)	No. of villages covered
Bahraich	30.20	10	28.00 (93)	10
Balrampur ²¹	12.06	4	11.62 (96)	4
Lakhimpur Kheri	4.57	14	4.57 (100)	14
Maharajganj	167.55	40	93.62 (56)	40
Pilibhit	7.30	2	6.38 (87)	2
Shravasti	45.50	13	41.50 (91)	13
Siddharthnagar	148.63	63	117.02 (79)	63
Total	415.81	146	302.71 (73)	146

(Source: CE and the seven divisions)

²¹ Sale deeds were faulty as out of 262 registries submitted to audit for scrutiny, in 93 cases (35 per cent), the registries were executed mentioning rates per square meter instead of per hectare basis. In 23 cases (nine per cent), rates were not mentioned in the sale deeds.

Audit noticed that Hon'ble Home Minister, GoI requested (November 2015) the Hon'ble Chief Minister, Uttar Pradesh to direct respective District Magistrates/ other departments of the State Government to expedite the process of land acquisition and other clearances so that road works could achieve desired speed. Subsequently, Chief Secretary, GoUP directed (January 2016) district magistrates of seven project districts to expedite the work of land acquisition, utility shifting works and forest clearances. MHA further directed (January 2019) the CE (INB) to make efforts to acquire the balance land through constant liaisoning with locals/villagers/landowners and the State revenue authorities. However, despite this pursuance, the pace of acquisition of land by UPPWD continued to be extremely tardy as it was yet to acquire 27 per cent land (December 2019) in case of 11 out of 12 sanctioned DPRs.

The Government replied (January 2020) that initially land acquisition was based on old rates which were revised on the demand of landowners as per the provisions of the revised Act (The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013) and consequent order of the State Government in March 2015 in this regard. As a result, the revised estimates for land acquisition were sanctioned by May 2017. As of November 2019, approximately 73 per cent of the land had been acquired.

The fact remains that UPPWD had ample time to acquire the land even after implementation of the revised Act in March 2015. Due to delays in land acquisition, 27 per cent land was yet to be acquired which would have a concomitant effect on further delays in completion of the project.

2.2.3.3 Availability of clear sites for construction

Paragraph 37 of Uttar Pradesh Budget Manual and 378 of Financial Hand Book (FHB) Volume-VI provides the availability of clear site as a precondition for taking up of work.

Scrutiny of records of the seven divisions revealed that in four²² out of seven divisions, a sum of ₹ 3.23 crore was provided between August 2013 and March 2017 to the Uttar Pradesh Power Corporation Limited (UPPCL) for shifting of 1,544 electric poles erected on the alignment of the proposed roads, against which 1,220 electric poles (79 per cent) had been shifted as of December 2019. Further, in district Bahraich, the site was not got cleared from the Indian Railways. **Table 2.4** summaries the status regarding site clearances as of December 2019.

Table 2.4: Progress regarding site clearances

Site clearance work	Event	Audit observation
Shifting of electric poles from site	Payment of ₹ 1.04 crore made to UPPCL during August 2013 to February 2016.	In district Lakhimpur Kheri , against the targeted 606 poles to be shifted, 476 poles were shifted.
	Payment of ₹ 43.61 lakh made to UPPCL during August 2013 to March 2017.	In district Maharajganj , against the targeted 137 poles to be shifted, 121 poles were shifted.

²² Lakhimpur, Maharajganj, Shravasti and Siddharthnagar.

Site clearance work	Event	Audit observation
	Payment of ₹ 48.43 lakh had been made to UPPCL for shifting 144 poles.	In district Shravasti , as per initial estimate 144 poles were to be shifted. This was later changed to 99 poles on account of changes in alignment. All 99 poles were shifted but cost of 45 poles (approximately ₹ 12.20 lakh ²³) was not recovered as of December 2019.
	Payment of ₹ 1.27 crore made to UPPCL in September 2013	In district Siddharthnagar , against the targeted 702 poles to be shifted, only 524 poles were shifted. Audit observed that no pole was shifted between September 2014 and June 2019.
Availability of railway land	In district Bahraich , construction of road on a stretch of 270 meter of Rupaidiha-Munshipurwa road (total road length 17.96 km) could not be taken up as the land was under the jurisdiction of the Indian Railways.	The DPR was sanctioned in January 2013. Subsequently, due to change of alignment in March 2015, the new alignment was passing through railway land, which was required to be transferred to UPPWD. However, the matter was not taken up immediately and was raised with the Indian Railways in December 2018 and was pending as of December 2019.

(Source: UPPWD Divisions)

Audit observed that despite the matter being taken up at the apex level on two occasions (July 2015 and May 2017) by the Principal Secretary, UPPWD and by Chief Secretary in January 2016, wherein directions were issued to the concerned District Magistrates and Energy Department to make the sites clear by removing electric poles, it could not be translated at the ground level. However, on being pointed out in audit, the issue of non-shifting of poles was taken up vigorously at the divisions level as well as circles level. Thus, non-compliance of the orders of apex level officers coupled with indifferent approach by UPPWD authorities (in Bahraich), the availability of clear site was not ensured, thereby leading to delays in construction works.

The Government replied (January 2020) that 178 number of electric poles were likely to be shifted very soon in district Siddharthnagar. In district Shravasti, the funds provided to UPPCL had been consumed. Hence, there was no case of recovery. It was further stated that in district Bahraich, due to change (March 2015) in alignment, railway land of 270 m length was required for construction of road along the international border for which correspondence and pursuance were being done. During the exit conference, the Secretary, PWD, GoUP stated that the Indian Railways was being pursued to get the railway land in district Bahraich.

It was apparent from the reply that shifting of electric poles was yet (January 2020) to be completed in Siddharthnagar, Lakhimpur Kheri and Maharajganj districts. The reply of Government in case of district Shravasti was not tenable, as the payments of ₹ 48.43 lakh were made for shifting of 144 poles against which only 99 poles were shifted.

²³ ₹ 19.25 lakh was paid for shifting of 71 poles against which only 26 poles were shifted. However, UPPCL shifted another 73 for which UPPWD had deposited ₹ 29.18 lakh.

2.3 Project execution

Audit noticed that project execution was marred with procedural irregularities as well as time and cost overruns on account of over-estimation in DPRs, calling of Notice Inviting Tenders (NITs) before technical sanctions, delays in execution of contract bonds despite availability of fund, undue benefit to the contractors and inadequate quality control, as discussed in the succeeding paragraphs:

2.3.1 Over-estimation in estimates for road works

Financial Rules²⁴ provide that detailed estimates must be prepared for every work proposed to be carried out, followed by technical sanction (TS) to the detailed estimate by the competent authority, which gives an assurance that the proposals are structurally sound and the estimates are accurately calculated and based on adequate data. UPPWD order (December 2005) provides for the preparation of estimates as per the specifications of MORTH and IRC. Accordingly, the detailed estimates for roads are to be based on MORTH Standard Data Book (standardised quantity, hire charges, output, etc., of material, machines and labour) for analysing the rates of different items.

Scrutiny of 12 approved DPRs revealed that in nine DPRs, UPPWD applied different hire charges for the same machines (batch mix hot mix plant and generator) (*Appendix-2.1A*) in analysing the estimates for Dense Graded Bituminous Macadam (DGBM) and Bituminous Concrete (BC). The hire charges applied were also at variance with MORTH rate for these machineries, which inflated the cost of the projects by ₹ 11.93 crore (*Appendix-2.1B*). Pertinently, certificates to the effect that rates were analysed as per MORTH data book, were given in the faulty DPRs. Audit also noticed that the office of CE (INB) also did not apply due diligence while according TS to the DPRs on inflated cost.

The State Government stated (January 2020) that rates were different for different capacities of machines as per the quantum of work and therefore, inference of audit that different rates for the same machines were applied was not correct.

The reply was not tenable as the rates for batch mix hot mix plant and generator in the rate analysis of nine DPRs were not in conformity with rates prescribed by MORTH for the same capacity of machines. In addition, the rate analysis for DGBM and BC in these nine DPRs also lacked uniformity in the application of rates for these machines, which could have been avoided. As a result, the rates arrived at in the DPRs for DGBM and BC were inflated.

2.3.2 Contract management

Thirteen contract bonds were executed for ₹ 646.34 crore between May 2013 and February 2018 for construction of 244.707 km roads under the project. Scrutiny of records pertaining to contracts revealed shortcomings in the contract management as enumerated below:

²⁴Paragraph 318 of Financial Handbook Volume-VI.

2.3.2.1 Invitation and opening of bids before according TS and delay in execution of contract bonds

As per UPPWD order (September 1999), NIT should not be issued without obtaining TS from the competent authority. Further, E-in-C directed (April 2004) that NITs should not be published without finalisation of Bill of Quantities (BOQ). E-in-C (UPPWD) order (December 2005) also provides for execution of the contract bond within 52 days from the date of NIT.

Audit scrutiny revealed that in case of 11 out of 13 contracts, NITs were invited by INB circles 34 to 162 days prior to TS by the competent authorities. Further, in these 11 NITs, the financial bids were also opened up to 59 days prior to the dates of according TS (**Appendix-2.2**). Scrutiny, however, revealed that in eight out of 11 NITs, contract bonds were executed 18 to 146 days beyond the stipulated period of 52 days. Thus, there was no justification for inviting tenders and opening of financial bids prior to TS.

Further scrutiny revealed that bids of successful bidders were higher than the estimated cost ranging between 12.15 *per cent* and 49.20 *per cent*. Therefore, to bring the contract within the approved estimated cost (TS), the INB circles reduced the BOQ although the contracts were executed for the entire length of road as mentioned in NITs. However, with the reduced BOQ, construction of 53.71 km road (22 *per cent*) was not possible²⁵ (**Appendix-2.3**).

The Government replied (January 2020) that in order to save time, bids were invited before TS and TS was accorded prior to the commencement of work as per the provision of FHB Volume-VI. The scope of work remained as sanctioned. It was further stated that bids were received on the higher side as compared to the rates mentioned in the BOQ. In case of rejecting bids and going for re-tendering, it was probable that rates could have gone further higher. Hence, in the government's interest it was decided to negotiate with the lowest bidder to obtain the minimum cost. This process consumed some extra time.

The reply was not acceptable as the invitation and opening of bids before TS violated the UPPWD order of 1999. Further, the reduction of BOQ after opening of bid was against the essence of transparency in contract management. This also led to lesser length as compared to the sanctioned length taken up for construction. Further, the contention that rejection of bids and going for re-tendering could have resulted in higher rates was entirely based on assumption since likewise the process of re-tendering could have yielded lower rates also. Moreover, UPPWD directed (November 1965) that negotiation should only be resorted to under conditions when it is not possible to invite fresh tender for the work. Further, the officer shall invariably record in detail the reason(s) for not inviting fresh tender and a quarterly statement of such cases was to be put to the higher authority for examination.

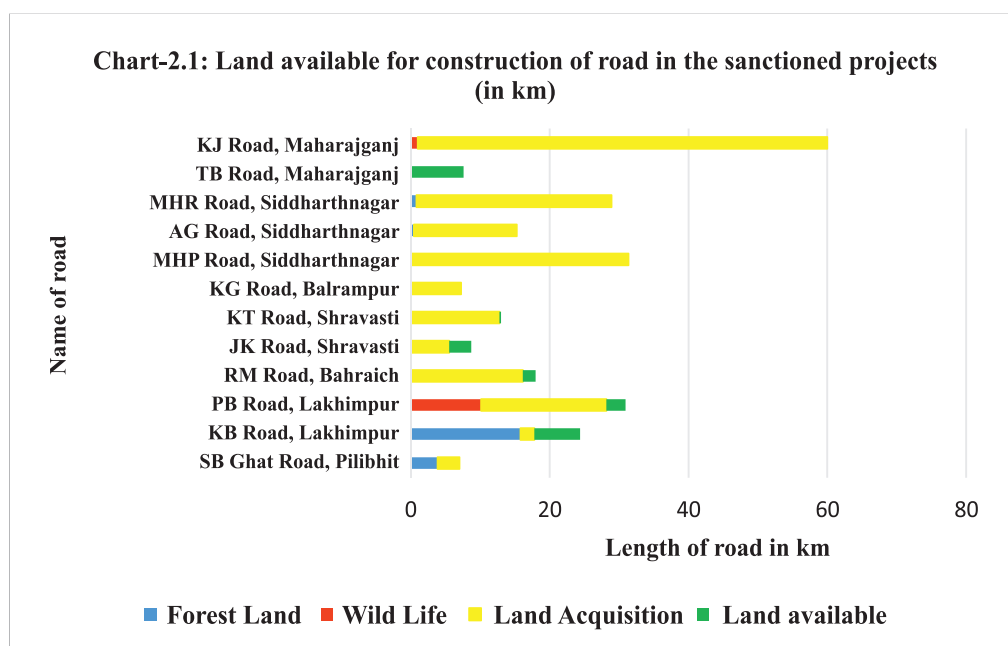
²⁵ Computed on proportionate basis of quantity of BC/PQC works as per NIT and as per BOQ of the contract bonds.

2.3.2.2 Execution of contract bonds without acquisition of land

As per Financial Rules²⁶, no work should be commenced in land which has not been duly made over by the responsible civil officer.

Scrutiny of records revealed that INB circles entered into 13 contracts for execution of work between May 2013 and July 2015 (12 contract bonds) and in February 2018 (one contract bond) though the land was not acquired for construction work. Audit observed that just one month prior to taking up of the construction work in May 2013, a consultancy firm was engaged for survey work (identification of land, consent from land owners and getting registry done in the name of the State Government) and preparation of micro-plan for land acquisition. This indicates that even preparatory work relating to land acquisition was not completed and, thus, there was no scope for construction work but the contracts were executed in anticipation of land acquisition which was inconsistent with the financial rules.

Audit observed that at the time of execution of the contract, out of 12 works (13 contract²⁷), no land was available in six works whereas two to 10 *per cent* land was available in three works. In two works, the availability of land was 27 *per cent* and 37 *per cent* respectively and only in one work 100 *per cent* land was available as detailed in **Chart 2.1**.



The acquisition of land in respect of 12 road works was started by UPPWD between February 2014 and August 2014 and as of December 2019, 27 *per cent* of required land was yet to be acquired. Execution of contract bonds without acquisition of land was not only against the financial rules but also led to undue favor to the contractors as they were paid large amounts of interest-free advances (₹ 84.85 crore) which were tied to progress of

²⁶ Rule 378 of FHB-Volume VI.

²⁷ In Bahraich, road work was awarded in part to two contractors, hence, 13 contract bonds.

construction though land was not available, as discussed in the succeeding paragraphs.

The Government stated (January 2020) that agreements were made keeping in view that some portion of the packages include government land where no land acquisition was required and construction and land acquisition process may proceed simultaneously. Land acquisition process was held up due to amendment in Land Acquisition Act (2013).

The reply was not acceptable as in one work only, 100 *per cent* land was available for construction at the time of execution of the contract. Thus, without acquisition of land the execution of contract bonds not only violated the financial rules but also led to cost and time overrun.

2.3.2.3 Advances to contractors

Model Bidding Document (MBD) prescribes that interest-free Mobilisation Advance (up to five *per cent* of contract value) and Machinery Advance (up to 10 *per cent* of contract value) are admissible to the contractor. The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the contractor for the construction work, following the schedule of completed percentage of the work on payment basis.

Irregularities in the grant of advances and their recovery have been consistently highlighted in the Reports of the Comptroller and Auditor General of India (e.g. Paragraph No. 2.3 of the Performance Audit Report on Contract Management in Road Works), Government of Uttar Pradesh, for the year ended 31 March 2016. Scrutiny of records in the seven divisions, however, revealed similar irregularities in grant of advances to contractors as discussed below:

▪ Mobilisation Advance

Scrutiny of records revealed that interest free advances amounting ₹ 31.81 crore were granted (May 2013 to March 2018) to the contractors in 12 out of 13 contracts in the INB divisions.

Audit further observed that there was unadjusted mobilisation advance of ₹ 27.25 crore (86 *per cent*) in 12 contracts even beyond the stipulated date of completion and as of December 2019, ₹ 7.93 crore was pending for recovery in four contracts (**Appendix-2.4**). Since no time limit was prescribed for recovery of these advances in the MBD and recoveries were linked with the progress of work, misuse of mobilisation advance by contractors could not be ruled out.

The Government replied (January 2020) that grant of mobilisation advances and recoveries thereof were done as per the contract conditions. It was further stated that ₹ 7.93 crore was pending for recovery. The fact remains that provisions of MBD regarding interest-free mobilisation advances without a fixed schedule of recovery led to large unadjusted advances for years, which was also in violation of Central Vigilance Commission order (April 2007) that recovery should be time based and not linked with the progress of works.

▪ **Equipment Advance**

The contractor is to use the advance payment only to pay for equipment and plant expenses required specifically for execution of works. The contractor shall demonstrate the advance payment has been used in this way by supplying copies of invoices or other documents to the Engineer.

Scrutiny of records revealed that equipment advances of ₹ 53.04 crore against 11 contracts in the test-checked divisions were granted (June 2013 to March 2018) to the contractors without obtaining and verifying the invoices in support of procurement of machinery and equipment.

Further, as recovery of advances was linked with the progress of works, contractors were allowed to retain equipment advance amounting to ₹ 45.23 crore (85 *per cent*), even beyond the stipulated date of completion as detailed in **Appendix-2.5**. This included ₹ 14.38 crore (27 *per cent*) lying unrecovered as of December 2019. It is pertinent to mention that the entire unrecovered amount as of December 2019 was lying against two contractors in INB divisions, Maharajganj and Siddharthnagar, who were granted advances of ₹ 32.95 crore between September 2013 and May 2014.

The Government stated (January 2020) that the grant of equipment advances and recoveries thereof were done as per the contract conditions. Bank guarantee against advances has been pledged which are safe with the Department. The fact remains that non-recovery of large sum of interest-free advances from the contractors even after a lapse of four years from the scheduled dates of completion led to undue advantage to the contractors.

▪ **Secured advance**

Scrutiny of records of INB Division, Bahraich revealed that as per the terms and conditions of the contract executed with the contractor, only mobilisation and equipment advances were permissible to be granted to the contractor. However, against the terms and conditions of the contract, inadmissible interest-free secured advances of ₹ 1.53 crore were granted²⁸ to two contractors against two contracts in February 2015 and March 2018.

The Government replied (January 2020) that the secured advances were granted against actual work done but not measured as per para 456 (a) of the Financial Handbook, Volume-VI.

The reply was not acceptable as terms and conditions of the contract permit grant of mobilisation and equipment advances only to the contractor. Thus, the grant of secured advances was not only against the terms and conditions of the contract but also gave undue advantage to the contractors.

2.3.2.4 Payments for vehicles

As per Clause 124 of MORTH, the contractor shall provide a vehicle to the engineer for inspection work and will be paid accordingly as mentioned in the Bill of Quantity (BOQ).

²⁸ Contract Bond (CB) No. 03/SE dated 30.12.2013: ₹ 1.23 crore on 7.02.2015 and CB No. 08/SE dated 12.02.2018: ₹ 29.88 lakh on 24.03.2018

The scrutiny of DPRs revealed that in nine out of 12 DPRs, ₹ 3.42 crore (original ₹ 1.55 crore) was provisioned for vehicles under road safety, road signage, etc. in BOQs of DPRs and accordingly sanctioned by the competent authority while according TS to these DPRs. However, against these provisions, an expenditure of ₹ 5.15 crore with an excess expenditure of ₹ 2.46 crore was incurred on vehicles as of December 2019, as detailed in **Appendix-2.6**. It is pertinent to mention that in two works neither this item was provisioned in original DPRs nor in the revised DPRs. Thus, not only excess payment was made but items not sanctioned in DPRs were unauthorisedly taken in the contracts and payments were being made.

The Government replied (January 2020) that the vehicles had been used for the execution of Indo-Nepal border works in seven INB divisions as per minimum requirements. As per prevailing practice, two vehicles are allowed in normal working divisions but divisions of INB were placed in interior and remote areas. Therefore, more number of vehicles were required to be deployed. Payments of vehicles are being charged against contingencies provided in the sanctioned estimates.

The fact remains that not only was excess payment made on vehicles but it was included in the BOQ of contract without having been sanctioned in the DPRs. Further, the Government did not offer specific comments to audit observations with regard to the excess and unauthorised payments comment.

2.3.2.5 Construction of road on forest land without approval of the Forest Department

Audit noted that out of total length 24.400 km of Khajuria-Bazarghat road²⁹, 15.500 km stretch was falling on forest land for which a proposal for transfer of forest land was submitted by UPPWD during 2012-13. While the proposal was under consideration of the Forest Department, the office of Deputy Director, Buffer Zone, Dudhwa Tiger Reserve, Lakhimpur intimated (July 2013) the INB Division, Lakhimpur Kheri that the approval for construction of road could not be accorded without the transfer of forest land. The Division, however, without obtaining the mandatory approval of the Forest Department, constructed the road on the forest land (widening from existing three meters to seven meters and strengthening by cement concrete). Thus, the construction of road was in violation of the Forest Conservation Act, 1980.

Audit further observed that the Forest Department had sought (October 2018) details of the divisional officers involved in the construction of road from UPPWD for appropriate action, which was awaited as of December 2019.

The Government stated (January 2020) that in district Lakhimpur Kheri, widening and strengthening of single lane road was done. However, no comment was offered regarding construction of road without having clearance from the Forest Department though it was mandatory and accordingly intimated by the Forest Department in July 2013.

²⁹ Sanctioned by MHA, GoI in January 2013.

2.3.2.6 Non-construction of road despite forest clearance

Scrutiny of records of INB Division, Siddharthnagar revealed that 1.28 km (2.088 ha land) of sanctioned roads (Aligarhawa to Kakrahwa road and Barhani to Pakrihawa road) were falling under reserve and protected forest for which necessary approval was required from the GoI.

Audit observed that GoUP conveyed (August 2018) the approval of the GoI for cutting of 344 trees necessary for making the site clear for widening of road. Further, an amount of ₹ 29.91 lakh on account of Net Present Value and Compensatory Afforestation was paid by the UPPWD to the Forest Department. However, the execution of work was not commenced (August 2019), despite forest clearance³⁰.

The Government replied (January 2020) that the work has been initiated after getting necessary approval from GoI and cutting of trees. The fact remains even after getting the approval in August 2018, the work was not started until August 2019 (as intimated by INB Division Siddharthnagar) due to which the work was further delayed.

2.4. Quality control and monitoring

2.4.1 Mandatory quality tests of materials

Section 900 of MORTH Standard Data Book prescribes various types of tests to be carried out for road construction work. Further, as per GoUP instructions (August 1996), 25 per cent test samples, out of total samples, would be sent to Research Development and Quality Promotion Cell (QPC) and Research Institute (RI), Lucknow and 25 per cent would be sent to Regional Laboratory, Meerut. In regions where regional laboratories are not available, these 25 per cent test samples would also be sent to QPC and RI³¹. Remaining 50 per cent test samples would be sent to district laboratories for testing. Further, INBRP scheme envisages the provision of third-party inspection to ensure quality and timely completion of the project.

Audit, however, observed shortfalls in tests to be carried out in the test-checked divisions (as of December 2019) as given in **Table 2.5**.

Table 2.5: Shortfall against tests required to be carried out

Sl. No.	Road levels	No. of tests to be carried out	No. of tests carried out	Shortfall (in per cent)
1	Earthwork	24,125	5,328	18,797 (78)
2	Granular Sub base (GSB)	3,595	2,180	1,415 (39)
3	Wet Mixed Macadam/ Water Bound Macadam (WMM/ WBM)	6,037	2,630	3,407 (56)
4	Dense Bituminous Macadam/ Bituminous Concrete (DBM/BC)	3,906	2,800	1,106 (28)
5	Dry lean concrete (DLC)	6,686	595	6,091 (91)

(Source: MORTH specifications and PWD divisions)

As evident from the above, the maximum shortfall of tests was in DLC followed by earthwork. Details are given in **Appendix-2.7**. Further, against

³⁰ Contracts for these road works was already awarded (June 2013 and January 2014).

³¹ In case of INB Divisions, which are not in the jurisdiction of RI Meerut, 50 per cent of sample was to be sent to QPC.

the norm of 50 *per cent* samples required to be sent to QPC and RI, 0.58 *per cent* samples were sent and no sample was sent to the district laboratories for testing.

The Government stated (January 2020) that tests were carried out at site as far as possible in accordance with Section 900 of MORTH. Third party tests and tests at QPC were also carried out to ensure quality control.

The reply was not acceptable, as CE, INB while replying to an audit query³² had accepted (June 2019) that third party inspection were not carried out. Further, the Department cannot absolve itself from the primary responsibility of mandatory tests to be carried out in terms of the instructions laid down in GoUP order issued in August 1996 as there was a shortfall of almost 100 *per cent* tests carried out at QPC Lucknow. Tests carried out at site laboratories of the contractors cannot be fully relied upon.

Thus, due to non-observance of rules and orders for ensuring quality control, the quality of road works being executed by the UPPWD was fraught with the risk of sub-standard work.

2.4.2 Monitoring of road construction

GoUP order (May 1999) makes concerned Superintending Engineers (SEs) and Chief Engineers (CEs) responsible for quality control of the construction works being executed under their jurisdiction. Accordingly, the SEs and CEs are to inspect all works being executed under their jurisdiction once in six months and in a year, respectively.

The status of monitoring of works by CE and SEs during 2014-15 to 2019-20 (up to December 2019) is given in **Table 2.6**.

Table 2.6: Monitoring of works by CE and SEs during 2014-20

Authority	Inspections required	Inspections conducted	Shortfall
CE	56 inspections of 12 works	8 inspections of six works	86 <i>per cent</i>
SEs	124 inspections of 12 works	21 inspections of 12 works	83 <i>per cent</i>

(Source: CE, SEs and the seven divisions)

As evident from the above table, there was a substantial shortage in the field inspections by the CE and SEs and in fact, six roads³³ in INB divisions Balrampur, Lakhimpur Kheri, Shravasti and Siddharthnagar remained uninspected by CE (**Appendix-2.8**). This was not only against the orders but was also indicative of poor monitoring on the part of CE.

The Government replied (January 2020) that inspections were carried out as far as possible and all officers have been instructed to inspect works as per norms. The fact remains that substantial shortfalls in inspections by CE and SEs possibly contributed to delays and questionable quality of construction.

³² Reply given in June 2019 by CE, INB in respect of an audit query raised in February 2019

³³ C/o Kanchanpur Gandhelnaka Road (7.475 kilometer), C/o Paliaghat to Barsola Road (Gauriphanta To Chandan Chawki (30.950 kilometer), C/o Kakardhari to Tarsoma and Bharta-Gujjargauri Road (13.000 kilometer), Jamunaha to Kakardhari (8.7200 kilomwter), C/o Malgahiya Harbanshpur Road via Barhni Pakarhiwa Road (31.350 kilometer) & C/o Malgahiya Harbanshpur Road via Karamaini Ramnagar (28.900 kilometer).

2.4.3 Bitumen supplied by oil companies

The State Government ordered (May 2009) that the divisional officer shall obtain Consignee Receipt Certificates (CRCs) from contractors and verify its genuineness from oil companies before making payments to contractors against the bituminous works done.

Scrutiny of records of the seven divisions, however, revealed that in ten works, a total of 7322.493 MT bitumen was consumed in execution of bituminous works, out of which CRCs of 3400.171 MT bitumen, costing ₹ 18.11 crore, were not obtained from the contractors before making payments (*Appendix-2.9*). Further, the required verification of CRCs obtained (3922.322 MT, ₹ 20.33 crore) was not carried out from the respective oil companies. Payments to contractors without obtaining CRCs and without verification, where obtained, were not only in violation of the Government order but the possibility of compromising with the quality and quantity of bitumen used in bituminous work could not be ruled out.

The Government replied (January 2020) that genuineness of the CRCs obtained from contractors was ensured from the oil companies. Also, the remaining CRCs shall be obtained from the contractors before the finalisation of the agreements.

The reply was not acceptable as no document regarding verification of genuineness of the CRCs was provided either during audit or with the reply.

2.5 Financial Management

As per scheme, cost of construction of roads is to be borne by the GoI, whereas the cost of land acquisition is met from the funds provided by the GoUP. During 2012-20 (upto December 2019), against the total releases of ₹ 934.91 crore (GoI funds ₹ 650.79 crore and GoUP funds ₹ 284.12 crore), the Department incurred an expenditure of ₹ 834.50 crore (GoI funds ₹ 591.72 crore and GoUP funds ₹ 242.78 crore) on implementation of the project. The GoI funds and the GoUP funds have been discussed below separately:

2.5.1 Provisioning of funds and expenditure thereagainst

2.5.1.1 GoI funds for construction of roads

Audit noted that GoI funds were routed through the State budget up to 2017-18. However, in view of directions of MHA (August 2017), the State Government opened (October 2017) a separate savings bank account in the name of Indo-Nepal Border Road Project, UPPWD and the amount released from GoI from 2018-19 onwards was deposited in this bank account. The fund released by the GoI and expenditure thereagainst by UPPWD on account of the construction of roads is given in **Table 2.7**.

Table 2.7: GoI funds for construction of roads

(₹ in crore)

Year	Funds released by GoI	Expenditure	Unutilised balance
2012-13	0.00	0.03	(-) 0.03 ³⁴
2013-14	350.00	117.61	232.36
2014-15	0.00	51.09	181.27
2015-16	0.00	89.72	91.55
2016-17	31.57	91.23	31.89
2017-18	200.92	74.85	157.96
2018-19	50.00	98.20	109.76
2019-20 (up to 12/2019)	18.30	68.99	59.07
Total	650.79	591.72	59.07

(Source: CE, INB, UPPWD)

From the above table, it is evident that the project was not able to absorb fund released by GoI for construction of roads, which was due to slow progress of work as land acquisition was lagging behind, forest clearances were yet to be obtained and site of construction was not cleared from hindrances. As of December 2019, ₹ 59.07 crore of funds remained unutilised as against GoI release of ₹ 650.79 crore. Audit further noted that the State Government had submitted utilisation certificates of ₹ 567.04 crore to GoI as of January 2020.

The Government stated (January 2020) that for construction of works, targets were set according to availability of land, sanctions and allotment. The land acquisition was affected as a result of revised Land Acquisition Act, 2013, which was implemented in Uttar Pradesh in March 2015, which resulted in hampering the progress of the project. CE (INB) further stated (August 2020) that UCs for ₹ 591.72 crore had been sent to the GoI.

The fact remains that there was slow progress in construction of roads under INBRP despite availability of funds and even after implementation of the revised Land Acquisition Act in March 2015, the utilisation of funds did not gain momentum.

▪ **Interest accrued not surrendered**

Audit noted that UPPWD deposited ₹ 68.30 crore released by the GoI in 2018-19 and 2019-20 (as of December 2019) in a bank account opened for INBRP. However, interest amounting to ₹ 1.16 crore accrued (as of December 2019) on the deposited fund in the bank account was not surrendered to the GoI.

The Government accepted the fact and stated (January 2020) that the interest accrued on GoI funds up to March 2019 had been intimated to MHA and it had been requested that interest amounts may either be taken back or be accounted for in the next release of funds by them.

2.5.1.2 GoUP funds for land acquisition

Funds allocated by GoUP and expenditure thereagainst for land acquisition is given in **Table 2.8**.

³⁴ During 2012-13, expenditure of ₹ 0.03 crore was borne by the State Government from its own resources.

Table 2.8: GoUP funds for land acquisition

(₹ in crore)			
Year	Budget provision	Expenditure	Savings/ Surrenders
2011-12	10.00	0.00	10.00
2012-13	20.00	0.00	20.00
2013-14	17.00	17.00	0.00
2014-15	162.48	40.01	122.47
2015-16	120.00	19.01	100.99
2016-17	188.10	25.06	163.04
2017-18	46.67	24.57	22.10
2018-19	200.00	76.15	123.85
2019-20 (up to 12/2019)	122.08	40.98	Not Any (as only part of the year)
Total	886.33	242.78	

(Source: CE, INB, UPPWD)

As evident from the table above, there was substantial savings of fund each year, as UPPWD could not utilise the funds provisioned by the State Government for the acquisition of land due to slow pace of acquisition of land.

The Government replied (January 2020) that rates of land acquisition were revised in compliance with GO (March 2015) after the new Act came into existence for the ‘Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation & Resettlement Act, 2013’. Accordingly, revised estimates were sanctioned for ongoing works up to May, 2017. So, it cannot be said that pace of work was not up to the mark.

The reply was not acceptable as even after implementation of the new LA Act in Uttar Pradesh in March 2015, there was ample time to complete the land acquisition.

2.5.2 Non-signing of Memorandum of Understanding (MoU)

As per INBRP scheme, MHA would consider signing of MoU with the State Government for implementation of the scheme. Scrutiny of records revealed that the GoI sent (June 2013) a draft MoU to GoUP for consideration which was not finalised even after lapse of more than six years despite several correspondences between MHA and GoUP. Audit further observed that office of CE (INB), UPPWD had proposed (May 2019) modification in respect of several terms and conditions mentioned in the draft MoU sent by GoI, as illustrated in **Table 2.9**.

Table 2.9: Illustrative lists of modifications proposed in the draft MoU

Exclusions proposed in draft MoU clauses	Additions proposed in draft MoU clauses
<ul style="list-style-type: none"> • Cost of construction of per km road at the rate of ₹ 2.53 crore per km • Cost of land acquisition, cost of compensatory afforestation and other incidental costs to prevent damages to the ecosystem from the scope of DPR • Levy of liquidated damages on UPPWD in case the work was delayed due to the reasons solely attributable to UPPWD • Responsibility of UPPWD to obtain clearances from utility authorities (telephone, water supply, etc.) and to bear cost of utility shifting, etc. 	<ul style="list-style-type: none"> • Provision for unforeseen increase in cost of the Project due to increase in the scope of work in the form of construction of additional cross drainage structures and protection works for roads/bridges due to challenging terrain along INB • Exception clause to the provision of two lane road (seven-meter carriage way width and right of way as per IRC specifications) in restricted areas due to forests and existing irrigation infrastructure • Price escalation as per provisions of bidding documents, if any.

The State Government stated (January 2020) that the construction of INBRP works was being carried out as per sanctioned DPR and in accordance with GoI and GoUP rules and regulations. The Government further added that MoU had been sent by GoUP to MHA in September 2019, which was under finalisation.

The fact remains that GoI fund of ₹ 591.72 crore was incurred on INBRP without MoU between GoI and GoUP, which resulted in lack of clarity over terms and conditions for implementation of the scheme. As discussed in paragraph 2.6, deterioration in constructed roads could not be ruled out due to delays in construction of roads, however, there was no clarity over responsibility for delays in construction of roads. Further, GoUP incurred inadmissible expenditure of ₹ 17.65 crore from funds provided by GoI, as discussed in the subsequent paragraphs.

2.5.2.1 Inadmissible deductions of establishment charges

As per GoUP order (April 2010), establishment charges at the rate of 6.875 *per cent* on the total cost of the project shall be deducted and credited to the concerned revenue head of account. Accordingly, while approving the total cost of the 12 sanctioned DPRs, the Expenditure Finance Committee (EFC), GoUP had added the cost of establishment charges on the State share. Further, according to the sanction orders of the State Government on the DPRs³⁵, these charges were to be deducted exclusively from the State share.

Scrutiny of records of six divisions revealed that as the State Government did not release its share, the establishment charges of ₹ 13.45 crore was deducted³⁶ by the respective divisions as of December 2019 from GoI funds and remitted to the revenue head of accounts which violated the sanctions of EFC.

The State Government stated (January 2020) that the establishment charges were deducted from the allotment as per the terms and conditions given in the administrative and financial sanction orders issued the GoUP (July 2013). The Government further added that agency charges had been proposed in the MoU, which was under finalisation between GoUP and GoI and if any issue is raised by the GoI in this regard, it may be settled at the time of closure of the project.

The reply was not acceptable as in the light of terms and conditions given in the administrative and financial sanction orders issued by the GoUP, the establishment charges were to be deducted from the State's share of the project.

2.5.2.2 Inadmissible expenditure out of contingency charges

The scheme guidelines provide that the cost of forest clearance would be borne by the State Government. Further, UPPWD had clarified (May 2016) that expenditure on account of utility shifting (shifting of electric poles, tubewells, etc.) was also the responsibility of GoUP.

Audit noted that UPPWD incurred an expenditure of ₹ 4.20 crore as of January 2019 on account of utility shifting (₹ 2.85 crore), afforestation

³⁵ Issued after administrative and financial sanction of GoI.

³⁶ Bahraich: ₹0.18 crore, Balrampur: ₹0.22 crore, Lakhimpur Kheri: ₹6.06 crore, Maharajganj: ₹1.44 crore, Shravasti: ₹0.43 crore and Siddharthnagar: ₹5.12 crore.

(₹ 0.20 crore) and depreciation fund (₹ 1.15 crore). Although GoUP was to bear the cost of these items, the Department met these expenses from the contingency charges of the concerned works from GoI funds.

The Government stated (January 2020) that the DPRs sent to MHA were approved with a provision of 3 *per cent* contingency. Also, GoUP has no cost-sharing for the construction of roads. The reply was not acceptable as expenditure on the above mentioned items was the responsibility of GoUP under INBRP scheme.

2.6 Impact of delays on the implementation of project

Against 574.59 km stretch identified for construction under INBRP in Uttar Pradesh by March 2016, DPRs for only 257.02 km (45 *per cent*) of 12 roads were sanctioned by GoI. Remaining 16 DPRs for 317.57 km of 16 roads, of which 85 *per cent* alignment involved forest/wildlife clearance, was yet to be approved, as GoI directed to obtain forest clearance and submit revised alignment in respect of these DPRs. Further, non-approval of the entire stretch along the Indo-Nepal border resulted in gaps in intra-district and inter-district connectivity of INB roads as detailed in paragraph 2.2.2.

Further, even the sanctioned DPRs had forest clearance (for 32.10 km alignment) and land acquisition (for 198.07 km alignment). However, as the contracts for construction of roads were entered into without ensuring availability of land, only 132.64 km (52 *per cent*) were actually constructed as of December 2019 due to delays in statutory clearances and land acquisition, as shown in **Table 2.10**.

Table 2.10: Sanctioned length and executed length

Sl. No.	District	No. of Works	Sanctioned length (in km)	Executed length up to surface level as of December 2019 (in km)	Percentage of Col. 5 to 4
1	2	3	4	5	6
1	Bahraich	1	20.363	17.460	86
2	Balrampur	1	07.475	07.260	100 ³⁷
3	Lakhimpur Kheri	2	57.350	42.000	73
4	Maharajganj	2	67.600	13.900	21
5	Pilibhit	1	07.000	02.800 ³⁸	40
6	Shrawasti	2	21.720	21.470	99
7	Siddharthnagar	3	75.509	27.750	37
Total		12	257.017	132.640	52

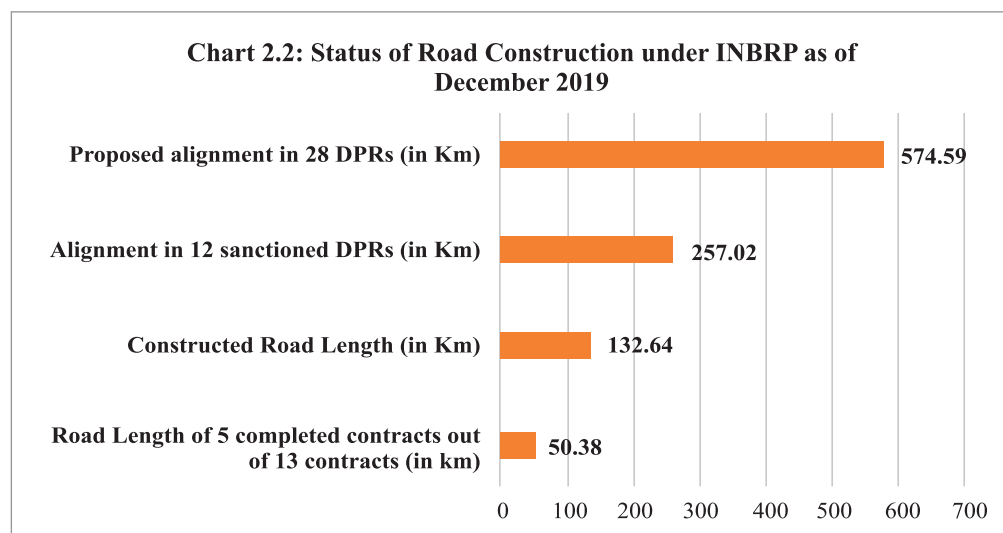
(Source: CE, INB, UPPWD)

Audit further noticed that out of 12 road works, only five road works (50.38 km) were completed³⁹ (December 2019), whereas construction of roads in case of the remaining seven road works was carried out in patches due to non-availability of land and forest clearance. The impact of delays on construction of roads is further summarised in **Chart 2.2**.

³⁷ The revised road length of 7.260 km was approved by HLEC in March 2015.

³⁸ The remaining road alignment, which was in forest area, was not included in the contract.

³⁹ Project completion report yet to be issued.



Time and cost overrun

The inordinate delays in the project had a cascading effect on construction cost of the project. Due to receipt of bids at higher rate for construction of roads, scope of works was changed and lesser road length were taken up for construction, as discussed in Paragraph 2.3.2.1. Out of 12 sanctioned works, the cost of nine works (original aggregate cost: ₹ 550.12 crore) was revised to ₹ 779.20 crore (42 per cent increase). Further, there were significant delays of 16 to 66 months beyond the stipulated dates of completion in 13 contracts executed against 12 sanctioned works (**Appendix-2.10**) due to which deterioration in constructed roads could not be ruled out. Similarly, delays in land acquisition led to escalation of land acquisition cost by ₹ 284.80 crore (164 per cent) from the original cost of ₹ 173.53 crore to ₹ 458.33 crore.

The Government stated (January 2020) that the DPRs were sanctioned between January 2013 and March 2014 and bids were invited on the prevailing rates of 2011. Bids were received at higher rates on account of appreciation of labour and material costs. Consequently, lesser length as compared to the sanctioned length was taken up for construction. This was intimated to MHA and contracts were entered into with the concurrence of MHA. Revised estimates were submitted to MHA accordingly for revision of cost, which were sanctioned by the High-Level Empowered Committee, MHA. It was further stated that contract agreements were made keeping in view that some parts of the packages include government land where no land acquisition was required and there was no provision of price escalation in the contract bond.

The reply was not acceptable, as the project was to be completed by March 2016 as per initial sanction given by MHA. Further, works under 10 out of 13 agreements, were scheduled to be completed by 31 March 2016, but could not be completed as scheduled. As regards cost overrun, the construction cost had been escalated by ₹ 249.18 crore in 10 out of 12 works as noted from the revised estimates approved for these works. Further, as per Rule 378 of the Uttar Pradesh FHB Volume VI, no work should be commenced on land which has not been duly made over by the responsible civil officers, which was not

followed while executing contracts as out of 257.02 km⁴⁰ of sanctioned road taken up for construction, only 22.25 km was without encumbrance.

The execution of contracts without ensuring the availability of land not only led to inordinate delays in the execution of works but also a spike in costs. Further, the delayed/ non-construction of INB roads impeded the fast mobility of SSB as evident from the fact that SSB, while replying to an audit query, stated (September 2019) that it faces problems in patrolling including no movement by vehicle during the rainy season due to non-construction of border roads.

2.7 Link roads for BOPs not falling on main alignment

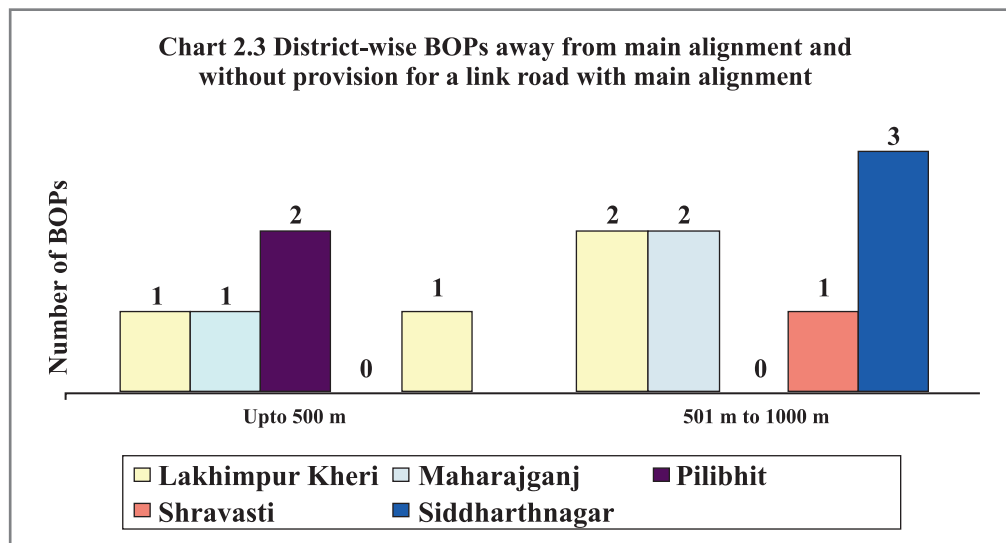
As per approved scheme (November 2010) many of the BOPs were not connected by road and this makes the task of border guarding forces difficult as operational stretches also include difficult terrain such as hills, mountains, rivers, streams and forest area. The approved scheme for INBRP envisaged that proposed roads would primarily run parallel to the borders thereby adding to the mobility of SSB.

In the 28th meeting of the Technical Committee⁴¹ (January 2012), CE (INB) agreed to construct link roads for BOPs not falling on the main alignment. While according approval for alignment of border roads, SSB reiterated that provision for link road to the BOPs which were not on the proposed road be ensured. This was also reiterated (January 2018) by UPPWD, Forest Department and SSB in a meeting held for review of alignment of border roads and a decision was taken that separate DPRs would be prepared for this purpose.

Scrutiny of records revealed that out of 71 BOPs to be connected under 12 sanctioned DPRs, 31 BOPs were adjacent to the proposed alignment and 40 BOPs were located at a distance ranging between 100 and 6500 m. Out of 40 BOPs, 27 BOPs were having connectivity through link roads with INB roads which were being constructed. Remaining 13 BOPs were located at a distance upto 1000 m (*Appendix-2.11*) for which neither was there any provision for a link road in the sanctioned DPRs nor were separate DPRs prepared by the UPPWD, as depicted in **Chart 2.3**.

⁴⁰ This length of stretch 257.02 km was reduced to 252.40 km by reducing 4.62 km {Lakhimpur Kheri (2.0 km), Balrampur (0.22 km) and Bahraich (2.40 km)} as per actual site conditions.

⁴¹ The proposals submitted by the State Governments were examined by the Technical Committee (TC) of GoI headed by Director General (Works), Central Public Works Department.



Audit noted that five⁴² roads having 17 BOPs were completed as of December 2019. Of which, 12 BOPs were either connected through link roads (six BOPs) or were adjacent to the alignment (six BOPs). Remaining five BOPs were off the INB roads with a distance ranging between 200 m and 1000 m as detailed in *Appendix-2.12*.

The Government replied (January 2020) that in the sanctioned DPRs, there was no provision to connect BOPs which were falling outside the alignment. It was further stated that separate DPRs would be prepared in consultation with SSB as per their requirements to connect BOPs, since SSB had intimated that several temporary BOPs were to be shifted to permanent locations. During the exit conference, the Government stated (May 2020) that after finalisation of the new alignment, DPRs would be prepared for connecting BOPs.

The reply of the Government confirms that the DPRs for the Indo-Nepal Border roads project were prepared and approved without providing for link roads to BOPs not falling on the approved alignment. Thus, DPRs were not in conformity with the INBRP scheme's stipulation to provide road connectivity to BOPs. Further, separate DPRs for linking unconnected BOPs were also not prepared. This was indicative of poor planning.

2.8 Conclusion

MHA, being the administrative ministry of GoI had approved the INBR project in November 2010 with a goal to construct roads of strategic importance along the Indo-Nepal border by March 2016 and provided funds for it. SSB, the user department, was to be benefited from this project of strategic importance by achieving fast mobility of troops to dominate the sensitive borders more effectively. UPPWD, the executing agency, was responsible to complete the project in its entirety, viz., finalisation of alignment in consultation with SSB, State Government and MHA, getting forest and wildlife clearances and acquisition of private land followed by the execution of construction works as scheduled.

⁴² 50.38 km of road constructed between June 2017 and June 2019.

The role of UPPWD in implementation of the scheme was found to be below par. Even after eight years from the commencement of the project, the DPRs of 56 *per cent* alignment for Indo-Nepal Border roads in Uttar Pradesh was yet to be approved by GoI, as UPPWD had not submitted the revised alignment and forest clearances for these stretches of roads were yet to be obtained. Even for the 252 km stretch⁴³ sanctioned by GOI, only 132.64 km (52 *per cent*) of sanctioned road length could be completed as of December 2019.

The failure of UPPWD in getting the site cleared for construction coupled with acquisition of land at snail's pace and delays in forest clearance caused massive delays of 16 to 66 months beyond the stipulated dates for completion of contracts. This also led to 42 *per cent* increase in construction cost and 164 *per cent* increase in cost of land acquisition. Further, BOPs situated off the constructed roads were left without connectivity despite GoI covenants to provide connectivity through link roads.

Contract management was opaque and deficient. Financial bids were opened prior to technical sanction. There were inordinate delays in execution of contracts. Execution of the project was marred with delays in recovery of advances and considerable amounts remained pending. Quality control and monitoring were sans requisite oversight by the authorities responsible therefor, leading to the possibility of sub-standard construction works on a project of strategic importance. Further, inadmissible expenditure was incurred from funds provided by GoI due to lack of clarity on the terms and conditions for implementation of the scheme since MoU between GoI and GoUP was not finalised.

To sum up, lack of adequate preparatory work including obtaining forest and wildlife clearances and land acquisition in time, deficient contract management and lack of co-ordination between departments resulted in only 12 (257.02 km) out of 28 DPRs for 574.59 km being sanctioned and construction of 132.64 km (52 *per cent*), including 50.38 km road length of five completed contracts out of 13 contracts, till December 2019. The remaining 16 DPRs for 317.57 km (56 *per cent*) were yet to be approved by GoI. There were delays of 16 to 66 months beyond the stipulated dates of completion of contracts which led to 42 *per cent* increase in construction cost and 164 *per cent* increase in cost of land acquisition. BOPs situated off the constructed roads were left without connectivity. Thus, these factors had an adverse effect on completion of the INBR project and resulted in gaps in intra as well as inter-district connectivity of INB roads, and therefore, the end objective to add to the mobility of SSB to enable them to dominate sensitive borders more effectively could not be fulfilled.

2.9 Recommendations

The State Government should:

- *develop institutional mechanisms to ensure effective coordination among departments, viz. PWD, Forest Department and SSB to finalise alignments to*

⁴³ 252 km out of approximate length of 570 km.

connect BOPs in a time-bound manner so that seamless connectivity to roads constructed in patches can be provided while arresting time and cost overrun.

- *take immediate action to reverse the systemic vitiation of the tender finalisation process and initiate departmental proceedings as appropriate in cases involving significant deviations.*
- *revise the Model Bid Document to specify provisions related to time-bound recovery of advances made to contractors or make provisions of interest-bearing advances to the contractors.*
- *ensure strict adherence to the quality control mechanism, including field inspections of the works by CE and SEs.*
- *finalise the MoU with GoI urgently so as to implement the INB project as per agreed terms and conditions.*